

## **APPENDIX Q**

### **ASAP Comment Analysis Report**

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**Alaska Stand Alone Pipeline Project  
Supplemental Environmental Impact Statement  
Public Comment Analysis Report**

**U.S. Army Corps of Engineers**

**March 2018**

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- C: Meeting Sign-in Sheets**
- D: Comment Summary Statements and Responses Report**
- E: Meeting Transcripts**

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## ACRONYMS AND ABBREVIATIONS

|              |                                                 |
|--------------|-------------------------------------------------|
| ADEC .....   | Alaska Department of Environmental Conservation |
| ADF&G .....  | Alaska Department of Fish and Game              |
| AGDC.....    | Alaska Gasline Development Corporation          |
| AS.....      | Alaska Statute                                  |
| ASAP .....   | Alaska Stand Alone Pipeline                     |
| BLM .....    | Bureau of Land Management                       |
| CFR .....    | Code of Federal Regulations                     |
| CNG.....     | Compressed Natural Gas                          |
| ENSTAR.....  | ENSTAR Natural Gas Company                      |
| EPA .....    | U.S. Environmental Protection Agency            |
| FNSB.....    | Fairbanks North Star Borough                    |
| FR.....      | Federal Register                                |
| GHG.....     | greenhouse gas                                  |
| LNG .....    | liquefied natural gas                           |
| MMscfd ..... | million standard cubic feet per day             |
| MP.....      | milepost                                        |
| NEPA.....    | National Environmental Protection Act           |
| NOA .....    | Notice of Availability                          |
| NPP .....    | National Park and Preserve                      |
| NPS .....    | National Park Service                           |
| ROD .....    | Record of Decision                              |
| SEIS .....   | Supplemental Environmental Impact Statement     |
| U.S.....     | United States                                   |
| USACE .....  | U.S. Army Corps of Engineers                    |

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# 1. INTRODUCTION

## 1.1. Introduction

The United States (U.S.) Army Corps of Engineers (USACE), Alaska District, Regulatory Division is preparing a Supplemental Environmental Impact Statement (SEIS) to assess the impacts of constructing the Alaska Stand Alone Pipeline (ASAP) Project described in Section 1.2. An essential step in the National Environmental Protection Act (NEPA) process is public comment as required under 40 Code of Federal Regulations (CFR) 1506.6(a), which provides an opportunity for the public and agencies to express their views and help identify issues to be addressed in the SEIS.

This document represents a public record and summary of the public comment period activities. Summaries of the substantive comments that were received during the public comment period are also provided in this report. A careful and deliberate approach has been undertaken to ensure that all substantive public comments are reviewed, considered, and responded to.

At this stage in the development of the SEIS, comments on the Draft SEIS (USACE, 2017) have been collected and reviewed; they are summarized in this report. Responses to comment summaries are included in Attachment D, appended to the FSEIS as required under NEPA. If comments resulted in changes to the Draft SEIS, an indication of where those changes made is included in the Final SEIS.

Comments received during the Final SEIS comment period will be reviewed and considered by USACE during development of the Record of Decision (ROD); however, specific responses will not be provided. For additional information on future steps in the SEIS process, see Section 3.

## 1.2. Purpose and Need

The proposed ASAP Project would deliver North Slope natural gas to Fairbanks, Southcentral, and other communities in Alaska. The applicant's stated purpose of the proposed Project is to provide Alaskans with a stable, affordable, long-term supply of natural gas for heating and powering their homes and businesses. The purpose of the Alaska Gasline Development Corporation (AGDC) (*i.e.*, the Project sponsor and applicant) is established in Alaska Statute (AS) 31.25.005, which states that the corporation shall, for the benefit of the state, to the fullest extent possible:

- *...Develop and have primary responsibility for developing natural gas pipelines...and other transportation mechanisms to deliver natural gas in-state for the maximum benefit of the people of the state;*
- *When developing natural gas pipelines...and other transportation mechanisms to deliver natural gas in-state, provide economic benefits in the state and revenue to the state;*

- *Assist the Department of Natural Resources and the Department of Revenue to maximize the value of the state's royalty natural gas, natural gas delivered to the state as payment of tax, and other natural gas received by the state;*
- *Advance an in-state natural gas pipeline...in a safe, prudent, economical, and efficient manner, for the purpose of making natural gas...available to Fairbanks, the Southcentral region of the state, and other communities in the state at the lowest rates possible;*
- *...Endeavor to develop natural gas pipelines ...to deliver natural gas...to public utility and industrial customers in areas of the state to which the natural gas...may be delivered at commercially reasonable rates; and*
- *Endeavor to develop natural gas pipelines ...that offer commercially reasonable rates for shippers and access for shippers who produce natural gas...*

The proposed ASAP Project would help meet the statewide demand for improved access to an energy source that is clean, reliable, and affordable. In 2013, the Alaska State Legislature enacted Senate Bill 23, authorizing the Alaska Industrial Development and Export Authority to finance a project to provide some Fairbanks North Star Borough (FNSB) communities with liquefied natural gas (LNG) by truck until an in-state gas pipeline could be developed (AS 44.88.010(a)).

Improved access to natural gas would help to improve air quality in the Fairbanks area, which is adversely affected by widespread combustion of wood and coal. Electricity is distributed to the Fairbanks area by the Golden Valley Electric Association and is supplied by 10 generation plants fueled by 35 percent natural gas, 28 percent coal, and 25 percent oil. Construction of a second coal power plant in Healy has increased the baseload of coal-fired generation and contributes to long-term stability. Fairbanks is currently classified as an air quality Non-attainment Area by the Alaska Department of Environmental Conservation (ADEC) and the U.S. Environmental Protection Agency (EPA). The Fairbanks air quality Non-attainment is described in detail in documents provided on ADEC's Division of Air Quality website: [http://dec.alaska.gov/air/pm2-5\\_ak.htm](http://dec.alaska.gov/air/pm2-5_ak.htm). Infrastructure for local gas distribution is currently being developed in and around Fairbanks, and a reliable supply of natural gas would result in cleaner air, as well as more affordable heating and electric power generation.

The proposed ASAP Project would provide up to 500 million standard cubic feet per day (MMscfd) of natural gas from North Slope gas reserves to in-state markets, which would meet current and projected future in-state energy demands (AGDC, 2014; Northern Economics, Inc., 2010), as well as help improve air quality in the Fairbanks area. The proposed ASAP Project would transport natural gas; therefore, it would be accessible to communities adjacent to the line that choose to tap into it and develop the required infrastructure for its use. The proposed Project would make expansion of commercial and industrial enterprises possible statewide. It would also provide a substantial number of jobs to Alaskans and economic benefit to the State of Alaska through royalties.

AGDC (2016)<sup>1</sup> presented an overview of the current and future (2040) natural gas demand for the proposed Project Area by demand segment<sup>2</sup> as follows:

- Current Demand: 214 MMscfd – Southcentral area current demand
- Future Demand: 332.4 to 422 MMscfd – Total
  - 243 to 295 MMscfd – Southcentral area future demand
  - 41 to 50 MMscfd – Fairbanks area<sup>3</sup> future demand
  - 15 to 17 MMscfd – Interior power generation
  - 30 to 40 MMscfd – Mining operations
  - 3.4 to 20 MMscfd – Small communities within 50 miles of pipeline

With an estimated supply of 500 MMscfd of natural gas to in-state markets, the natural gas supply provided by the proposed ASAP pipeline would meet the current demand (214 MMscfd) as well as the estimated future demand (332.4 to 422 MMscfd) in Alaska.

The public benefit of the proposed ASAP Project is the potential for delivery of a long-term, reasonably priced supply of natural gas to Southcentral, Fairbanks, and other Alaskan communities for:

- Heating homes, public safety facilities, military bases, and businesses.
- Generating electrical energy.
- Continuing economic stability and growth by supporting industrial users.
- Accommodating future population growth and increased commercial usage served by the existing ENSTAR Natural Gas Company’s distribution system, and for the Fairbanks/North Pole area and other Railbelt communities.
- Improving air quality in the Fairbanks area, which is currently classified as an air quality Non-attainment Area by ADEC and EPA (see ADEC Division of Air Quality website: [https://dec.alaska.gov/air/PM2-5\\_AK.htm](https://dec.alaska.gov/air/PM2-5_AK.htm)).
- Promoting Compressed Natural Gas (CNG) as a substitute for gasoline and diesel fuel used by cars and trucks in Fairbanks; for use by communities along the Parks Highway, including tour buses in Denali National Park and Preserve (NPP); and for use by Anchorage and communities on the Kenai Peninsula.
- Providing CNG for distribution to rural Alaska communities via the Yukon and Tanana rivers and marine barges from Cook Inlet.

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<sup>1</sup> Report based on publicly available information regarding historical natural gas use, capacities, generation assets, gas purchase contracts, and other public documents to develop the forecast results discussed herein.

<sup>2</sup> Includes southcentral natural gas utilities, southcentral electric utilities, industry (Cook Inlet field operations, Tesoro oil refinery, and other small consumers)

<sup>3</sup> Includes Fairbanks Natural Gas and Interior Natural Gas Utility

- Facilitating the development of infrastructure to allow more economic development of mining and oil and gas projects.

In many regions in Alaska, there is no long-term source of fuel other than heating oil. Alaska's North Slope has more than 30 trillion cubic feet of conventional natural gas reserves. A pipeline is a proven and efficient way to transfer this energy source and develop it for the benefit of Alaskans. AGDC's proposed action meets the goal of providing a stable, long-term supply of clean, affordable energy to both developed and developing markets within Alaska, including Southcentral, Fairbanks, and the Railbelt.

### **1.3. Description of the Project Area**

The proposed Project Area spans from Prudhoe Bay in northern Alaska to Point MacKenzie in southcentral Alaska. Beginning in Prudhoe, the pipeline corridor generally parallels the Trans-Alaska Pipeline System and the Dalton highway northwest of Fairbanks. At Livengood, the corridor continues on the west side of Fairbanks and Nenana. The corridor bypasses Denali National Park and Preserve to the east and generally parallels the Parks Highway to Willow. Southwest of Big Lake, the corridor connects to ENSTAR's distribution system at milepost (MP) 39 of the Beluga Pipeline. A lateral line to Fairbanks runs east along Murphy Dome and ends on the west side of University of Alaska Fairbanks.

### **1.4. Description of the Public Process**

Scoping activities began on August 1, 2014, when the Notice of Intent was published in the *Federal Register* (79 FR 44758) for the scoping comment period, which ended on October 14, 2014.

On June 30, 2017, the Notice of Availability (NOA) was published in the *Federal Register* (82 FR 29859 and 82 FR 39424) announcing the public comment period for the Draft SEIS, which ended on August 29, 2017. Attachment A provides a copy of the NOA.

The aim of the public comment process is to invite potentially affected and interested individuals, agencies, and groups to help:

- Share information and identify concerns about the proposed action;
- Define a range of alternatives;
- Determine and define the scope of issues to be examined;
- Identify other environmental and consultation requirements;
- Gather additional information regarding potential effects of the proposed action; and
- Inform and identify potentially interested parties.

Central to the public comment process is to gather input on the proposed action and alternatives presented in the Draft SEIS.

A basic principle of public participation is reporting back to stakeholders about the process in which they take part. In keeping with a transparent process, this Public Comment Analysis Report has been posted on the website (<http://www.asapeis.com>) and those who are included in the email list received an email notification of such posting.

Public comments were received through August 29, 2017, and are summarized in this Public Comment Analysis Report. Comment analysis materials are included as attachments and include:

- Attachment A: Federal Register NOA
- Attachment B: Meeting Notices
- Attachment C: Meeting Sign-in Sheets
- Attachment D: Comment Summary Statements and Responses Report
- Attachment E: Meeting Transcripts

#### ***1.4.1. Public Comment Period Meeting Notices***

Public notices for public comment meetings were announced in the newspapers in Table 1. The public notices outlined the general purpose of the meeting, meeting times and locations, and the agenda for the meetings. Public notices were published 30 days in advance of each meeting and again 7 days prior to the meeting date. Public service announcements were also made several times leading up to each meeting on local radio stations listed in Table 1.

**Table 1                      Newspapers and Radio Stations**

| <b>Newspaper Notices</b>                                                        | <b>Dates of Publication</b>                                |
|---------------------------------------------------------------------------------|------------------------------------------------------------|
| Alaska Dispatch News<br>1001 Northway Dr. Anchorage, AK 99508<br>907-257-4200   | June 30, 2017 and July 25, 2017                            |
| Arctic Sounder<br>PO Box 241582, Anchorage, AK 99524<br>907-770-0820            | June 15, 2017 and July 6, 2017                             |
| Fairbanks Daily News-Miner<br>PO Box 70710, Fairbanks, AK 99707<br>907-456-6661 | June 20, 2017 and July 13, 2017                            |
| <b>Radio Station Public Service Announcements</b>                               |                                                            |
| KUAC fm<br>312 Tanana Drive, Fairbanks, AK 99775<br>907-474-7491                | KIAM am/fm<br>PO Box 474, Nenana, AK 99760<br>907-832-5426 |
| KBRW am/fm<br>1695 Okpik St. Barrow, AK<br>907-852-6811                         | KTNA fm<br>PO Box 300, Talkeetna, AK 99676<br>907-733-1700 |

### 1.4.2. Public Meetings

Public meetings were held in 11 Alaska communities. Meetings were held between 5:30 p.m. and 8:30 p.m.; except for Anchorage where the meeting was held between 6:30 p.m. and 9:30 p.m. Table 2 shows the dates and locations of these meetings. Official transcripts from the public meetings are included as Attachment E.

**Table 2**                      **Dates and Locations of Public Meetings**

| <b>Date</b>     | <b>Location</b>        | <b>Venue</b>                                      | <b>Venue Address</b>                         |
|-----------------|------------------------|---------------------------------------------------|----------------------------------------------|
| July 17, 2017   | Barrow                 | Inupiat Heritage Center                           | 5421 North Star Street<br>Barrow, AK 99723   |
| July 18, 2017   | Nuiqsut                | Kisik Community Center                            | PO Box 89148<br>Nuiqsut, AK 99789            |
| July 20, 2017   | Fairbanks              | Westmark Hotel                                    | 813 Noble Street<br>Fairbanks, AK 99701      |
| July 25, 2017   | Bettles/<br>Evansville | Evansville Community<br>Hall                      | PO Box 26087<br>Bettles Field, AK 99726      |
| July 26, 2017   | Wiseman                | Community Center of<br>Wiseman                    | Wiseman, AK                                  |
| July 28, 2017   | Minto                  | Tentatively scheduled at<br>Minto Lake View Lodge | Lake View Road<br>Minto, AK 99758            |
| August 1, 2017  | Anchorage              | APU Lecture Hall                                  | 4101 University Drive<br>Anchorage, AK 99508 |
| August 2, 2017  | Healy                  | Tri-Valley Community<br>Center                    | 1 Healy Spur Road<br>Healy, AK 99743         |
| August 3, 2017  | Cantwell               | Cantwell Community<br>Hall                        | Cantwell, AK 99729                           |
| August 4, 2017  | Trapper Creek          | Trapper Creek<br>Community Park Facility          | East TC Park Circle                          |
| August 18, 2017 | Willow                 | Willow Community<br>Center                        | PO Box 1027<br>Willow, AK 99688              |

## 2. COMMENT ISSUE SUMMARY

The analysis of public comments was a multi-stage process that included coding, sorting, and summarizing public comment submissions into categories based on common themes. The goal of this process was to ensure that each substantive comment pertinent to the Draft SEIS was analyzed. Substantive comments constitute assertions, suggested alternatives or actions, data, background information, or clarifications relating to the Draft SEIS document or its preparation. Analysts then assigned each substantive comment to an issue category (see Table 3).

**Table 3 Issue Codes and Descriptions**

| Code             | Issue Text                                               | Description                                                                                                                                                                        |
|------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACC              | Access to Land/Property                                  | Comments that discuss property/land access.                                                                                                                                        |
| ACK <sup>a</sup> | Acknowledged                                             | Acknowledges the receipt of the communication that may be related to another topic other than the proposed ASAP Project.                                                           |
| AIR              | Air Quality or Emissions/Climate Change/Greenhouse Gases | Comments related to air quality, air emissions, climate change, or greenhouse gas (GHG) emissions.                                                                                 |
| AKN              | Alaska Native Issues                                     | Comments on the analysis of the cultural and social impacts of the alternatives on Alaska Natives.                                                                                 |
| ALT              | Alternatives                                             | Comments that support or reject the preferred alternative or suggest new alternatives or alignments.                                                                               |
| CUL              | Archeological/Cultural Resources                         | Comments regarding the archeological/cultural resources impacts of the Project.                                                                                                    |
| ECO              | Economy                                                  | Comments regarding economic impacts of the proposed Project.                                                                                                                       |
| EDI              | Editorial                                                | Comments providing suggestions for improving the organization and readability of the document as well as accuracy of the content.                                                  |
| EFF              | Effects of the Proposed Project/Analysis of Effects      | Comments on the potential effects of the proposed Project, analysis of effects (including direct, indirect, and cumulative), or the methods developed to analyze the alternatives. |
| ENG              | Engineering/Project Design/Project Description           | Comments discussing Project engineering, Project design (including gas composition), or proposed changes.                                                                          |
| FISH             | Fish                                                     | Comments regarding fish and fish habitat.                                                                                                                                          |
| GEO              | Soils, Geology, Permafrost                               | Comments regarding soils, geology, and permafrost.                                                                                                                                 |
| HAZ              | Hazardous Material                                       | Comments regarding potential risks related to hazardous materials or handling of hazardous materials associated with the proposed Project.                                         |
| HIA              | Health Impacts                                           | Comments related to the health impact assessment in the NEPA process or concern about health impacts.                                                                              |

| Code  | Issue Text                                                   | Description                                                                                                                                 |
|-------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| INA   | Inadequate Information to Assess Effects/Unclear Information | Comments stating the information provided in the analysis of the alternatives or potential effects is inadequate, inaccurate, or confusing. |
| LNG   | LNG pipeline                                                 | Comments comparing ASAP to the LNG pipeline project.                                                                                        |
| MIT   | Mitigation/Monitoring                                        | Comments related to mitigation and monitoring associated with the proposed Project.                                                         |
| NEPA  | National Environmental Policy Act                            | Comments regarding the NEPA and SEIS process.                                                                                               |
| NOI   | Noise                                                        | Comments regarding noise concerns.                                                                                                          |
| NOTE  | Notification of Meeting                                      | Comments regarding notification issues.                                                                                                     |
| PER   | Permits                                                      | Comments on permits and the permitting process.                                                                                             |
| PUR   | Project Purpose and Need                                     | Comments regarding the Project purpose and need.                                                                                            |
| REC   | Recreation                                                   | Comments regarding recreation concerns.                                                                                                     |
| RFI   | Request for Information                                      | Comments requesting information including maps, presentations, or descriptions of locations.                                                |
| SPILL | Spills (Oil Spills, Response, or Planning)                   | Comments related to potential oil spills, spill response, or planning.                                                                      |
| SUB   | Subsistence                                                  | Comments on potential impacts to subsistence activities.                                                                                    |
| VIS   | Visual Resources                                             | Comments regarding visual/scenic resources.                                                                                                 |
| WAS   | Trash/Waste                                                  | Comments regarding effects of trash/waste during construction and operation.                                                                |
| WET   | Wetlands/Water                                               | Comments regarding wetlands, streams, rivers, or associated vegetation.                                                                     |
| WLD   | Wildlife                                                     | Comments regarding potential effects on wildlife or wildlife-related issues with the proposed pipeline.                                     |

<sup>a</sup> These comments are not included in the total as substantive to the proposed action.

A second review of the comments within each issue category was conducted to identify specific subcategories. These subcategories were then synthesized into succinct “Comment Summary Statements” that intend to capture the particular concern within each issue category. Comment Summary Statements are not intended to replace actual comments. Rather, they summarize the range of concerns on a specific issue.

## 2.1. Source and Number of Public Comments

Comments submitted during the public comment period came from the following sources:

- Public meetings
- Written comments received by U.S. mail to USACE – CEPOA – RD, Ms. Sandy Gibson, PO Box 6898, JBER, AK 99506-0898

- Via email to [asapeiscomments@erm.com](mailto:asapeiscomments@erm.com) (a link was also provided on the website at <http://www.asapeis.com>)

A total of 81 submissions were received in addition to 26 from public hearings (including verbal testimony and comment forms). These submissions generated a total of 750 substantive comments: 75 from public hearing testimony and 675 from emails and letters.

## **2.2. Issues Identified During Public Comment Period**

In all, 30 issues were raised by stakeholders during the comment period. These issues are defined in Table 3. Figure 1 presents the number of comment summary statements raised by stakeholders on specific issues during the public comment period.

Table 4 is an index that provides a list of numbered issue codes associated with specific submissions received.

## **2.3. Comment Summary Statements and Responses**

Attachment D contains comment summary statements and responses developed from substantive comments received during the comment period.

Those who submitted comments can use Table 4 in conjunction with Attachment D to determine which summary statements represent their comment(s) and the associated responses. First, use Table 4 to locate the sender's name, review the correlating issue codes listed, and then see Attachment D for the list of summary statements and responses, which are organized by general issue and number.

**Figure 1**      **Number of Comment Summary Statements on Issues Raised during Public Comment Period**

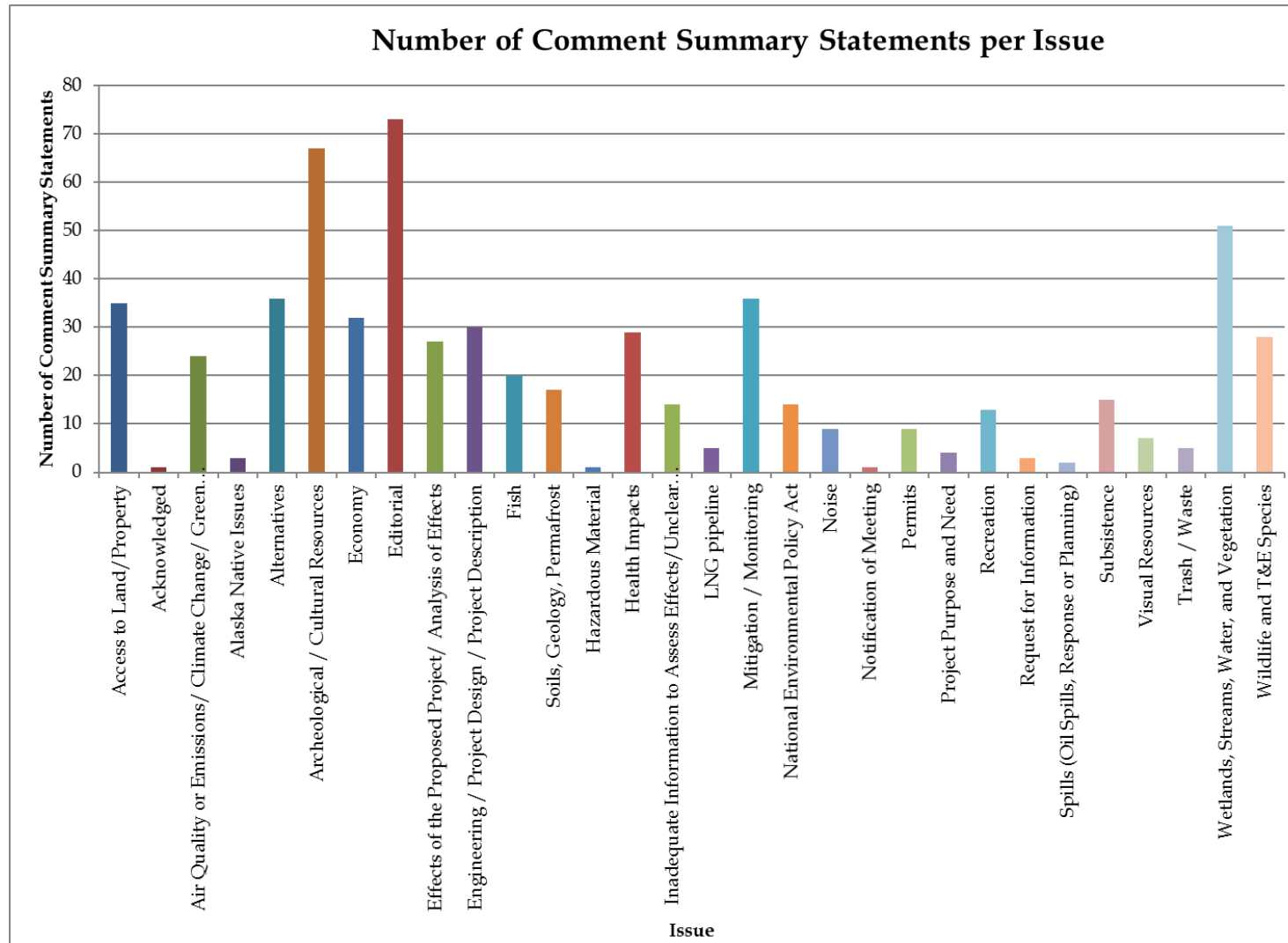


**Table 4 Public Comment Index**

| Sender Name       | Affiliation                                                | Issue Code(s)                                                                                                                                                                                                                             |
|-------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ahmakak           | None                                                       | ACK_1                                                                                                                                                                                                                                     |
| Ahnupkana         | None                                                       | HIA_1, SUB_7, WLD_4                                                                                                                                                                                                                       |
| Allnutt           | EPA                                                        | AIR_20, AIR_22, AIR_9, ALT_27, ALT_7, ALT_8, EFF_24, EFF_25, EFF_26, EFF_27, ENG_24, ENG_26, INA_10, INA_11, INA_12, INA_13, INA_9, MIT_30, MIT_31, MIT_32, MIT_33, MIT_34, MIT_35, MIT_36, WET_10, WET_27, WET_32, WET_49, WET_50, WET_9 |
| Anderson          | Ahtna, Inc                                                 | ACC_6, ECO_9, ENG_27, INA_1, MIT_18, NEPA_1, SPILL_1, SUB_2, WLD_2                                                                                                                                                                        |
| Bale              | Denali Citizens Council                                    | ALT_33, ALT_34, ECO_20, ECO_21, MIT_9, PUR_3, VIS_3                                                                                                                                                                                       |
| Balsiger          | NMFS                                                       | FISH_3, FISH_4                                                                                                                                                                                                                            |
| Boelman           | Columbia University<br>Lamont-Doherty Earth<br>Observatory | ACC_5                                                                                                                                                                                                                                     |
| Boeve             | Willow Area Community<br>Organization                      | NOTE_1                                                                                                                                                                                                                                    |
| Bond              | None                                                       | AKN_1, RFI_2, WET_3                                                                                                                                                                                                                       |
| Boothby           | Matanuska Susitna<br>Borough, Planning and<br>Land Use     | PER_3                                                                                                                                                                                                                                     |
| Bovee             | Ahtna Inc                                                  | ACC_6, INA_1, NEPA_1, SUB_2, WLD_2                                                                                                                                                                                                        |
| Bret-Harte        | University of Alaska<br>Fairbanks                          | ACC_5                                                                                                                                                                                                                                     |
| Bronowski         | None                                                       | ACC_7, ECO_7, NEPA_2, PUR_1                                                                                                                                                                                                               |
| Brower            | None                                                       | MIT_2, SUB_4                                                                                                                                                                                                                              |
| Brower            | North Slope Borough<br>(Mayor)                             | ALT_1, ALT_32, ENG_4, ENG_7, ENG_8, MIT_8, WLD_3                                                                                                                                                                                          |
| Brower,<br>Eunice | Native Village of Nuiqsut                                  | HIA_3, SUB_5                                                                                                                                                                                                                              |
| Casto             | None                                                       | ACC_18                                                                                                                                                                                                                                    |
| Charles           | None                                                       | REC_4                                                                                                                                                                                                                                     |
| Charles, Steve    | Willow Trail Committee                                     | ALT_30, REC_4                                                                                                                                                                                                                             |
| Chavez            | None                                                       | ACC_1                                                                                                                                                                                                                                     |
| Chester           | None                                                       | ALT_35                                                                                                                                                                                                                                    |
| Christian         | Mechanical Contractors<br>of Fairbanks Inc                 | ALT_1, ALT_2                                                                                                                                                                                                                              |
| Clay              | None                                                       | ENG_6, NEPA_4                                                                                                                                                                                                                             |
| Conn              | USFWS                                                      | ALT_35, ALT_36, ECO_22, EDI_1, EFF_5, EFF_6, EFF_7, MIT_10, MIT_11, MIT_12, MIT_13, MIT_14, MIT_15, NEPA_10, WET_7, WLD_5                                                                                                                 |
| Cooper            | None                                                       | WET_1                                                                                                                                                                                                                                     |
| Costello          | Evansville Tribal Council                                  | ECO_1                                                                                                                                                                                                                                     |
| Crosby            | None                                                       | ACC_1, ALT_12, INA_2, LNG_3, MIT_6, NEPA_5, NEPA_6, PUR_2, REC_3                                                                                                                                                                          |
| Desmond           | Western Mechanical, Inc                                    | ALT_1, ALT_2                                                                                                                                                                                                                              |

| Sender Name | Affiliation                                                              | Issue Code(s)                                                                                                                                                                                                                                                                                                                                                                        |
|-------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dick        | None                                                                     | ALT_20                                                                                                                                                                                                                                                                                                                                                                               |
| Dorrepaal   | Umeå University<br>Department of Ecology<br>and Environmental<br>Science | ACC_5, ALT_28                                                                                                                                                                                                                                                                                                                                                                        |
| Dupey       | None                                                                     | ECO_8, EFF_3, WET_4                                                                                                                                                                                                                                                                                                                                                                  |
| Fernando    | None                                                                     | ACC_3                                                                                                                                                                                                                                                                                                                                                                                |
| Fitzhugh    | Hawk Consultants LLC                                                     | ALT_1, ALT_2                                                                                                                                                                                                                                                                                                                                                                         |
| Fournier    | None                                                                     | ECO_4                                                                                                                                                                                                                                                                                                                                                                                |
| Frankevich  | National Parks<br>Conservation Association                               | ALT_29, ECO_19                                                                                                                                                                                                                                                                                                                                                                       |
| George      | None                                                                     | SUB_1, SUB_8                                                                                                                                                                                                                                                                                                                                                                         |
| Glatt       | None                                                                     | ALT_1, ALT_4, ECO_3                                                                                                                                                                                                                                                                                                                                                                  |
| Gough       | Towson University                                                        | ACC_5                                                                                                                                                                                                                                                                                                                                                                                |
| Grenier     | None                                                                     | ECO_14                                                                                                                                                                                                                                                                                                                                                                               |
| Guthrie     | None                                                                     | REC_1                                                                                                                                                                                                                                                                                                                                                                                |
| Hobrlle     | None                                                                     | ENG_1                                                                                                                                                                                                                                                                                                                                                                                |
| Holland     | None                                                                     | LNG_1                                                                                                                                                                                                                                                                                                                                                                                |
| Houchen     | Brena, Bell & Clarkson<br>Attorneys at Law                               | ACK_1                                                                                                                                                                                                                                                                                                                                                                                |
| Hugo        | None                                                                     | WAS_3                                                                                                                                                                                                                                                                                                                                                                                |
| Itta        | Native Village of Nuiqsut                                                | AKN_3, ECO_8, MIT_4                                                                                                                                                                                                                                                                                                                                                                  |
| Johnson     | BLM                                                                      | AIR_10, ALT_22, CUL_31, CUL_32, CUL_33,<br>CUL_34, CUL_35, CUL_36, CUL_37, CUL_38,<br>CUL_39, CUL_40, CUL_41, CUL_42, CUL_43,<br>CUL_44, CUL_45, CUL_46, CUL_47, CUL_49,<br>CUL_50, EDI_73, ENG_29, GEO_16, MIT_19,<br>MIT_20, MIT_21, MIT_22, MIT_23, MIT_24, MIT_25,<br>REC_10, REC_11, REC_12, REC_13, REC_9, VIS_7,<br>WET_38, WET_39, WET_40, WET_41, WET_42,<br>WLD_20, WLD_21 |
| Johnson     | U.S. Department of the<br>Interior                                       | ACK_1, ENG_28, GEO_5, GEO_6, WET_33,<br>WET_34, WET_35, WET_36, WET_37, WLD_18,<br>WLD_19                                                                                                                                                                                                                                                                                            |
| Johnson     | USFWS                                                                    | ALT_35, ALT_36, EFF_23, EFF_5, EFF_6, EFF_7,<br>ENG_30, GEO_15, MIT_11, MIT_12, MIT_13,<br>MIT_14, NEPA_10, WET_47, WET_48, WLD_19,<br>WLD_23, WLD_24, WLD_5                                                                                                                                                                                                                         |
| Justice     | None                                                                     | REC_1                                                                                                                                                                                                                                                                                                                                                                                |
| Kassel      | Fairbanks North Star<br>Borough (Mayor)                                  | ALT_18, ECO_23, EFF_8, HIA_2, NEPA_12, PUR_4                                                                                                                                                                                                                                                                                                                                         |
| Knight      | City of Valdez (Mayor)                                                   | ALT_5, NEPA_11, PUR_4                                                                                                                                                                                                                                                                                                                                                                |
| Lamb        | Alaska Energy Authority                                                  | ALT_1                                                                                                                                                                                                                                                                                                                                                                                |
| Lundstrum   | None                                                                     | ACC_1                                                                                                                                                                                                                                                                                                                                                                                |
| Mack        | ADNR                                                                     | ALT_1, ALT_2                                                                                                                                                                                                                                                                                                                                                                         |
| MacKinnon   | Associated General<br>Contractors of Alaska                              | ALT_1, ALT_2                                                                                                                                                                                                                                                                                                                                                                         |
| McLaren     | University of Texas at El<br>Paso                                        | ACC_5                                                                                                                                                                                                                                                                                                                                                                                |

| Sender Name       | Affiliation                                                           | Issue Code(s)                                                                                                                                                                                                                                                                            |
|-------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Moderow           | None                                                                  | ACC_16, ALT_26, INA_5, NEPA_9, VIS_2, WET_6                                                                                                                                                                                                                                              |
| Morgan            | None                                                                  | ECO_8                                                                                                                                                                                                                                                                                    |
| Mulligan          | Alaska Chamber                                                        | ALT_1                                                                                                                                                                                                                                                                                    |
| Murkowski         | U.S. Senate                                                           | ALT_24, ECO_16, ECO_17                                                                                                                                                                                                                                                                   |
| Murrell           | ADEC                                                                  | AIR_11, AIR_12, AIR_13, AIR_14, AIR_15, AIR_16, AIR_17, AIR_18, AIR_19, AIR_21, AIR_23, AIR_24, AIR_5, AIR_6, EDI_63, EDI_64, EDI_65, EDI_66, EDI_67, EFF_10, EFF_11, EFF_12, EFF_13, EFF_14, EFF_15, EFF_16, EFF_17, EFF_18, EFF_19, EFF_20, EFF_21, HAZ_1, HIA_29, LNG_4, LNG_5        |
| Murrell           | ADEC - Division of Water - Wastewater Discharge Authorization Program | PER_4, PER_8, SPILL_2, WAS_5, WET_46                                                                                                                                                                                                                                                     |
| Murrell           | ADF&G                                                                 | ACC_34, EDI_58, EDI_59, FISH_10, FISH_11, FISH_12, FISH_13, FISH_14, FISH_15, FISH_16, FISH_17, FISH_18, FISH_19, FISH_20, PER_9, SUB_11, WET_43, WET_44, WET_45, WLD_22                                                                                                                 |
| Murrell           | ADNR                                                                  | FISH_9                                                                                                                                                                                                                                                                                   |
| Murrell           | DHSS                                                                  | EDI_60, EDI_61, EDI_62, HIA_10, HIA_11, HIA_12, HIA_13, HIA_14, HIA_15, HIA_16, HIA_17, HIA_18, HIA_19, HIA_20, HIA_21, HIA_22, HIA_23, HIA_24, HIA_25, HIA_26, HIA_27, HIA_28, HIA_4, HIA_5, HIA_6, HIA_7, HIA_8, HIA_9, MIT_26, MIT_27, MIT_28, MIT_29, SUB_12, SUB_13, SUB_14, SUB_15 |
| Murrell           | DNR-DGGS                                                              | AIR_7, ALT_35, ECO_27, EFF_22, GEO_10, GEO_11, GEO_12, GEO_13, GEO_14, GEO_7, GEO_8, GEO_9, WET_51                                                                                                                                                                                       |
| Murrell           | DNR-OHA-SHPO                                                          | CUL_19, CUL_28, CUL_48, CUL_51, CUL_52, CUL_53, CUL_54, CUL_55, CUL_56, CUL_57, CUL_58, CUL_59, CUL_6, CUL_60, CUL_61, CUL_62, CUL_63, CUL_64, CUL_65, CUL_66, CUL_67, CUL_9, EDI_72                                                                                                     |
| Murrell           | DNR-Water                                                             | EDI_68, EDI_69, EDI_70, EDI_71                                                                                                                                                                                                                                                           |
| Navarre           | AGDC Community Advisory Committee                                     | ALT_1, ECO_18                                                                                                                                                                                                                                                                            |
| Nukapigak, Edward | Nuiqsut Whaling Captain                                               | INA_3, MIT_3, NEPA_7, SUB_5, SUB_6, WLD_4                                                                                                                                                                                                                                                |
| Nukapigak, Robert | None                                                                  | INA_4, MIT_5, NEPA_8                                                                                                                                                                                                                                                                     |
| Oxley             | Willow Area Community Organization                                    | ACC_15, ALT_25                                                                                                                                                                                                                                                                           |
| Parker            | Fairbanks North Star Borough, Community Platting                      | PER_3, PER_5                                                                                                                                                                                                                                                                             |
| Public            | None                                                                  | ALT_3                                                                                                                                                                                                                                                                                    |
| Rastetter         | University of Chicago Marine Biological Laboratory                    | ACC_5, ALT_6                                                                                                                                                                                                                                                                             |

| Sender Name                          | Affiliation                                                                            | Issue Code(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reakoff                              | Western Interior Regional Advisory Council to the Federal Subsistence Board (Chairman) | ACC_10, ACC_8, ACC_9, ALT_13, ALT_15, ALT_16, EFF_2, ENG_2, FISH_1, FISH_2, SUB_3, WLD_1, WLD_3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Federal Subsistence Board (Chairman) | US Department of the Interior                                                          | ACC_10, ACC_8, ACC_9, ALT_13, ALT_15, ALT_16, EFF_2, ENG_2, FISH_1, FISH_2, SUB_3, WLD_1, WLD_3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Richards                             | AGDC                                                                                   | ACC_17, ACC_19, ACC_20, ACC_21, ACC_22, ACC_23, ACC_24, ACC_25, ACC_26, ACC_27, ACC_28, ACC_29, ACC_30, ACC_31, ACC_32, ACC_33, AIR_1, AIR_2, AIR_3, AIR_4, AIR_8, ALT_2, ALT_31, CUL_1, CUL_10, CUL_11, CUL_12, CUL_13, CUL_14, CUL_15, CUL_16, CUL_17, CUL_18, CUL_2, CUL_20, CUL_21, CUL_22, CUL_23, CUL_24, CUL_25, CUL_26, CUL_27, CUL_29, CUL_3, CUL_30, CUL_4, CUL_5, CUL_7, CUL_8, ECO_24, ECO_25, ECO_26, ECO_28, ECO_29, ECO_30, ECO_31, ECO_32, EDI_10, EDI_11, EDI_12, EDI_13, EDI_14, EDI_15, EDI_16, EDI_17, EDI_18, EDI_19, EDI_2, EDI_20, EDI_21, EDI_22, EDI_23, EDI_24, EDI_25, EDI_26, EDI_27, EDI_28, EDI_29, EDI_3, EDI_30, EDI_31, EDI_32, EDI_33, EDI_34, EDI_35, EDI_36, EDI_37, EDI_38, EDI_39, EDI_4, EDI_40, EDI_41, EDI_42, EDI_43, EDI_44, EDI_45, EDI_46, EDI_47, EDI_48, EDI_49, EDI_5, EDI_50, EDI_51, EDI_52, EDI_53, EDI_54, EDI_55, EDI_56, EDI_57, EDI_6, EDI_7, EDI_8, EDI_9, EFF_1, EFF_9, ENG_10, ENG_11, ENG_12, ENG_13, ENG_14, ENG_15, ENG_16, ENG_17, ENG_18, ENG_19, ENG_20, ENG_21, ENG_22, ENG_23, ENG_25, ENG_9, FISH_5, FISH_6, FISH_7, FISH_8, GEO_1, GEO_17, GEO_2, GEO_3, GEO_4, INA_14, INA_6, INA_7, INA_8, MIT_16, MIT_17, NEPA_13, NEPA_14, NOI_1, NOI_2, NOI_3, NOI_4, NOI_5, NOI_6, NOI_7, NOI_8, NOI_9, PER_6, PER_7, REC_5, REC_6, REC_7, REC_8, SUB_10, SUB_9, VIS_4, VIS_5, VIS_6, WAS_4, WET_11, WET_12, WET_13, WET_14, WET_15, WET_16, WET_17, WET_18, WET_19, WET_20, WET_21, WET_22, WET_23, WET_24, WET_25, WET_26, WET_28, WET_29, WET_30, WET_31, WET_8, WLD_10, WLD_11, WLD_12, WLD_13, WLD_14, WLD_15, WLD_16, WLD_17, WLD_25, WLD_26, WLD_27, WLD_28, WLD_6, WLD_7, WLD_8, WLD_9 |
| Rowe                                 | University of New Hampshire                                                            | ACC_5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Sattler                              | Tanana Chiefs Conference                                                               | ACC_12, AKN_2, NEPA_3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Sender Name     | Affiliation                                                                 | Issue Code(s)                                                    |
|-----------------|-----------------------------------------------------------------------------|------------------------------------------------------------------|
| Smolden, Carrie | None                                                                        | REC_4                                                            |
| Smoldon, Carrie | None                                                                        | ECO_15, EFF_4, REC_4                                             |
| Smoldon, Todd   | None                                                                        | MIT_7                                                            |
| Stackhouse      | None                                                                        | ALT_14, ECO_5, ECO_7                                             |
| Stinson         | Price Gregory International Inc                                             | ALT_1                                                            |
| Strassenburgh   | None                                                                        | ACC_14, ALT_10, ALT_11, ALT_9, LNG_2, MIT_1, REC_2, VIS_1, WET_5 |
| Swanson         | Evansville Tribal Council                                                   | ECO_6, ENG_3                                                     |
| Tansy           | None                                                                        | ACC_11, ACC_6                                                    |
| Therriault      | Alaska Industrial Development and Export Authority, Interior Energy Project | ALT_1, ECO_10                                                    |
| Thompson        | Evansville Tribal Council (First Chief)                                     | RFI_1                                                            |
| Thorne          | None                                                                        | ACC_4, ALT_13, ECO_1, WET_2                                      |
| Titus           | Village of Minto (Second Chief)                                             | ACK_1, ECO_1, ECO_11, ECO_12, SPILL_1                            |
| Troyer          | None                                                                        | REC_1                                                            |
| Turnbull        | None                                                                        | ALT_23                                                           |
| Veats           | None                                                                        | WAS_1, WAS_2, WLD_1                                              |
| Wait            | None                                                                        | RFI_3                                                            |
| Walker          | Denali Borough (Mayor)                                                      | ALT_7                                                            |
| Walsh           | Petrotechnical Resources of Alaska LLC                                      | ALT_1, ALT_2                                                     |
| Weiser, Josh    | None                                                                        | ACC_2, ACK_1, ALT_14, ALT_21, PER_2                              |
| Weiser, Vera    | None                                                                        | ACC_2, SPILL_1                                                   |
| Wilder          | None                                                                        | ECO_13                                                           |
| Woods           | Manley Hot Springs (Chief)                                                  | ALT_3, ECO_2                                                     |
| Wuttig          | Alyeska Pipeline                                                            | ACC_13, ALT_17, ALT_19, ENG_4, ENG_5, PER_1                      |

### **3. RESPONSE TO COMMENTS AND THE SEIS PROCESS**

In accordance with the NEPA process, the Final SEIS has been modified based on comments received during the Draft SEIS public comment period. For example, specific comments resulted in changes to the proposed pipeline route or location of ancillary facilities such as access roads or camps.

USACE, along with the cooperating agencies, has analyzed and responded to substantive comments received in response to the Draft SEIS. These comments and responses have been assimilated and published in this Public Comment Analysis Report. Table 1.10-2 in the FSEIS captures the issues identified during the comment period and where in the Final SEIS those comment topics are discussed

After public notice of the Final SEIS availability is made, a 90-day period is held, during which the public may submit comments on the Final SEIS to be considered by USACE prior to publishing the ROD.

## 4. CONTACT

For further information regarding this Public Comment Analysis Report or other aspects of the ASAP Project SEIS, please contact:

Sandy Gibson  
Project Manager  
USACE – CEPOA – RD  
PO Box 6898  
JBER, AK 99506  
[asapeiscomments@erm.com](mailto:asapeiscomments@erm.com)

## 5. REFERENCES

- AGDC (Alaska Gasline Development Corporation). (2014). *Alaska Stand Alone Pipeline/ASAP – Plan of Development*. Revision 3. 001-C-22-PRO-W-0001. June 20, 2014. Website: [http://asapgas.agdc.us/pdfs/documents/pod2014/POD%20Rev%203\\_Final\\_07-22-2014\\_COMBINED.pdf](http://asapgas.agdc.us/pdfs/documents/pod2014/POD%20Rev%203_Final_07-22-2014_COMBINED.pdf). Accessed October 9, 2014.
- AGDC. (2016). *Alaska Stand Alone Pipeline/ASAP Project – Environmental Evaluation Document*. 001-C-22-GRD-W-0055. July 15, 2016. Website: <http://asapgas.agdc.us/documents.html>.
- Northern Economics Inc. (2010). *In-state Gas Demand Study Vol. 1: report prepared for TransCanada Alaska Co. LLC*. January.
- USACE (U.S. Army Corps of Engineers). (2017). *Alaska Stand Alone Pipeline Project Draft Supplemental Environmental impact Statement*. June 2017. Website: <http://www.asapeis.com/docs.html>.

## **ATTACHMENT A**

**Federal Register NOA**

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US Army Corps  
of Engineers  
Alaska District

Regulatory Division (1145)  
CEPOA-RD  
Post Office Box 6898  
JBER, Alaska 99506-0898

# Public Notice of Application for Permit and Notice of Availability for Draft Supplemental Environmental Impact Statement

**PUBLIC NOTICE DATE:** June 30, 2017

**EXPIRATION DATE:** August 14, 2017

**REFERENCE NUMBER:** POA-2009-651

**WATERWAY:** Multiple Waterways

Project Information: The U.S. Army Corps of Engineers (Corps), Alaska District, Regulatory Division received an application from the Alaska Gasline Development Corporation on January 13, 2016 (amended July, 2016) requesting authorization under a Department of the Army permit to construct an in-state natural gas pipeline. The Alaska Stand Alone Pipeline (ASAP) Project comprises of a natural gas conditioning facility (GCF) capable of producing an annual average 500 million standard cubic feet per day (MMscfd) of utility-grade natural gas at peak capacity and a 1,480 pound per square inch (psig) natural gas pipeline. The pipeline is a 733-mile long, 36-inch-diameter natural gas transmission mainline extending from the Gas Conditioning Facility near Prudhoe Bay south to a connection with the existing ENSTAR pipeline system in the Matanuska-Susitna Borough. An approximately 30-mile-long, 12-inch-diameter lateral pipeline will connect the mainline to Fairbanks. The proposed pipeline will typically be buried with a minimum cover of 30 inches and a bottom-of-ditch depth of 6 to 8 feet except at possible fault crossings, elevated bridge stream crossings, pigging facilities, and block valve locations. The ASAP route will generally parallel the Trans-Alaska Pipeline System (TAPS) and Dalton Highway corridor to near Livengood, northwest of Fairbanks. At Livengood, the mainline route will continue south, to the west of Fairbanks and Nenana. The pipeline will bypass Denali National Park and Preserve to the east and will then generally parallel the Parks Highway corridor to Willow, continuing south to its connection into ENSTAR's distribution system at MP 39 of the Beluga Pipeline southwest of Big Lake. The Fairbanks Lateral tie-in will be located approximately 2.5 miles south of the Chatanika River crossing at MP 440 of the mainline. From the mainline tie-in point, the Fairbanks Lateral pipeline will traverse east over Murphy Dome, following the Murphy Dome and Old Murphy Dome Roads, and then extend southeast into Fairbanks. **A total of 21,237.34 acres (8,907.01 in jurisdictional waters of the U.S., including wetlands; and, 12,330.33 in uplands)**

would be impacted either permanently or temporarily by the proposed pipeline, aboveground facilities, access roads, and marine dredge or fill. The 8,907.01 acres of wetland impacts include 8,734.58 acres of impacts to freshwater habitat (categorized as palustrine emergent, palustrine shrub/scrub, and palustrine forest; and, pond, lake and intermittent waterbodies). The remaining 172.44 acres of jurisdictional marine impacts include discharges to 0.90 acres of intertidal and 171.54 acres of subtidal waters of the U.S..

Applicant: Alaska Gasline Development Corporation, c/o Mr. Michael Thompson, 3201 C Street, Suite 200, Anchorage, Alaska 99503; mthompson@adgc.us

Project Purpose: The applicant has stated, "The Alaska Stand Alone Pipeline (ASAP) is Alaska's in-state natural gas pipeline designed to develop an affordable, long-term energy solution for Fairbanks, the Southcentral region of the state, and other communities in the state consistent with Alaska Statute AS 31.25.005.

Permit Authority: The proposed project would involve work and structures in navigable waters of the U.S., and the discharge of fill material in waters of the U.S., including wetlands. Therefore, the project is subject to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

Other Environmental Review and Consultation Requirements: Other environmental review and consultation requirements include Executive Order 13175 Consultation and Coordination with Indian Tribal Governments, Executive Order 12898 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 106 of the National Historic Preservation Act of 1966, Endangered Species Act Section 7 consultation and Magnuson-Stevens Act Essential Fish Habitat.

- Endangered Species: The Corps has made a determination that the proposed project **may affect** listed species and their federally-designated critical habitat, identified within the Endangered Species Act. The Corps has initiated section 7 consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service.
- Essential Fish Habitat: The Corps has determined that the proposed project **may affect** essential fish habitat and is initiating consultation with the National Marine Fisheries Service, under the Magnuson-Stevens Act.
- Historic Properties: The Corps has made a determination that historic properties exist within the permit area and may result in an **adverse effect** to properties as a result of the proposed project. The Corps has reinitiated consultation with the State Historic Preservation Office under 106 of the National Historic Preservation Act. A programmatic agreement will be developed in consultation with SHPO and other consulting or interested parties for incorporating measures to resolve any unavoidable or adverse effects to historic properties and cultural resources. Additionally, the Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding

protected rights and resources will be accorded due consideration in this process. Notification of invitation to participate in government-to-government consultation, additional opportunities to obtain project related information, request for participation in decision-making processes regarding the protected Tribal right or resources and opportunities to provide comments were provided by phone, email correspondence and hardcopy to the Tribes within the area potentially affected by the proposed work. Additionally, consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period. The Corps will be available to conduct government to government consultations with all affected federally recognized tribes.

**Application Location for Download:** The permit application, including descriptions of proposed work and structures, plan and elevation drawings, type, composition and quantity of fill discharge by location, and other supporting information is available for public review at the project website: [www.asapeis.com](http://www.asapeis.com) .

**Draft SEIS Location for Download:** A Draft Supplemental Environmental Impact Statement (DSEIS) has been prepared for this project and is also available for review. Notification of scheduled public meeting locations and dates have been provided by separate notification and are posted on the project website: [www.asapeis.com](http://www.asapeis.com) .

To request a hardcopy of the application or the SEIS, please contact the Applicant, at: Alaska Gasline Development Corporation, c/o Mr. Michael Thompson, 3201 C Street, Suite 200, Anchorage, Alaska 99503; [mthompson@adgc.us](mailto:mthompson@adgc.us)

The Corps has been designated the lead federal agency and the U.S. Bureau of Land Management (BLM), National Park Service (NPS), U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (USFWS), U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA), and the Alaska Department of Natural Resources State Pipeline Coordinator's Office (SPCO) are participating as cooperating agencies in the Supplemental Environmental Impact Statement (SEIS) development process.

Comments: Comments can be submitted via the U.S. Postal Service to: U.S. Army Corps of Engineers, CEPOA-RD, Ms. Sandy Gibson, P.O. Box 6898, JBER, Alaska 99506-0898 or also via email at: [asapeiscomments@erm.com](mailto:asapeiscomments@erm.com). We request that you include with your comments: (1) Your name, address, and affiliation (if any); (2) Be as specific as possible when stating your concern or comment and whether it is specific to the Draft SEIS, the permit application or both; and (3) Provide any background documents to support your comments, as necessary.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, water quality, conservation, economics, aesthetics, wetlands, cultural values, navigation, fish and wildlife values, water supply, and any other factors judged important to the needs and welfare of the people. The decision to issue a DA

permit or not will be based on an evaluation of the potential impacts, including direct, indirect, and/or cumulative impacts of the proposed project on the public interest. That decision will reflect the national concern for both the protection and utilization of important resources. The benefit which reasonably can be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. For the discharge of fill into special aquatic sites, evaluation of the impact of the activity on the public interest will include application of the 404(b)(1) guidelines promulgated by the Administrator of the Environmental Protection Agency (40 CFR Part 230). Subject to the preceding sentence and any other applicable guidelines or criteria (see 40 CFR Part 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

Development of the SEIS will assist the Corps in determining whether to issue a DA permit, issue a DA permit with special conditions, or deny a DA permit.

Public Hearing: Any person may request, in writing, within the designated comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for public hearing and shall be submitted to the Corps, using the contact information referenced above.

**- THE DEADLINE FOR PROVIDING COMMENTS IS AUGUST 14, 2017 -**

District Engineer  
U.S. Army, Corps of Engineers



US Army Corps  
of Engineers  
Alaska District

Regulatory Division (1145)  
CEPOA-RD  
Post Office Box 6898  
JBER, Alaska 99506-0898

# Public Notice of Application for Permit

**PUBLIC NOTICE DATE: June 30, 2017**

**EXPIRATION DATE: August 29, 2017  
(revised)**

**REFERENCE NUMBER: POA-2009-651**

**WATERWAY: Multiple Waterways**

## **\*\*\*PUBLIC NOTICE REVISION\*\*\***

On June 30, 2017, the Alaska District Corps of Engineers published a Public Notice for Department of the Army (DA) permit number POA-2009-651, Multiple Waterways, for a DA permit application and Notice of Availability for the Draft Supplemental Environmental Impact Statement for the Alaska Stand Alone Pipeline Project.

The public comment period has been extended to August 29, 2017.

All other information contained in the previous notice remains the same. Please bring this announcement to the attention of anyone you know who is or may be interested.

Comments: Comments can be submitted via the U.S. Postal Service to: U.S. Army Corps of Engineers, CEPOA-RD, Ms. Sandy Gibson, P.O. Box 6898, JBER, Alaska 99506-0898 or also via email at: [asapeiscomments@erm.com](mailto:asapeiscomments@erm.com). We request that you include with your comments: (1) Your name, address, and affiliation (if any); (2) Be as specific as possible when stating your concern or comment and whether it is specific to the Draft SEIS, the permit application or both; and (3) Provide any background documents to support your comments, as necessary.

**- THE DEADLINE FOR PROVIDING COMMENTS IS AUGUST 29, 2017 -**

District Engineer  
U.S. Army, Corps of Engineers

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## **ATTACHMENT B**

### **Meeting Notices**

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# You're Invited!

## Alaska Stand Alone Pipeline Project

### 2017 Public Meeting

The U.S. Army Corps of Engineers Alaska District invites you to a public meeting to discuss the Draft Supplemental Environmental Impact Statement (SEIS) for the Alaska Stand Alone Pipeline (ASAP) Project.

There will be a presentation about the ASAP Project, then an informational open house where the public can view project maps, followed by a formal public comment opportunity. Refreshments will be provided. Please join us!

The BLM will also be conducting an ANILCA 810 subsistence hearing to provide information on potential impacts to subsistence uses and hear the concerns and comments of affected users in the following villages: Barrow, Nuiqsut, Bettles, Wiseman, Minto, Healy, Cantwell, and Trapper Creek.

|                                                                                                                                                  |                                                                                                                                                                      |                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Willow, Friday, August 18, 2017 (7:00-8:30pm)</b><br>Willow Community Center<br>23625 W. Willow Community Center Circle, Willow, Alaska 99688 |                                                                                                                                                                      |  <b>NEW!</b> |
| <b>Barrow, Monday, July 17, 2017 (5:30-8:30pm)</b><br>Iñupiat Heritage Center<br>P.O. Box 69, Barrow, Alaska 99723                               | <b>Wiseman/Coldfoot, Wednesday, July 26, 2017 (5:30-8:30pm)</b><br>Community Center of Wiseman<br>Wiseman, Alaska 99701                                              |                                                                                                 |
| <b>Nuiqsut, Tuesday, July 18, 2017 (5:30-8:30pm)</b><br>Kisik Community Center<br>P.O. Box 89148, Nuiqsut, Alaska 99789                          | <b>Anchorage, Tuesday, August 1, 2017 (6:30-9:30pm)</b><br>Alaska Pacific University, Lecture Hall,<br>4101 University Drive,<br>Anchorage, Alaska 99508             |                                                                                                 |
| <b>Fairbanks, Thursday, July 20, 2017 (5:30-8:30pm)</b><br>Westmark Hotel<br>813 Noble Street, Fairbanks, Alaska 99701                           | <b>Healy, Wednesday, August 2, 2017 (5:30-8:30pm)</b><br>Tri-Valley Community Center<br>1 Healy Spur Road, Healy, Alaska 99743                                       |                                                                                                 |
| <b>Minto/Tanana, Friday, July 21, 2017 (5:30-8:30pm)</b><br>Minto Tribal Hall<br>Minto, Alaska 99758                                             | <b>Cantwell/Denali, Thursday, August 3, 2017 (5:30-8:30pm)</b><br>Cantwell Community Hall<br>Cantwell, Alaska 99729                                                  |                                                                                                 |
| <b>Bettles/Evansville, Tuesday, July 25, 2017 (5:30-8:30pm)</b><br>Evansville Tribal Hall<br>P.O. Box 26087, Bettles Field, Alaska 99726         | <b>Trapper Creek, Friday, August 4, 2017 (5:30-8:30pm)</b><br>Trapper Creek Park Building, Milepost 115.2<br>George Parks Highway, Turn Left on E. TC<br>Park Circle |                                                                                                 |

Please check the project website for additional information and for potential updates to meeting dates and locations: <http://www.asapeis.com>



**US Army Corps  
of Engineers**  
Alaska District





## MEMORANDUM

September 13, 2017

To: KBRW  
Phone: 907-852-6811  
Fax: 907-852-2274  
[cshults@kbrw.org](mailto:cshults@kbrw.org)

RE: **Alaska Stand Alone Pipeline (ASAP) Project Public Meeting**

---

This memo serves as public service announcement to be aired through KBRW:

**WHAT:** A COMMUNITY MEETING  
**WHERE:** Iñupiat Heritage Center, **BARROW**, Alaska  
**WHEN:** Monday, **JULY 17, 2017** from 5:30 PM to 8:30 PM

The U.S. Army Corps of Engineers invites you to a public meeting to discuss the Draft Supplemental Environmental Impact Statement (SEIS) for the Alaska Stand Alone Pipeline (ASAP) Project.

There will be a presentation about the ASAP Project, then an informational open house where the public can view maps, followed by a formal public comment opportunity. Public comments on the Draft SEIS will be accepted through **AUGUST 14, 2017**.

Refreshments will be provided. Please join us!

For more information on the ASAP Project, please visit the project website at [www.asapeis.com](http://www.asapeis.com). The BLM will also be conducting an ANILCA 810 subsistence hearing to provide information on potential impacts to subsistence uses and hear the concerns and comments of affected users.

Please air this message beginning July 10 through July 17, 2017. Thank you.

---

Annie Surratt, Staff Scientist  
ERM Alaska, Inc.  
+1 (907) 264-4458  
[annie.surratt@erm.com](mailto:annie.surratt@erm.com)



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# AFFIDAVIT OF PUBLICATION

STATE OF ALASKA  
THIRD JUDICIAL DISTRICT

Joleesa Stepetin  
being first duly sworn on oath deposes and  
says that he/she is a representative of the  
Alaska Dispatch News, a daily newspaper.  
That said newspaper has been approved  
by the Third Judicial Court, Anchorage,  
Alaska, and it now and has been published  
in the English language continually as a  
daily newspaper in Anchorage, Alaska, and  
it is now and during all said time was  
printed in an office maintained at the  
aforesaid place of publication of said  
newspaper. That the annexed is a copy of  
an advertisement as it was published in  
regular issues (and not in supplemental  
form) of said newspaper on

June 30, 2017

and that such newspaper was regularly  
distributed to its subscribers during all of  
said period. That the full amount of the fee  
charged for the foregoing publication is not  
in excess of the rate charged private  
individuals.

Signed

*Joleesa Stepetin*

Subscribed and sworn to before me  
this 30th day of June, 2017

*[Signature]*

Notary Public in and for  
The State of Alaska.  
Third Division  
Anchorage, Alaska  
MY COMMISSION EXPIRES

4/14/21

ANGELA M SIMMONS  
NOTARY PUBLIC  
State of Alaska  
My Commission Expires Apr. 14, 2021

## U.S. Army Corps of Engineers Notice of Public Meetings

### Draft Supplemental Environmental Impact Statement Alaska Stand Alone Pipeline (as proposed)

The U.S. Army Corps of Engineers (USACE), Alaska District, announces the availability of the Draft Supplemental Environmental Impact Statement (SEIS) for the Alaska Stand Alone Pipeline (ASAP). The Draft SEIS identifies and analyzes the potential impacts associated with the construction and operations of the proposed ASAP utility-grade natural gas transportation pipeline, including mitigation measures intended to reduce impacts resulting from the construction and operation of the proposed project. The Draft SEIS focuses on project changes proposed after the completion of the October 2012 Final Environmental Impact Statement. The Draft SEIS may also be viewed online at: <http://asapgas.agdc.us/documents.html>. The BLM will also be conducting an ANILCA 810 subsistence hearing to provide information on potential impacts to subsistence uses and hear the concerns and comments of affected users in the following villages: Barrow, Nuiqsut, Bettles, Wiseman, Minto, Healy, Cantwell, and Trapper Creek.

Public meetings provide an opportunity to express your views and identify issues to be addressed in the Draft SEIS. In accordance with the National Environmental Policy Act, the USACE is soliciting public comments regarding the potential impacts to the proposed project and project alternatives for the construction and operations of the proposed ASAP pipeline. Ten public meetings will be held on the following dates and locations, from 5:30pm to 8:30pm, with exceptions indicated in parentheses:

|                                                                                                                     |                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Barrow, Monday, July 17, 2017<br>Iñupiat Heritage Center<br>P.O. Box 69, Barrow, Alaska 99723                       | Minto/Tanana, Friday, July 28, 2017<br>Minto Tribal Hall<br>Minto, Alaska 99758                                                                        |
| Nuiqsut, Tuesday, July 18, 2017<br>Kisik Community Center<br>P.O. Box 89148, Nuiqsut, Alaska 99789                  | Anchorage/Willow, Tuesday, August 1, 2017<br>(6:30-9:30pm)<br>Alaska Pacific University, Lecture Hall<br>4101 University Drive Anchorage, Alaska 99508 |
| Fairbanks, Thursday, July 20, 2017<br>Westmark Hotel<br>813 Noble Street, Fairbanks, Alaska 99701                   | Healy, Wednesday, August 2, 2017<br>Tri-Valley Community Center<br>1 Healy Spur Road, Healy, Alaska 99743                                              |
| Bettles/Evansville, Tuesday, July 25, 2017<br>Evansville Tribal Hall<br>P.O. Box 26087, Bettles Field, Alaska 99726 | Cantwell/Denali, Thursday, August 3, 2017<br>Cantwell Community Hall<br>Cantwell, Alaska 99729                                                         |
| Wiseman/Coldfoot, Wednesday, July 26, 2017<br>Community Center of Wiseman<br>Wiseman, Alaska 99701                  | Trapper Creek, Friday, August 4, 2017<br>Trapper Creek Park Building, Milepost 115.2<br>George Parks Hwy, Turn Left on E. TC Park Circle               |

Please check the project website for potential updates to meeting dates and locations:  
<http://www.asapeis.com>

The Notice of Availability (NOA) was published in the Federal Register on June 30, 2017. A link to the NOA and other project related information can be found on the project website at: <http://www.asapeis.com>. Comments can also be submitted to the USACE via U.S. Postal Service to: U.S. Army Corps of Engineers, CEPOA-RD, Ms. Sandy Gibson, P.O. Box 6898, JBER, Alaska 99506-0898 or via email at: [asapeiscomments@erm.com](mailto:asapeiscomments@erm.com). We request the following with your comments: include your name, address, and affiliation (if any); be as specific as possible when stating your concern or comment; and, provide any background documents to support your comments as you think necessary.

- THE DEADLINE FOR PROVIDING COMMENTS IS AUGUST 14, 2017 -

# AFFIDAVIT OF PUBLICATION

UNITED STATES OF AMERICA  
STATE OF ALASKA  
FOURTH DISTRICT

SS.

Before me, the undersigned, a notary public, this day personally appeared Erin Wells, who, being first duly sworn, according to law, says that he/she is an Advertising Clerk of the Fairbanks Daily News-Miner, a newspaper (i) published in newspaper format, (ii) distributed daily more than 50 weeks per year, (iii) with a total circulation of more than 500 and more than 10% of the population of the Fourth Judicial District, (iv) holding a second class mailing permit from the United States Postal Service, (v) not published primarily to distribute advertising, and (vi) not intended for a particular professional or occupational group. The advertisement which is attached is a true copy of the advertisement published in said paper on the following day(s):

6/20/17, 7/13/17

ERM Alaska Inc

Acct# 2749

Ad# 41367

Notice of Public Meetings

and that the rate charged thereon is not excess of the rate charged private individuals, with the usual discounts.

Erin Wells

Subscribed and sworn to before me on this 25th day of July, 2017

[Signature]  
Notary Public in and for the State Alaska.

My commission expires December 7, 2017

## U.S. Army Corps of Engineer Notice of Public Meetings

Draft Supplemental Environmental Impact State  
Alaska Stand Alone Pipeline (as proposed)

The U.S. Army Corps of Engineers (USACE), Alaska District, announces the availability of the Draft Supplemental Environmental Impact Statement (SEIS) for the Alaska Stand Alone Pipeline (ASAP). The Draft SEIS identifies impacts associated with the construction and operations of the proposed ASAP utility-grade pipeline, including mitigation measures intended to reduce impacts resulting from the construction project. The Draft SEIS focuses on project changes proposed after the completion of the Construction Impact Statement. The Draft SEIS may also be viewed online at: <http://asapgas.agdc>. The USACE is also conducting an ANILCA 810 subsistence hearing to provide information on potential impacts and hear the concerns and comments of affected users in the following villages: Barrow, Healy, Cantwell, and Trapper Creek.

Public meetings provide an opportunity to express your views and identify issues to be addressed with the National Environmental Policy Act, the USACE is soliciting public comments on the proposed project and project alternatives for the construction and operations of the pipeline. Meetings will be held on the following dates and locations, from 5:30pm to 8:30pm, with exceptions as noted.

|                                                                                                                            |                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Barrow, Monday, July 17, 2017</b><br>Inupiat Heritage Center<br>P.O. Box 69, Barrow, Alaska 99723                       | <b>Minto/Tanana, Friday</b><br>Minto Tribal Hall<br>Minto, Alaska 99758                                                                     |
| <b>Nuiqsut, Tuesday, July 18, 2017</b><br>Kisik Community Center<br>P.O. Box 89148, Nuiqsut, Alaska 99789                  | <b>Anchorage/Willow, Tuesday, July 18, 2017 (6:30-9:30pm)</b><br>Alaska Pacific University<br>4101 University Drive Anchorage, Alaska 99508 |
| <b>Fairbanks, Thursday, July 20, 2017</b><br>Westmark Hotel<br>813 Noble Street, Fairbanks, Alaska 99701                   | <b>Healy, Wednesday, July 19, 2017</b><br>Tri-Valley Community Center<br>1 Healy Spur Road, Healy, Alaska 99726                             |
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| <b>Wiseman/Coldfoot, Wednesday, July 26, 2017</b><br>Community Center of Wiseman<br>Wiseman, Alaska 99701                  | <b>Trapper Creek, Friday, July 28, 2017</b><br>Trapper Creek Park Building<br>George Parks Hwy, Trapper Creek, Alaska 99759                 |

Please check the project website for potential updates to meeting dates and locations.

The Notice of Availability (NOA) was published in the Federal Register on June 30, 2017. Related information can be found on the project website at: <http://www.asapels.com>. Contact the USACE via U.S. Postal Service to: U.S. Army Corps of Engineers, CEPOA-RD, Ms. Seamus, Alaska 99506-0898 or via email at: [asapelscomments@erm.com](mailto:asapelscomments@erm.com). We request the following information: name, address, and affiliation (if any); be as specific as possible when stating your comments; and provide background documents to support your comments as you think necessary.

- THE DEADLINE FOR PROVIDING COMMENTS IS AUGUST 1, 2017

NOTARY PUBLIC  
M. BURNELL  
STATE OF ALASKA

My commission Expires December 7, 2017

# The Arctic Sounder

CASE/PO/AIO: Environmental Resources Management  
AD# or Identifier: Draft Supplemental Environmental Impact  
Statement Alaska Stand Alone Pipeline (as proposed) Public Meetings

REMIT TO: Alaska Media, LLC  
P.O. Box 241582  
Anchorage, AK 99524  
Ph: (907) 770-0820  
Fax (907) 770-0822

INVOICE(S): 23456, 23810

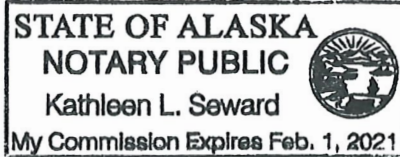
## AFFIDAVIT OF PUBLICATION

UNITED STATES OF AMERICA  
STATE OF ALASKA, THIRD DISTRICT BEFORE ME, THE  
UNDERSIGNED, A NOTARY PUBLIC, THIS DAY  
PERSONALLY APPEARED Tanny Walker WHO, BEING  
FIRST DULY SWORN, ACCORDING TO LAW, SAYS THAT  
S/HE IS General Manager Of The Arctic Sounder  
PUBLISHED AT 500 W INTERNATIONAL AIRPORT RD, STE  
F ANCHORAGE, AK, IN SAID THIRD DISTRICT AND STATE  
OF ALASKA AND THAT THE ADVERTISEMENT, OF WHICH  
THE ANNEXED OR ATTACHED IS A TRUE COPY, WHICH  
WAS PUBLISHED IN SAID PUBLICATION ON  
THE 15<sup>th</sup> DAY OF June, 2017 AND  
THE 6<sup>th</sup> DAY OF July, 2017 AND  
THE \_\_\_\_ DAY OF \_\_\_\_, 20\_\_\_\_ AND  
THE \_\_\_\_ DAY OF \_\_\_\_, 20\_\_\_\_ AND  
THE \_\_\_\_ DAY OF \_\_\_\_, 20\_\_\_\_ AND  
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THE \_\_\_\_ DAY OF \_\_\_\_, 20\_\_\_\_ AND  
THE \_\_\_\_ DAY OF \_\_\_\_, 20\_\_\_\_.

Tanny Walker  
TANNY WALKER  
GENERAL MANAGER

SUBSCRIBED AND SWORN BEFORE ME THIS 6<sup>th</sup>  
day of July, 2017

Kathleen L Seward  
KATHLEEN L SEWARD  
NOTARY PUBLIC STATE OF ALASKA  
MY COMMISSION EXPIRES ON FEBRUARY 1, 2021



## ATTACH PROOF OF PUBLICATION HERE

### U.S. Army Corps of Engineers Notice of Public Meetings Draft Supplemental Environmental Impact Statement Alaska Stand Alone Pipeline (as proposed)

The U.S. Army Corps of Engineers (USACE), Alaska District, announces the availability of the Draft Supplemental Environmental Impact Statement (SEIS) for the Alaska Stand Alone Pipeline (ASAP). The Draft SEIS identifies and analyzes the potential impacts associated with the construction and operations of the proposed ASAP utility-grade natural gas transportation pipeline, including mitigation measures intended to reduce impacts resulting from the construction and operation of the proposed project. The Draft SEIS focuses on project changes proposed after the completion of the October 2012 Final Environmental Impact Statement. The Draft SEIS may also be viewed online at: <http://asapgas.agdc.us/documents.html>. The BLM will also be conducting an ANILCA 810 subsistence hearing to provide information on potential impacts to subsistence uses and hear the concerns and comments of affected users in the following villages: Barrow, Nuiqsut, Bettles, Wiseman, Minto, Healy, Cantwell, and Trapper Creek.

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**- THE DEADLINE FOR PROVIDING COMMENTS IS AUGUST 14, 2017 -**

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## **ATTACHMENT C**

### **Meeting Sign-in Sheets**

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# ASAP

Alaska's In-State Gas Pipeline

**USACE – AGDC – ERM**  
**ALASKA STAND ALONE PIPELINE PROJECT SEIS**  
**PUBLIC MEETING**  
**July/August 2017**  
**SIGN-IN SHEET**

| PLEASE PRINT NAME<br>AND ADDRESS | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER | EMAIL ADDRESS            | MAKE ORAL<br>COMMENT? |
|----------------------------------|--------------------------|-----------------|--------------------------|-----------------------|
| GREG Youngmun                    | BP                       | 907-240-8042    | greg.youngmun@bp.com     |                       |
| AKIS GIALORSOS                   | AK Legislature           | 907-227-4842    | AKIS.Gialorsos@akleg.gov | no                    |
| Laura Carmack                    | University of AK         | 907-786-7760    | LMCARMACK@ALASKA.EDU     | No                    |
| Wilida Libby                     |                          | 727-5151        |                          | No                    |
| Jake Stager                      | FNSB                     | 250-5535        | jstager@Brevlaw.com      | No                    |
| JOAN KLUWE                       | National<br>Park Service | 644-3535        | joan_kluwe@nps.gov       | No                    |
| Patrick Conway                   |                          | 903 1762        | phconway@yahoo.com       | No                    |



USACE – AGDC – ERM  
ALASKA STAND ALONE PIPELINE PROJECT SEIS  
PUBLIC MEETING  
July/August 2017  
SIGN-IN SHEET

| PLEASE PRINT NAME<br>AND ADDRESS                                                         | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER      | EMAIL ADDRESS           | MAKE ORAL<br>COMMENT? |
|------------------------------------------------------------------------------------------|--------------------------|----------------------|-------------------------|-----------------------|
| Drema Fitzhugh<br>Hawk Consultants<br>670 W. Fireweed Ln, Ste 201<br>Anchorage, AK 99503 |                          | 907.<br>278.<br>1877 | dfitzhugh@hawkpros.com  | No                    |
|                                                                                          |                          |                      |                         |                       |
| JAFF BAKER<br>12900 MOUNTAIN PL<br>ANCHORAGE AK 99516                                    |                          | 907 317 2054         | JBAKER@MBAKERINTL.COM   | No                    |
| DAVE NORTON<br>HAWK CONSULTANTS                                                          |                          | 907<br>278 1877      | DAVENORTON@hawkpros.com | No                    |
| Shea Siegert<br>Staff to Rep. Johnson                                                    |                          | 907-465-<br>4958     | shea.siegert@akleg.gov  | No                    |
|                                                                                          |                          |                      |                         |                       |
|                                                                                          |                          |                      |                         |                       |



**USACE – AGDC – ERM**  
**ALASKA STAND ALONE PIPELINE PROJECT SEIS**  
 PUBLIC MEETING  
 July/August 2017  
**SIGN-IN SHEET**

| PLEASE PRINT NAME<br>AND ADDRESS           | AGENCY AND<br>DISCIPLINE            | PHONE<br>NUMBER | EMAIL ADDRESS                     | MAKE ORAL<br>COMMENT? |
|--------------------------------------------|-------------------------------------|-----------------|-----------------------------------|-----------------------|
| Joshua Gumbas<br>5115 Horgan Ave           |                                     | 907-852<br>3029 |                                   |                       |
| Chris Hugo<br>5210/A/8/Karluk              |                                     | 907-852<br>5445 |                                   |                       |
| Qaiyaan Harcharek<br>PO Box 69 Utqiagvik   | NSR Wildlife<br>+<br>AGDC Community | 852-0350        | Qaiyaan.Harcharek@north-slope.org | maybe                 |
| Martha Stackhouse<br>PO Box 1238 Utqiagvik | retired.                            | 852-2174        | mmalaska7@gmail.com               | yes                   |
| Etta Fournier                              |                                     | 852-1345        |                                   |                       |
|                                            |                                     |                 |                                   |                       |
|                                            |                                     |                 |                                   |                       |

# ASAP

Alaska's In-State Gas Pipeline

**USACE – AGDC – ERM**  
**ALASKA STAND ALONE PIPELINE PROJECT SEIS**  
**PUBLIC MEETING**  
July/August 2017  
**SIGN-IN SHEET**

| PLEASE PRINT NAME<br>AND ADDRESS                                       | AGENCY AND<br>DISCIPLINE                                     | PHONE<br>NUMBER | EMAIL ADDRESS              | MAKE ORAL<br>COMMENT? |
|------------------------------------------------------------------------|--------------------------------------------------------------|-----------------|----------------------------|-----------------------|
| Rich Thorne<br>Box 26036<br>Bettles Field, AK 99726                    |                                                              | 907-692-5791    | rbthorne@hughes.net        | maybe                 |
| FRANK THOMPSON<br>PO 26042<br>BETTLES, AK 99726                        | EVANSVILLE<br>TRIBAL COUNCIL<br>1ST CHIEF                    | 692-5005        | evansvillealaska@gmail.com |                       |
| NOEL <del>BOND</del> BOND<br>C/O GENERAL DELIVERY<br>BETTLES, AK 99726 |                                                              |                 | noel.bond@partner.nps.gov  |                       |
| Anya Bronowski                                                         |                                                              |                 | amauraz83@hotmail.com      |                       |
| Noel Swanson                                                           | Evansville<br>Tribal Council<br>Environmental<br>Coordinator | 907-371-6587    | Rig Pig 141@yahoo.com      |                       |
| Naomi Costello                                                         | Evansville Tribal<br>Council                                 | 907-692-5005    | evansvillealaska@gmail.com | yes                   |
|                                                                        |                                                              |                 |                            |                       |

# ASAP

Alaska's In-State Gas Pipeline

**USACE – AGDC – ERM**  
**ALASKA STAND ALONE PIPELINE PROJECT SEIS**  
**PUBLIC MEETING**  
**July/August 2017**  
**SIGN-IN SHEET**

| PLEASE PRINT NAME<br>AND ADDRESS | AGENCY AND<br>DISCIPLINE           | PHONE<br>NUMBER | EMAIL ADDRESS                   | MAKE ORAL<br>COMMENT? |
|----------------------------------|------------------------------------|-----------------|---------------------------------|-----------------------|
| Roy Tansy Jr.                    | Ahtna, Inc.                        | 317-0866        | rtansy@ahtha.net                |                       |
| JOE BOVEE                        | Ahtna                              | 822-3476        | jbovee@ahtha-inc.com            |                       |
| Jennifer Murrell                 | DNR                                | 269-6479        |                                 |                       |
| Tammany George                   | Ahtna &<br>Centwell Village Member | 320 0600        | tstraughn1@ahtha.net            |                       |
| Erica Watson                     |                                    | 857-8248        | yta.lvezporequellneve@gmail.com |                       |
| CHRISTINE MINAULT                | DNR                                | 269 6874        |                                 |                       |
|                                  |                                    |                 |                                 |                       |

# ASAP

Alaska's In-State Gas Pipeline

FAIRBANKS  
USACE - AGDC - ERM  
ALASKA STAND ALONE PIPELINE PROJECT SEIS  
PUBLIC MEETING  
July/August 2017  
SIGN-IN SHEET

July 20, 2017

| PLEASE PRINT NAME<br>AND ADDRESS                           | AGENCY AND<br>DISCIPLINE             | PHONE<br>NUMBER    | EMAIL ADDRESS              | MAKE ORAL<br>COMMENT? |
|------------------------------------------------------------|--------------------------------------|--------------------|----------------------------|-----------------------|
| Sue Signor<br>714 4th Ave<br>Fairbanks AK 99709            | HDR                                  | 865-2285<br>(907)  | susan.signor@hdrinc.com    | No                    |
| Erin Julianus<br>222 University Ave<br>Fairbanks, AK 99709 | BLM                                  | 907-474-<br>2358   | erjulianus@blm.gov         | No                    |
| John Ringstad<br>757 Illinois<br>Fbks AK 99701             |                                      | 907<br>590<br>2026 |                            | NO                    |
| Bear Ketzler<br>1154 PARK DR<br>Fbks AK 99709              |                                      | 907<br>978<br>5848 | bearkatzler@gei.net        |                       |
| Seth Whitten<br>567 Cook Pit Way<br>Fairbanks, AK 99709    | Alaska Legislature<br>Rep. Guterberg | 456 8172           | seth.whitten@akleg.gov     | No                    |
| BECCA BRADO<br>330 WENDELL AVE STE<br>FAIRBANKS, AK 99701  | FAIRBANKS<br>ECONOMIC<br>DEVELOPMENT | 907.452<br>2185    | BBRADO@INVESTFAIRBANKS.COM | No                    |
| Robert Sattler                                             | TCC                                  | 452-8251<br>x 3343 | Rob.sattler@tanachiefs.org | No                    |



FAIRBANKS  
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ALASKA STAND ALONE PIPELINE PROJECT SEIS  
PUBLIC MEETING  
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July 20, 2017

| PLEASE PRINT NAME<br>AND ADDRESS                              | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER | EMAIL ADDRESS            | MAKE ORAL<br>COMMENT? |
|---------------------------------------------------------------|--------------------------|-----------------|--------------------------|-----------------------|
| K Boyd                                                        | XK                       | 378<br>657      |                          | NO                    |
| Dave Watts<br>Box 81837, FBX 99708                            | —                        | 455-4185        | hdtvwatt@<br>hotmail.com | N/A                   |
| MARC LUKEN                                                    | DOT/PF                   | 465-3902        | marc.luken@alaska.gov    | NO                    |
| Steve Kelly<br>P.O. Box 63 Ester, AK 99725                    | —                        | 479-4578        | sacbalam@yahoo.com       | NO                    |
| Warren Christman<br>2385 Saw Augustin Dr.<br>North Pole 99705 |                          | 460-2771        | christmanw@doxow.com     | NO                    |
|                                                               |                          |                 |                          |                       |
|                                                               |                          |                 |                          |                       |

# ASAP

Alaska's In-State Gas Pipeline

USACE – AGDC – ERM  
ALASKA STAND ALONE PIPELINE PROJECT SEIS  
PUBLIC MEETING  
July/August 2017  
SIGN-IN SHEET

Healy, AK

| PLEASE PRINT NAME<br>AND ADDRESS                          | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER | EMAIL ADDRESS                  | MAKE ORAL<br>COMMENT? |
|-----------------------------------------------------------|--------------------------|-----------------|--------------------------------|-----------------------|
| Terry Hinman                                              |                          |                 | hinman@mtaonline.net           |                       |
| Jennifer Murrell                                          | DNR                      | 269-6479        |                                |                       |
| CHRISTOPHER MINNIEZ                                       | DNR                      | 269 6874        | CHRISTOPHER.MINNIEZ@ALASKA.GOV |                       |
| KEN ENGELS<br>DENALI RV PARK                              |                          | 683-1500        |                                |                       |
| Christopher Infante<br>PO Box 218 Denali Park<br>AK 99755 |                          | 683-4430        | cinfant@hotmail.com            |                       |
| ANDREA BLAKESLEY                                          | NPS                      | 683-9545        |                                |                       |
|                                                           |                          |                 |                                |                       |

## Alaska's In-State Gas Pipeline

Healy, AK

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ALASKA STAND ALONE PIPELINE PROJECT SEIS  
PUBLIC MEETING  
July/August 2017  
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July 21, 2017

| PLEASE PRINT NAME<br>AND ADDRESS | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER | EMAIL ADDRESS             | MAKE ORAL<br>COMMENT? |
|----------------------------------|--------------------------|-----------------|---------------------------|-----------------------|
| Carla Dick                       |                          |                 | Carla_dick85e@outlook.com |                       |
| Vera Weiser                      |                          |                 | VWeiser@hotmail.com       |                       |
| Josh Weiser                      |                          |                 | weiser1984@gmail.com      |                       |
| Richard R Frank                  |                          |                 |                           |                       |
| Charlie Titus                    |                          |                 |                           |                       |
| Cynthia Wilder                   |                          |                 |                           |                       |
|                                  |                          |                 |                           |                       |



NUIQSUIT  
USACE – AGDC – ERM  
ALASKA STAND ALONE PIPELINE PROJECT SEIS  
PUBLIC MEETING  
July/August 2017  
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July 18, 2017

| PLEASE PRINT NAME<br>AND ADDRESS      | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER | EMAIL ADDRESS           | MAKE ORAL<br>COMMENT? |
|---------------------------------------|--------------------------|-----------------|-------------------------|-----------------------|
| 99320 NRT, MC<br>Robert Nuaagaa 79785 | Self                     | N/A             | N/A                     |                       |
| CLARENCE AANUKAON                     |                          |                 |                         |                       |
| James Taalok                          | City of<br>Nuiqsut       | 480 6722        | janestaalak@hotmail.com |                       |
| Ed Nukopigok                          | Self                     |                 |                         |                       |
| Patrick F                             | Self                     | —               | —                       |                       |
| Jeremiah Ahmakak                      | Self                     | N/A             |                         |                       |
| SARAH HEIME                           | Self                     |                 | jade-aatai@yahoo.com    |                       |

# ASAP

Alaska's In-State Gas Pipeline

Nuiqsut  
**USACE – AGDC – ERM**  
**ALASKA STAND ALONE PIPELINE PROJECT SEIS**  
PUBLIC MEETING  
July/August 2017  
**SIGN-IN SHEET**

July 18, 2017

| PLEASE PRINT NAME<br>AND ADDRESS | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER     | EMAIL ADDRESS               | MAKE ORAL<br>COMMENT? |
|----------------------------------|--------------------------|---------------------|-----------------------------|-----------------------|
| Kate Taleak                      | Self                     |                     | native.pride90@yahoo.com    |                       |
| Eunice Mary Brower               | Self                     | 907 480 4800        | Kunnan.eunizemary@gmail.com |                       |
| Jimmy KASAK                      | Self                     | N/A                 | N/A                         |                       |
| ABRAHAM<br>STINE JR              | Self                     | 907<br>480-5354     | W                           |                       |
| Pauline<br>Bowers                | City of<br>Nuiqsut       | 907<br>519-<br>1438 | tavialuk1978@gmail.com      |                       |
| Dorcas Tulle                     | Self                     | 907 480<br>1332     |                             |                       |
| Martha LHA                       | Self                     |                     |                             |                       |

# ASAP

Alaska's In-State Gas Pipeline

**USACE – AGDC – ERM**  
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**PUBLIC MEETING**  
**July/August 2017**  
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| PLEASE PRINT NAME<br>AND ADDRESS | AGENCY AND<br>DISCIPLINE                 | PHONE<br>NUMBER | EMAIL ADDRESS                  | MAKE ORAL<br>COMMENT?                     |
|----------------------------------|------------------------------------------|-----------------|--------------------------------|-------------------------------------------|
| Talon Boeve                      |                                          | 495-0744        | twboeve@outlook.com            |                                           |
| Cicely Boeve                     |                                          | 495-0744        | cwboeveak@gmail.com            |                                           |
| (Willow<br>psy)<br>TAM Boeve     |                                          | 495-0744        | gntboeve@hotmail.com           |                                           |
| Paula Glenka<br>Chairwoman       | TRAPPER<br>Creek<br>Community<br>Council | 733-6506        | trapperCreek2010@<br>gmail.com | PO Box 13021<br>Trapper Creek<br>AK 99683 |
| Daniel Gagnon                    | MVFCU<br>Analyst                         | 315-3886        | dangagnon7@gmail.com           |                                           |
| Jennifer Murrell                 | DNR                                      | 209-6479        |                                |                                           |
| CHRISTOPHER MINNEZ               | DNR                                      | 209 6874        |                                |                                           |

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Alaska's In-State Gas Pipeline

USACE – AGDC – ERM  
ALASKA STAND ALONE PIPELINE PROJECT SEIS  
PUBLIC MEETING  
July/August 2017  
SIGN-IN SHEET

Willow, AK  
8/18/17

| PLEASE PRINT NAME<br>AND ADDRESS                 | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER            | EMAIL ADDRESS          | MAKE ORAL<br>COMMENT? |
|--------------------------------------------------|--------------------------|----------------------------|------------------------|-----------------------|
| Lisa Schooner NIS                                |                          |                            |                        |                       |
| Tam Boeve<br>HC 89 Box 124<br>Willow 99688       |                          | 495-0744                   | gntboeve@hotmail.com   |                       |
| Talon Boeve<br>HC 89 Box 124<br>Willow AK 99688  | WACO<br>Vice Chair       | 354-0744                   | twboeve@outlook.com    |                       |
| Cicely Boeve<br>HC 89 Box 124<br>Willow AK 99688 |                          | 495-0744                   | cwboeveak@gmail.com    |                       |
| Brian Greenear<br>PO Box 561 99688               |                          | 408 418<br>886 2           | bri:greenear@gmail.com |                       |
| Chip Taylor<br>Box 693, Willow                   |                          |                            |                        |                       |
| MARY & George Howard<br>PO Box 243 Willow        |                          | 907-841-<br>0318<br>George | geumary@mtaonline.net  |                       |

Lynn & Tom Phillips Willow 495-8010



**USACE – AGDC – ERM**  
**ALASKA STAND ALONE PIPELINE PROJECT SEIS**  
**PUBLIC MEETING**  
 July/August 2017  
**SIGN-IN SHEET**

*Willow, AK*  
*8/18/17*

| PLEASE PRINT NAME<br>AND ADDRESS                                | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER            | EMAIL ADDRESS             | MAKE ORAL<br>COMMENT? |
|-----------------------------------------------------------------|--------------------------|----------------------------|---------------------------|-----------------------|
| Henry & Kim Casto<br>900 N. Gambit Circle<br>Ruth & Ron Chester |                          | 907-354-6361               | rustybucket0097@yahoo.com |                       |
| 900 N. Gambit Circle<br>Debbie Cook<br>18452 N. MAE LOOP        |                          | 907-795-6063               | dreamcatcher AK@yahoo.com |                       |
| Vic Stanculescu<br>Box 891                                      |                          | 602 373 2643               | MISSDGBBIEPHX@AOL.COM     |                       |
| Tina Owen<br>Box 891                                            |                          | 495-0812                   |                           |                       |
| Mark Merrill<br>Box 103                                         |                          | 495-0812                   |                           |                       |
| Steve Charles<br>PO Box 76 99688                                |                          | 232-1168<br><del>495</del> |                           |                       |
|                                                                 |                          | 455-4368                   | scharles@mtadelmi.net     |                       |

*Mike Gallagher*

*351-0152*

*M GALLAGHER AK @ GMAIL.COM*



USACE – AGDC – ERM  
 ALASKA STAND ALONE PIPELINE PROJECT SEIS  
 PUBLIC MEETING  
 July/August 2017  
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Willow, AK  
 8/18/17

| PLEASE PRINT NAME<br>AND ADDRESS                 | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER | EMAIL ADDRESS               | MAKE ORAL<br>COMMENT? |
|--------------------------------------------------|--------------------------|-----------------|-----------------------------|-----------------------|
| David Huddspon<br>12780 Hume Way                 |                          | 907-367022      | huddsdh@gmail.com           |                       |
| RANDALL & KAREN<br>KOWALIK                       | MSB                      | 907<br>315-0865 |                             |                       |
| Bruno Bryner<br>P.O. Box 247<br>Willow, AK 99688 |                          | 907<br>495-6253 |                             |                       |
| Todd & Carrie Smolton                            | Private                  | 907-947-9891    | tsmolton@gsi.net            |                       |
| Richard Boothby                                  | Willow<br>Fire<br>Dept   | 907-354-3246    | richard.boothby@matsegoa.us |                       |
| Bob Chlupach                                     | SELF                     | 907-841-1045    |                             |                       |
| Mike McCann                                      | Residents                | 495-1318        |                             |                       |

# ASAP

Alaska's In-State Gas Pipeline

**USACE – AGDC – ERM**  
**ALASKA STAND ALONE PIPELINE PROJECT SEIS**  
**PUBLIC MEETING**  
**July/August 2017**  
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| PLEASE PRINT NAME<br>AND ADDRESS  | AGENCY AND<br>DISCIPLINE | PHONE<br>NUMBER      | EMAIL ADDRESS                        | MAKE ORAL<br>COMMENT? |
|-----------------------------------|--------------------------|----------------------|--------------------------------------|-----------------------|
| JACKIE VEATS<br>WISEMAN, AK 99790 |                          |                      | woolytundra@gmail.com                |                       |
| Tom "8-Ball" HOBEL                |                          | (907)<br>678-8888    | P.O. Box 9024<br>COLD FOOT, AK 99709 |                       |
| Jack Reakoff<br>Wiseman AK 99790  |                          | 907<br>678-2007<br>b | wisemanwolf@gmail.com                | Yes.                  |
| Jack McClure<br>Wiseman, AK       |                          | 907-678<br>-2052     |                                      |                       |
| Bob Maurer<br>Wiseman AK          |                          | 907-678-<br>2024     |                                      |                       |
| Ashley Johnson<br>wiseman, AK     |                          | 907-678<br>8021      |                                      |                       |
| Jordan Johnson<br>wiseman, AK     |                          | ~1                   |                                      |                       |

## **ATTACHMENT D**

### **Comment Summary Statements and Responses Report**

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| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section #s of Change |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| ACC_1      | Comments from property owners refusing to grant right-of-way to the ASAP Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | AGDC provided the USACE with a response letter to the commenter (Mr. and Mrs. Lundstrom), dated August 1, 2017. The letter documents AGDC's commitment to work with the property owners to address access restriction to their property from ATV traffic and attendant noise and compensation for right-of-way access across the property should the Project proceed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ACC_10     | The ASAP right-of-way should be maintained for open access to subsistence uses crossing or paralleling it.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Comment acknowledged. Land access agreements and lease stipulations for rights-of-way will be negotiated between AGDC and each land owner. Potential impacts to Subsistence are discussed in Section 4.20, along with proposed measures to mitigate impacts. Mitigation measures are also included in Appendix V of the Draft SEIS and Appendix M of the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change            |
| ACC_11     | We are concerned about winter access restrictions that may occur at the Denali fault line (e.g., at Windy Creek and Panorama Mountain).                                                                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the comment. The length of above ground pipe in current proposed Denali Fault alignment is approximately 1,500 ft, and is not expected to result in substantial winter access impediment. Access restrictions to the ROW post-construction will be based on requirements agreed upon with the individual parcel owners.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change            |
| ACC_12     | The Project right-of-way will open new access areas that will increase trespassing issues and associated trespassing conflicts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The Project Proponent has proposed mitigation for impacts to unauthorized land access in Appendix V in the Draft SEIS and in Appendix M of the Final SEIS. Additionally, AGDC plans to negotiate land access agreements and lease stipulations for rights-of-way with each land owner. Land owners may consider the ability for the public to access land for subsistence, recreation, or other uses in the land access agreements.                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change            |
| ACC_13     | The Trans-Alaska Pipeline System (TAPS) owners have not approved the proposed route across the TAPS Pump Station 1 property.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | AGDC intends to engage the Trans-Alaska Pipeline System owners in negotiations to utilize the referenced property.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No change            |
| ACC_14     | Letter explaining the access issues on lands south of the Denali State Park and west of the Parks Highway, both with respect to the MP 131 facility and the fact that the pipeline would be on the west side of the Parks Highway. Letter states the Project would create several access problems for people owning property south of Denali State Park near the proposed MP 131 facility. The facility is sited on a parking area used by hundreds of recreational snowmachiners and private property owners.                                                                                   | AGDC is proposing a change that aligns both the ASAP and Alaska LNG Rights-of-Way on the east side of the Parks Highway in this location. The parking area in question appears to be the existing and already disturbed material site located on publicly-owned MatSu Borough land on the west side of the Parks Highway at Parks MP 131. AGDC will retain this proposed location of the Swan Lake Camp, Pipe Storage Yard and Material Site just south of ASAP MP 645 and just west of Parks MP 131. This is an existing material site with already disturbed land. The use and expansion of this site is preferable to disturbing a new greenfields area.                                                                                                                                                                                                                  | No change            |
| ACC_15     | The clear-cut Project right-of-way will potentially enable inappropriate access to wetlands, anadromous streams, and other sensitive areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Proposed measures to restrict public access to the ROW are described in Appendix V Mitigation Measures of the Draft SEIS (Appendix M of the Final SEIS) and Sections 4.15 Land Use, 4.16 Recreation, and Section 4.20 Subsistence. Additional text has been added to Chapter 4 discussing the potential impacts to water resources, vegetation, and land use as a result of increased public access. It is agreed that clear-cutting could increase the public's access to sensitive resources however this accessible would be limited in duration and magnitude. Once the temporary ROW was allowed to revegetate public access would again be limited and access to the permanent ROW would be restricted by the Project proponent for security purposes and as obligation to the landowner.                                                                              | Chapter 4            |
| ACC_16     | The access road to McKinley Village (MP 539 - 541) doubles the affected area. Commercial development is prohibited in this residential district. The location and scope of this access road was misleading and incomplete in the original Final EIS.                                                                                                                                                                                                                                                                                                                                             | AGDC will be using the existing state road, and will develop a new access road outside of Village View Subdivision to access the pipeline right-of-way and a material site located adjacent to the gas pipeline. The access road and material site are located on Denali Borough and State of Alaska lands. There will be no commercial development within the McKinley Village View Subdivision.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change            |
| ACC_17     | The State of Alaska and Bureau of Land Management (landowners of approximately 85 percent of the right-of-way) support the Alaska Gasline Development Corporation's proposed action.                                                                                                                                                                                                                                                                                                                                                                                                             | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ACC_18     | The proposed Rustic Wilderness camp at Parks Highway MP 80.5 is located atop our two households. A third house is to be constructed here in 2018. We do not give permission for the Project to construct on this lot and have stated as such several times in the past.                                                                                                                                                                                                                                                                                                                          | USACE appreciates the identification of this discrepancy. The location of the Rustic Wilderness Camp will be moved from the Castro parcel to a State of Alaska parcel several miles south of the parcel in questions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ACC_19     | The statement "Title XI of the Alaska National Interest Lands Conservation Act (ANILCA) establishes procedures for federal agencies to grant ROWs on lands selected by, or granted, or conveyed to the State of Alaska under Section 6 of the Alaska Statehood Act (16 U.S.C. 410hh-3233, 43 U.S.C. 1602-1784)." is incorrect. ANILCA Title XI establishes procedures for siting transportation and utility systems within federal conservation system units established or expanded by ANILCA. It does not establish procedures for granting rights-of-way across State or State-selected land. | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.11.2.1             |
| ACC_2      | Opening new access areas and new trails will allow outsiders access to these areas to hunt, and this will negatively impact Native people.                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Section 4.20 of the SEIS discusses the environmental consequences to subsistence from the proposed Project. Access to the proposed Project would be restricted to operators and contractors working on the proposed Project, and access points secured to protect the proposed Project infrastructure. Temporary access roads and trails would be allowed to revegetate after construction was complete.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No change            |
| ACC_20     | The sentences "The federal government owns parcels within the proposed ROW that are managed by the BLM and NPS. The Denali NPP Route Variation crosses additional federal lands managed by NPS." suggests that ASAP traverses National Park Service (NPS)-managed lands in addition to those traversed with the Denali National Park and Preserve (NPP) Route Variation. No NPS-managed lands are traversed by ASAP in addition to the Denali NPP Alternate.                                                                                                                                     | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.11.3.1             |
| ACC_21     | The statement "As RS 2477 trail ROWs are easements and are not owned by the state, land ownership at these crossings are addressed under the respective land ownership sections." is incorrect. Revised Statute (RS) 2477 rights-of-way (ROWs) were established irrespective of the underlying fee ownership. Many RS 2477 ROWs traverse State-owned land and therefore are owned by the State.                                                                                                                                                                                                  | USACE appreciates the observation and agrees with the suggestion. This statement was revised, and now states, "Some RS 2477 trail ROWs traverse State-owned land and are therefore owned by the state. The RS 2477 trail ROW easements that are not State-owned are addressed under the respective land ownership sections (section 3.11.5).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 3.11.3.2             |
| ACC_22     | Please verify that the cities of Anderson and Nenana own parcels within the right-of-way (ROW) after the realignment to v6.1, then correct this statement "The cities of Anderson and Nenana own parcels within the proposed ROW. Other local governmental entities having ownership of parcels within the proposed ROW include the FNSB, Mat-Su Borough, Nenana Airfield, and the Railbelt School District."                                                                                                                                                                                    | Land status data provided by AGDC suggests that the cities of Anderson and Nenana own parcels within the ROW, however, these are outside of the incorporated city boundaries. Two of these parcels are in the Nenana vicinity and eight of these are in the Anderson vicinity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3.11.3.3             |
| ACC_23     | This statement is incorrect "The cities of Anderson and Nenana own parcels within the proposed ROW. Other local governmental entities having ownership of parcels within the proposed ROW include the FNSB, Mat-Su Borough, Nenana Airfield, and the Railbelt School District." ASAP does not intersect parcels owned by the City of Anderson or the Railbelt School District. The Nenana Airfield is not a local governmental entity. The Nenana Airfield, which is not intersected by ASAP, is owned by the City of Nenana.                                                                    | Land status data provided by AGDC suggests that the cities of Anderson and Nenana own parcels within the ROW, however, these are outside of the incorporated city boundaries. Two of these parcels are in the Nenana vicinity and eight of these are in the Anderson vicinity. The statement referenced has been updated in the Final SEIS.<br>AGDC's GIS land ownership database was developed using publicly available sources including the State of Alaska Department of Natural Resources (DNR), U.S. Bureau of Land Management (BLM), Fairbanks North Star Borough, Matanuska Susitna Borough and the North Slope Borough resources. Locations without available GIS data were developed from Land Title records and built into the subject database. Land Title records were obtained and title proofed pending further adjudication from public and private sources. | 3.11.3.3             |
| ACC_24     | This statement is incorrect: "Native corporation land is often held in large tracts and used for subsistence purposes or developed/sold to generate revenue for the corporation." Alaska Native Claims Settlement Act corporations rarely, not "often", sell their land. Recommend replacing "sold" with "leased."                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.11.3.3.1           |
| ACC_25     | This statement is partially incorrect: "The ANCSA established 12 for-profit Alaska Native Village Corporations (a 13th corporation was later added for Alaska Natives living outside the state and was involuntarily dissolved on December 31, 2013), which administers claims from the settlement." Recommend deleting "administers (sic) claims from the settlement." from the sentence. The Alaska Native Claims Settlement Act (ANCSA) extinguished Native claims to aboriginal lands and provided land and money as part of the Settlement. ANCSA Corps do not "administer" Native claims.  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.11.3.3.1           |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Section #s of Change                                             |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| ACC_26     | This paragraph is misleading "Under the Alaska Native Allotment Act of 1906 (34 Stat. 197, as amended), qualifying Alaska Natives were allotted up to 160 acres of non-mineral land. The proposed Project ROW would intersect Alaska Native Allotments awarded under the Act. The Tanana Chiefs' Conference (TCC) manages a trust service with the Bureau of Indian Affairs and acts as trustee for native allotment property owners on behalf of the 42 villages of Interior Alaska. There are several native allotments in and around the Cantwell area, as represented in purple in Figure 3.11-1, as well as throughout the North Slope Borough." This paragraph misleads the reader into thinking that ASAP impacts many Native Allotments, including "throughout the North Slope Borough." However, ASAP, including both Mainline, Fairbanks Lateral, and Related Facilities infrastructure, intersects a total of three Native Allotments, only one of which is located within the North Slope Borough.                                                                                                                                           | According to AGDC's GIS data, there are four Native Allotments intersected by the Project impacts layer: AKFF 011322B, AKA 015905, AKFF 014229, AKFF 014228. Of these four Allotments, only one is within the NSB (AKFF 011322B). The text in the SEIS has been modified to clarify that only four Native Allotments are intersected.<br><br>AGDC's GIS land ownership database was developed using publicly available sources including the State of Alaska Department of Natural resources (DNR), U.S. Bureau of Land Management (BLM), Fairbanks North Star Borough, Matanuska Susitna Borough and the North Slope Borough resources. Locations without available GIS data were developed from Land Title records and built into the subject database. Land Title records were obtained and title proofed pending further adjudication from public and private sources. | 3.11.3.3.2                                                       |
| ACC_27     | Table 3.11-2 overstates the acreage of forested Native Allotments impacted by the Project. Table 3.11-1 Land Ownership by Project Segment has a total Native Allotment acreage of 12.57. This is Mainline-affected acreage. When the related facilities-affected Native Allotment acreage is added, the total affected Native Allotment acreage is approximately 23.44, not 38 as indicated in Table 3.11-2. And this includes the Ahmaogak Allotment at West Dock, which is not forested.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the observation. Table 3.11-2 has been updated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Table 3.11-2                                                     |
| ACC_28     | Remove YKCA from the lists of boroughs, as it is not a borough but an unorganized borough. Such as here: "The proposed Project route crosses through five Alaska Boroughs: NSB, YKCA, FNSB, Denali Borough, and the Mat-Su Borough." Section 3.11.8.2 correctly describes this. Recommend changing 3.11.8 consistent with the correct 3.11.8.2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3.11.8, 3.11.8.2, and 3.11.8.5                                   |
| ACC_29     | This statement is incorrect: "Land managed by the Trapper Creek, Susitna, Willow Area, Big Lake and Point MacKenzie Community Councils would intersect the proposed Project route." Community councils do not manage lands. A recommended edit for each of these Community Council Comprehensive Plan sections would be similar to the following recommended edit for 3.11.9.5.7: "The proposed Project route would intersect land described by the Trapper Creek Community Council Comprehensive Plan. The Matanuska-Susitna Borough is currently developing the Plan with public input from the local Trapper Creek Community Council."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3.11.9.5.7, 3.11.9.5.8, 3.11.9.5.9, 3.11.9.5.10, and 3.11.9.5.11 |
| ACC_3      | Will the Project purchase new land/property?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | AGDC may purchase property to accommodate infrastructure development. A map of the current proposed infrastructure locations is provided on the ASAP SEIS website: <a href="http://asapeis.com">asapeis.com</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change                                                        |
| ACC_30     | This statement is partially incorrect "...the BLM also is the administrator for the INHT". The Bureau of Land Management (BLM) is the statutorily-designated federal administrator for the Iditarod National Historic Trail, managed according to the Iditarod National Historic Trail Comprehensive Management Plan (CMP) and a 1988 Memorandum of Agreement (MOA) between the BLM and State of Alaska. Administration of the National Trail by the BLM does not include management of non-Federal trail segments or sites. Under the CMP, no single agency or organization manages the entire trail; instead, the plan calls for cooperative management by federal, State and local agencies. Nothing in the MOA shall affect or interfere with fulfillment of the obligations and rights of the parties to manage the lands and programs administered by them in accordance with their other land management responsibilities. Recommend adding this information so that the general public is aware that the BLM's role as the federal administrator for the Iditarod National Historic Trail (INHT) does not mean that they manage the entire INHT. | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3.12.4.2.1                                                       |
| ACC_31     | We recommend an addition to this phrase: "The trail system is managed under the Iditarod National Historic Trail Comprehensive Management Plan (BLM, 1986a) with the accompanying Resource Inventory (1982)." We recommend adding that the Iditarod National Historic Trail is managed not only under the Comprehensive Management Plan but also under a 1988 Memorandum of Agreement between the Bureau of Land Management (BLM) and various State of Alaska land management agencies. The US Forest Service and the BLM also entered into a similar agreement regarding the management and coordination of their respective historic sites and trail segments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3.12.4.3.1.3.13                                                  |
| ACC_32     | This statement "Along the Dalton Highway, the pipeline crosses lands managed under the Central Yukon RMP and East Alaska RMP," suggests that the Central Yukon RMP is complete ("lands managed under the Central Yukon RMP"). Whereas the BLM released a Record of Decision and Approved Plan for the East Alaska RMP on September 7, 2007, a Record of Decision is not scheduled until 2019 for the Central Yukon RMP per the BLM Alaska's Central Yukon RMP/EIS planning webpage. A more correct statement would be that "lands will be managed under the Central Yukon RMP, which is in progress, and the East Alaska RMP, which is in effect."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3.12.4.3.1.3.14                                                  |
| ACC_33     | Point Mackenzie is not within 5 miles of any Project feature. Big Lake is within 5 miles of a proposed access road but not any other Project feature. These towns should be removed from Table 3.19-1 and Point Mackenzie from Table 3.19-2, and the descriptive text.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Point Mackenzie has been removed from both tables and the text discussion. The Big Lake distance has been updated in Table 3.19-2 and has been removed from Table 3.19-1 for the same reason as Point Mackenzie above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3.19, Table 3.19-1, and Table 3.19-2                             |
| ACC_34     | Alternative access should be provided around temporarily blocked areas of public access, R25477 easements, and section-line easements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the comment. There will be unavoidable temporary restrictions to public access during the construction of the pipeline necessary for public safety and operational reasons. During construction, AGDC would work with landowners and land managers to provide alternative access where feasible, or will ensure that temporary restrictions are in place for as short a duration as possible. No long-term closures to public access are expected as a result of this Project, with the exception of site specific restrictions for access to Project facilities for safety or operational purposes.                                                                                                                                                                                                                                                     | No change                                                        |
| ACC_35     | The proposed work camp in Willow, AK, is located on the same property as Denali View Estates and Denali Vista. The owners have owned this property since 2014.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | This comment was shared with AGDC and the proposed Rustic Wilderness Camp has been relocated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change                                                        |
| ACC_4      | The Project should not use the Jim River staging area of the Bettles Winter Road for storage or man-camp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Comment acknowledged. The area noted is not located within the Project footprint.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change                                                        |
| ACC_5      | The Project would negatively impact ongoing experiments at the Toolik Field Station. Access to the NSF-funded Toolik Field Station research location at Alaska DOT MS-117 would become more difficult. To avoid an NSF-funded experiment near Toolik Field Station, the pipeline should be rerouted just north of Dalton highway milepost (MP) 279 farther to the north. Gravel pits between MP 277 and MP 287 should not be reactivated for the same reason.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | According to the Project proponent, The gravel mining activity for the ASAP Project will be confined to the footprint submitted with the 404 Permit Application (included as an appendix to the SEIS). Granular material mining activities at ASAP MS 1D-C will be confined to the footprint proposed, which extends due east from the existing pit. The material sites referenced in the comment as Dalton Highway MP 277 and MP 287 are not part of the ASAP Project footprint. Research access through ASAP MS 1D-C will not be blocked, but third party personnel wishing access through the site will have to comply with Project safety policies and procedures and will also be required to complete Project safety training.                                                                                                                                       | No change                                                        |
| ACC_6      | The Project has not been in communication with Ahnna to cross/impact 33-miles of Ahnna land.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | The Project proponent is aware of the Ahnna's importance to a successful Project and plans to discuss access to land and material sites with Ahnna in the coming months.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No change                                                        |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Section #s of Change      |
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| ACC_7      | The Project should not use/access National Park Land.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The Project proponent supports Alternative 1 as their proposed alternative, which bypasses Denali National Park. If Alternative 2 is selected, however, the Denali National Park Improvement Act would allow the Project to construct within park lands. On September 18, 2013, the Denali National Park Improvement Act (Public Law 113-33) passed, which includes the following language: Sec. 3. B) Permit (1) a high-pressure natural gas transmission pipeline (including appurtenances) in non-wilderness areas within the boundary of Denali National Park within, along, or near the approximately 7-mile segment of the George Parks Highway that runs through the Park; and (2) any distribution and transmission pipelines and appurtenances that the Secretary determines to be necessary to provide natural gas supply to the Park. | No change                 |
| ACC_8      | Changing access as a result of the Project means that subsistence access will be eliminated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The Project proponent has proposed mitigation measures to avoid impacts to subsistence in Section 4.20.3 of the SEIS. These include identifying locations and timing of importance subsistence activities as to avoid impacts, scheduling work to avoid conflicts, and communicating and meeting with regulatory staff and local Alaska Native communities to address potential conflicts.                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change                 |
| ACC_9      | The Project will restrict access to communities along the route (e.g. Wiseman and Coldfoot). Access restrictions could impact the tourism industry if the roads are blocked for too long.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The ASAP alignment and access roads will not cross or impede access to Wiseman, and the footprint will not utilize the northern or southern access into Coldfoot Camp as part of the access to material site MS 2B-A. There will be granular material haul trucks on the northern access road. Potential impacts to the tourism industry as well as proposed mitigation measures are described in Section 4.16 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                      | No change                 |
| ACK_1      | Comments that are unrelated to the proposed ASAP project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change                 |
| AIR_1      | The positive air quality impacts to Fairbanks resulting from the project are vastly understated in the Draft SEIS. These benefits need to be discussed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | While some residents and businesses would switch to natural gas from oil and wood once available, the number and extent is dependent on several factors. These factors include foremost the cost, followed by ease of conversion, then satisfaction of the status quo and actual & perceived provincial air quality. The percent of conversions to natural gas would be gradual over decades. As a result, the extent of conversions by these private and commercial sources, and thus the decrease of pollutant impacts, could not be precisely estimated and thus are estimated as minor.                                                                                                                                                                                                                                                      | No change                 |
| AIR_10     | The conclusion is drawn that "The cumulative effect of wildfire management by the proposed project and those associated with other RFFAs would be a reduction in small-scale wildfires." Bureau of Land Management (BLM) suggests that additional information be included on how this conclusion was reached. Elsewhere, the effects of climate change are described as possibly increasing fire likelihood and acres burned. The available literature indicates that only by increasing fire suppression efforts would there be a resulting decrease in small-scale fires. The BLM recommends that this conclusion be adjusted accordingly or deleted.                                                                                                                 | USACE appreciates the recommendation. The text has been updated to read, "Natural events such as flooding and wildfires are a common occurrence in Alaska. Wildfires have an important, beneficial effect to both the boreal forest and tundra ecosystems in Alaska. Wildfires positively impact vegetation resources by releasing trapped nutrients back into the ecosystem as well promoting natural succession of species (USFWS, 2007). Wildfire suppression for the protection of structural components of the proposed Project, its associated workers, and other nearby RFFAs would cumulatively reduce the number of important small-scale wildfires, and lead to unnatural accumulations of fuel. Cyclical wildfires clear excess debris and ultimately reduce the risk of more extensive and dangerous wildfires (EPA, 2016)."         | 4.26.9.3                  |
| AIR_11     | The paragraph preceding Table 4.22-1 needs to explain what the significance is of concentrations presented as a percentage of National Ambient Air Quality Standards. While this information may be clear to those with an understanding of air quality, it is not understandable to the public that will be reading this EIS.                                                                                                                                                                                                                                                                                                                                                                                                                                          | The following text has been added to the Final SEIS to address this suggestion: "The National Ambient Air Quality Standards (NAAQS) for different pollutants have different averaging periods and statically determined threshold limits (i.e. NOx (1 hour standard) - 98th percentile of 1-hour daily maximum concentration, average over 3 years). Percentage value is used to describe how close the current air quality has become to a (complex or simple) NAAQS standard. A higher percentage indicates a lesser achievement of the NAAQS standards."                                                                                                                                                                                                                                                                                      | 4.22.2                    |
| AIR_12     | In Section 4.22.3, the first paragraph and the second bullet after the paragraph refer to Best Available Control Technology (BACT) without explaining what the BACT process is or under what regulatory authority it is being required. Please add an explanatory paragraph. Also, it is not clear why the word "mitigate" is used in bullet two of this section because BACT is required by existing permitting regulations. The Clean Air Act is one of the federal laws that require integration with the National Environmental Policy Act, so this description should be reworded to focus on meeting the regulatory standards and avoid using the word "mitigate" as this will lead some readers to assume it is mitigation rather than a regulatory requirement. | USACE appreciates the comment. A definition of BACT and applicable regulatory requirements has been included in Section 4.21.2.2, where BACT are first mentioned in the Public Health section. While implementation of BACT is a regulatory requirement, BACT also provide methods for mitigating potential impacts from the proposed Action.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.21.2.2                  |
| AIR_13     | It is not clear how bullets 2-6 of mitigation measures for air quality are related to climate change or greenhouse gas (GHG) emissions. Please explain how mitigation involving vegetation and wetlands would connect to climate change and GHG emission issues. The current description does not offer a clear connection.                                                                                                                                                                                                                                                                                                                                                                                                                                             | Vegetation (as well as permafrost) acts as a carbon stock. Reducing impacts to vegetation could decrease the amount of CO2 released into the atmosphere. This is explained in more detail in Section 4.22.4.1.5. The introductory sentence for Section 4.22.3 has been modified as follows: "Proposed mitigation measures applicable to climate change and GHG emissions impacts, not previously mentioned for air quality, include the following to maintain carbon stocks such as permafrost and vegetation:"                                                                                                                                                                                                                                                                                                                                  | 4.22.3                    |
| AIR_14     | This statement is unclear: "The effect would be site-specific to the air around GCF". Given the concerns about air quality discussed elsewhere in the document, it is not clear why the phrase "the air around GCF" was used. Please add more specificity or a citation to exactly what the geographic extent of the site-specific impacts could be.                                                                                                                                                                                                                                                                                                                                                                                                                    | Each air pollution source contributes to the air quality within the airshed. An airshed is defined as "a part of the atmosphere that behaves in a coherent way with respect to the dispersion of emissions." The main air pollutant emissions associated with the construction of the GCF are fugitive dust from land disturbance and diesel emissions from engines. The particulate (air pollutants) from these operations are large and heavy and settle out quickly. Thus, they are not usually transported out of the immediate airshed. The site-specific area includes the total acres disturbed (110.8 acres) plus the surrounding airshed.                                                                                                                                                                                               | 4.22.4.1.1                |
| AIR_15     | This sentence does not provide useful information: "Emissions from construction equipment combustion and fugitive dust would be controlled to the extent required by EPA." Please describe U.S. Environmental Protection Agency's (EPA) regulatory authority on vehicle emissions and the realistic limits of compliance and enforcement on construction equipment operating in Alaska. It is not clear why page 4-617 attributes regulatory authority over construction equipment combustion and fugitive dust with the EPA and this page attributes it to the Alaska Department of Environmental Conservation (ADEC). Please change this sentence to reflect that the authority rests with the EPA.                                                                   | Text has been added to address the concern, "ADEC has a 20% opacity limit during advisories and episodes; the Fairbanks Plan also has opacity ordinances. Commonly, if air with a 20% opacity due to air pollutants is leaving the property, this is considered a violation of the air pollution laws. In regard to internal combustion engines for construction equipment, including generators, the EPA has promulgated emission standards for manufacturers of internal combustion engines and mobile diesel equipment. They have also required fuel providers to lower sulfur content of fossil fuels, thus reducing the formation of sulfur dioxide."                                                                                                                                                                                       | 3.18.3.6.1 and 3.18.3.6.4 |
| AIR_16     | The tons per year (tpy) figures for Fugitive Dust in Table 4.22-6 appear to conflict with the statement made on page 4-617 that "Total PM fugitive dust is assumed equal to PM10 fugitive dust". The figures noted in this table are orders of magnitude different from this assumption. Please explain this disparity.                                                                                                                                                                                                                                                                                                                                                                                                                                                 | This statement is in reference to the calculation method used to determine vehicle travel fugitive emissions. Sections 4.22.4.1.2 and 4.22.4.1.4 have been revised accordingly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.22.4.1.2 and 4.22.4.1.4 |
| AIR_17     | This statement is unclear "Current and RFFAs near Denali NPP could impact the air quality monitoring that is conducted in the park as part of its Class I designation." It is not clear how current actions could impact the air quality monitoring in Denali National Park and Preserve (NPP). Would these actions require changes to the existing monitoring or the frequency of monitoring? Or was the sentence trying to say that current and Reasonably Foreseeable Future Actions (RFFAs) could impact the air quality in Denali NPP?                                                                                                                                                                                                                             | USACE appreciates the observation. The sentence is stating that current and RFFAs could impact the air quality in Denali NNP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change                 |
| AIR_18     | It is not clear why this discussion of greenhouse gas (GHG) emissions is included on page 4-625. It discusses the possibility of changes in GHG emissions due to the project, but does not discuss in usable detail any of the environmental consequences.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The consequences of GHG emissions and climate change are discussed in Section 4.22.4.1.5 and in Section 4.26.9.17.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No change                 |
| AIR_19     | This statement is unclear: "The overall impact of the operation of the GCF is expected to be minor, for the following reasons..." It is not clear how meeting permitting standards automatically makes the impact of the Gas Conditioning Facility (GCF) operations minor. Please describe in these bullets why the GCF operations would fall under the Prevention of Significant Deterioration permit, summarizing the emissions and regulatory caps on emissions.                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggested changes regarding the presentation of information in the SEIS. The following text has been added to address this suggestion: "The EPA and ADEC's health-based standards have been determined to be safe impacts in regard to the emissions of air pollutants. If proper permitting and air impact analyses are performed, as described in the above bulleted list, including requirements for clean fuels and air pollution control equipment, a facility should have minor impact on human health and environment."                                                                                                                                                                                                                                                                                             | 4.22.4.2.1                |
| AIR_2      | Add a citation and evidence for this statement or delete it from the document: "It has been hypothesized that the rate of movement could be accelerated by a warming climate."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3.2.4.1                   |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Section #s of Change |
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| AIR_20     | Background design values for Prudhoe Bay provide air quality data that could be used to conduct more thorough modeling for the proposed Gas Conditioning Facility. Table 3.18-6 contains blank entries for PM <sub>2.5</sub> and CO and is missing background values for NO <sub>2</sub> and SO <sub>2</sub> . More recent datasets may also be available. The SEIS should re-evaluate and sizeable datasets are available, preferably a 3-year dataset. Background design value should be reported for each of the criteria air pollutants. It would be helpful if Table 3.18-6 noted where National Ambient Air Quality Standards calculations were not used.                                                                                                                                                                                                                            | The USACE appreciates the comment. Table 3.18-6 has been updated and more recent ambient air quality data has been used to report values for each of the criteria pollutants included in the table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change            |
| AIR_21     | Table 4.22-10 provides information on the greenhouse gas (GHG) emissions from the Gas Conditioning Facility (GCF), so the end of the sentence should read "the overall impact to climate change would be moderate. From the prior descriptions it does not appear that climate change would have a moderate impact on the GCF facility or its operation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.22.4.2.4           |
| AIR_22     | Appendix U should include a list of inputs such as RunSpec files from each MOVES run to show what settings were used for the modeling.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggestion. Additional background information related to emissions factors has been included in the Final SEIS. Information included in Appendix U of the Draft SEIS is located in Appendix O of the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Appendix O           |
| AIR_23     | This statement is a misnomer: "The first 62 miles of the proposed pipeline in Alternative 2 would be aboveground. This could reduce vegetation disruption resulting in less fugitive dust." The reason the first 62 miles of pipeline is aboveground in Alternative 2 is due to permafrost and the vulnerability to thermokarst and subsidence if the active layer of insulation is disturbed during pipeline construction, so it is a misnomer to suggest that a reduction in vegetation disruption would result in less fugitive dust.                                                                                                                                                                                                                                                                                                                                                   | This statement acknowledges that less fugitive dust may be generated as a result of an above ground portion of the pipeline. It does not imply that the above ground construction option was proposed to mitigate fugitive dust. Reasoning supporting the inclusion of each Alternative is addressed in Chapter 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change            |
| AIR_24     | This statement is unclear/untrue: "The project may also result in minor positive air quality impacts during operation and maintenance." It is not clear how this general statement can be made. This statement appears from prior discussions to be premised on the introduction of natural gas into the Fairbanks North Star Borough and customers converting from oil-fired, wood-fired, or coal-fired heating devices. The rate of conversion to natural gas is dependent on the cost of conversion and the cost of natural gas at that time. The variables involved in this future scenario would appear to make this statement speculative and not reasonably foreseeable, so the sentence should be rewritten to make that clearer.                                                                                                                                                  | EPA reclassified the Fairbanks North Star Borough's air quality from "moderate" to "serious" this year and news sources compared the air quality to Beijing. As a result, there is an increase urgency in the region to use cleaner fuels for heating. If natural gas is available and at a reasonable cost, a percentage of area sources and private residents would switch to natural gas. Stability in the price and ease of conversion to natural gas would also capture another percentage of the population. Thus, we can conservatively say that at least a minor improvement in regional air quality will occur.                                                                                                                                                                                 | 4.26.9.17            |
| AIR_3      | This statement should be updated to reflect the U.S. Environmental Protection Agency's (EPA) new and most recent position on greenhouse gas (GHG) regulations: "On October 30, 2009, EPA promulgated 40 CFR 98, the first comprehensive national system for reporting emissions of CO <sub>2</sub> and other GHGs produced by major sources in the U.S. Through this new reporting, EPA would collect comprehensive and accurate data about the production of GHGs in order to confront climate change. Approximately 13,000 facilities, accounting for about 85 percent to 90 percent of GHGs emitted in the U.S., are covered under the rule." Please also apply the edit to Section 4.                                                                                                                                                                                                  | This statement is included in Section 3.18.3.14.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change            |
| AIR_4      | The Council on Environmental Quality guidance as mentioned in Section 3.18.4.1 was withdrawn April 5, 2017. See the following links and update the section accordingly. Please also apply elsewhere in Section 3 and throughout Section 4.22 where appropriate.<br><a href="https://www.gpo.gov/fdsys/pkg/FR-2017-04-05/pdf/2017-06770.pdf">https://www.gpo.gov/fdsys/pkg/FR-2017-04-05/pdf/2017-06770.pdf</a><br><a href="http://climatechange.procon.org/view.answers.php?questionID=001445">http://climatechange.procon.org/view.answers.php?questionID=001445</a><br><a href="https://www.epw.senate.gov/public/index.cfm/2016/8/inhofe-statement-on-ceqs-final-guidance-on-considering-climate-change-in-environmental-reviews">https://www.epw.senate.gov/public/index.cfm/2016/8/inhofe-statement-on-ceqs-final-guidance-on-considering-climate-change-in-environmental-reviews</a> | Reference to the withdrawal of the CEQ Guidance has been included, where applicable throughout the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3.18, 4.22           |
| AIR_5      | This statement needs to be updated "Likewise, the air quality would be further improved to the extent GVEA electrical generation and Flint Hills Refinery could be economically converted from naphtha, diesel and coal to natural gas." As of December 2016, the Flint Hills Refinery in North Pole was being dismantled, so there is no hope of oil refining operations restarting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the comment. This sentence as been removed from the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4.26.9.17            |
| AIR_6      | This connection is unclear: "Effects noted in this table for climate change includes 'increase in levels of air contaminant concentrations'." It is not clear what the connection is between climate change and an increase in levels of air contaminant concentrations. If the increase is due to an increase in wildfires due to climate change, that effect is already covered on page 4-835.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates the comment. The increase in levels of air contaminants from climate change was included in this table for a few reasons which include increases in methane gas as a result of increased temperatures, changes in wind patterns which may result in air stagnation zones, and as the commenter noted, increased wildfires from climate change result in an increase in air contamination.                                                                                                                                                                                                                                                                                                                                                                                              | No change            |
| AIR_7      | This statement needs to be updated: "Projected annual temperatures vary based on assumptions of economic and population growth, changes in energy and land use, and resource availability; however, projected annual mean temperature increases for Barrow, Alaska, ranges from 1.5 to 3.3°C by the year 2030 (Larsen et al., 2008)." This should be updated to a more recent assessment (e.g., Regional Climate Trends and Scenarios for the U.S. National Climate Assessment: Part 7. Climate of Alaska. National Oceanic and Atmospheric Administration Technical Report NESDIS 142-7) and should refer to the impacts along the Project area, not just Barrow, Alaska.                                                                                                                                                                                                                 | The referenced statement has been updated to reflect more recently available information.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4.22.4               |
| AIR_8      | We disagree with the statement "Air Quality: Increasing the availability of utility grade natural gas to FNG or GVEA (RFFAs N. 37 and 53) could have minor..." This needs to be changed from a minor impact to a major positive impact.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | While some residents and businesses would switch to natural gas from oil and wood once available, the number and extent is dependent on several factors. These factors include foremost the cost, followed by ease of conversion, then satisfaction of the status quo and actual & perceived provincial air quality. The percent of conversions to natural gas would be gradual over decades. As a result, the extent of conversions by these private and commercial sources, and thus the decrease of pollutant impacts, could not be precisely estimated and thus are estimated as minor.                                                                                                                                                                                                              | No change            |
| AIR_9      | Near-field air quality modeling should be undertaken for the Gas Conditioning Facility to assess project impacts on local air quality and Prevention of Significant Deterioration increment consumption so appropriate mitigation measures can be developed as needed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The USACE has been provided NAAQS modeling results for the GCF for initial air permitting, along with the ASAP Dispersion Modeling Protocol. The information from the NAAQS GCF Modeling has been included in the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.22.4.2.1           |
| AKN_1      | Which cultural resources would be impacted by the Project?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Section 4.19 of the SEIS discusses the Project's potential effects to cultural resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change            |
| AKN_2      | The ASAP Project team has conducted outreach to communities in the vicinity of the Project and should continue outreach and consultation with the Tribal governments and community members. Most important are the closely located villages of Minto and Nenana, but also there may be concerns from other communities further away including Manley Hot Springs, Rampart, Stevens Village, and others. The communities with whom you consult need to be provided the opportunity to understand the scope and scale of the Project and be afforded information on modifications and foreseeable consequences. Of particular interest are the socioeconomic factors in the affected human environment.                                                                                                                                                                                      | USACE agrees that engaging potentially affected communities is extremely important as part of the NEPA process. Following CEQ guidance, Project meetings were held in communities nearest to the proposed pipeline alignment, however, additional outreach has occurred with other communities farther away through government-to-government meetings in accordance with E.O. 13175 (see SEIS Section 1.10). Additionally, public notices (Notice of Intent and Notice of Availability) have been published in the Federal Register (FR) (79 FR 44758, 82 FR 29859 and 82 FR 39424, respectively). USACE held a 60-day comment period on the Draft SEIS, seeking public comments from all interested stakeholders. The Project website (www.asapeis.com) also provides easy access to Project documents. | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Section #s of Change |
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| AKN_3      | The Project needs to address and respect the wishes of the communities. The Project needs to start listening to the people and doing it on their terms. Project leads should be coming to these meetings instead of their associates. Project leads need to hear the issues from the people directly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the need to listen to communities and interested stakeholders. For this reason, USACE held a 60-day comment period June 30 - August 29, 2017 and held 11 public meetings to accept public comments and address Project questions. Comments received have been reviewed and summarized in the Comment Analysis Report appended to the Final SEIS. As described in the Comment Analysis Report, substantive comments have been used to refine the Project alignment and address questions and concerns in the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change            |
| ALT_1      | Comments in support of Alternative 1, the Applicant's Proposed Action: A buried pipeline would be safer, more secure, and less expensive. The environmental impacts of a buried pipeline would be less than an aboveground pipeline.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change            |
| ALT_10     | The pipeline should be routed to the west of the Parks Highway and immediately adjacent to it. This would benefit vehicle travelers in that the clearing will allow more and better opportunities to view the Alaska Range. This would also mean one viewshed scar rather than two.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | As described in Section 2.2.9.7, the Alternative 1 route alignment has been shifted since the 2012 alignment in order to minimize potential impacts to wetlands and would be located in more suitable soils. Potential visual impacts of the proposed action are discussed in Section 4.17 including specific measures to avoid, minimize and mitigate potential visual impacts (see Section 4.17.3).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change            |
| ALT_11     | The following potential Material Sites need to be moved or abandoned.<br>The Material Site at MP 615 is near the Ermine Hill trailhead, which is very popular and gets a lot of activity, would be in clear view of hikers. This is a poor place for a material site. The Material Site at MP 622 and 623 are just north of Byers Lake. The trail to Tarn Point and Kesugi Ridge goes around the north end of Byers Lake. The Material Sites will surely mar the view for hikers and detract from their wilderness backcountry experience, but the sites might also overlap or be in close proximity to the trail and thus impact it directly.<br>The two Material Sites at MP 633 are very near the entry road to the South Denali Visitor Center development. Base annual visitation is expected to be over 200,000 people, most of whom expect to see Denali and the Alaska Range in a wilderness setting. Gravel pits are an incompatible use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Comment acknowledged. Material Sites at MP 615 and 633 are no longer a part of the Project footprint. Material Site MS 4B-c is located at MP 622.7 and is a new site; however, it is also the site of an existing disturbance. Please refer to table 2.2-4 of the Final SEIS for material site locations. Federal, State, and Borough permits, and other land manager agreements, would be required prior to developing new or existing material extraction sites. Additional authorizations may be necessary for associated activities, such as the construction of temporary access roads. Prior to permitting the Project, individual sites would be reviewed on a case-by-case basis to identify the site-specific authorizations required for each location.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change            |
| ALT_12     | The State needs to look at public lands east of the highway near Parks Highway mile 129 to route their pipeline corridors. The ground is less swampy and has much better gravels on the east side of the highway from mile 131 to mile 114 of the Parks Highway. The east side of the highway is all public lands from mile 131 to mile 116 and has only a winter trail easement to contend with, rather than driveways trailheads, trails, and private property on the west side of the highway.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Thank you for your comment. The ASAP alignment has been revised to match the AKLNG alignment in this area from approximately Parks Highway MP 122 to MP 131.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No change            |
| ALT_13     | Questions regarding the temperature of the gas in the pipeline.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Section 2.2.5.3 of the SEIS provides detailed information regarding the temperature of the gas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change            |
| ALT_14     | Questions regarding dredging and dredge material disposal in the Beaufort Sea.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Section 2.2.3 of the SEIS provides detailed information on the proposed dredging and disposal activities at West Dock. In addition, Draft SEIS Appendix F: Part I provides the ASAP West Dock Dredge and Disposal Plan. For an evaluation of the potential impacts of dredging and disposal for the Alternatives, please see Chapter 4 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ALT_15     | How high or what distance off the ground would that elevated section be on the North Slope?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Alternative 2 includes elevating the pipeline on Vertical Support Members (VSMs) from MP 0 - 62. To allow passage of wildlife, the pipeline would be elevated a minimum of seven feet above the ground. This detail has been added to Section 2.4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2.4                  |
| ALT_16     | It is better now that there is only one compressor planned instead of several.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change            |
| ALT_17     | The Project should reduce the number of Trans-Alaska Pipeline System (TAPS) crossings, including the TAPS fuel gas line. The current route design incorporates twelve TAPS mainline and five fuel gas line crossings. This proximity exposes TAPS to substantial risk at each such crossing and we prefer reducing the number of TAPS crossings even further if practical. It is prudent to determine the setback from TAPS for adjacent parallel pipe segments. The encroachments may expose TAPS to unacceptable risk at pump station driveways, stream crossings, unstable slopes, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | The proposed Project would comply with PHMSA requirements. PHMSA regulates pipeline proximity to other infrastructure, pipeline crossings and highway crossings. The ASAP, TAPS and Dalton Highway alignments are all within a utility corridor with several pinch points that minimize alignment options. Landowners have commented that use of previously disturbed areas is preferred which by design consolidates infrastructure into a smaller footprint. The ASAP alignment considers all of these factors, including the requirement to minimize wetland impacts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No change            |
| ALT_18     | The Fairbanks North Star Borough (FNSB) requests that the U.S. Army Corps of Engineers (USACE) analyze pipeline route alternatives that utilize existing rights-of-way (ROWs) including the Elliott Highway and Trans Alaska Pipeline System utility corridor, from Livengood south to Fairbanks (Livengood-Fairbanks Route). Utilizing the Livengood-Fairbanks Route avoids 53 miles of pipeline construction in the Minto Flats State Game Refuge where no infrastructure exists and eliminates the need for the 30-mile Fairbanks Lateral. Routing the mainline through the Fairbanks area ensures that future demand in the Fairbanks region is met and allows access to gas for Richardson highway communities. In addition to the substantial environmental damage and permitting concerns implicated by the Minto Flats Route, the cost of construction associated with building 53 miles of pipeline in an area largely covered in wetland with no existing infrastructure is exorbitant. Rather than cut 53 miles of 120-foot-wide ROW across a pristine and environmentally sensitive area, FNSB proposes that the ASAP Project utilize existing infrastructure including access roads, camp pads, storage yards, and other infrastructure associated with the Trans-Alaska Pipeline System (TAPS). Use of existing infrastructure will reduce project costs and avoid unnecessary environmental damage. In addition to the Fairbanks Route Variation and the Richardson Highway Route Alternative, USACE should also consider an alternative route travelling from Fairbanks southwest along the Parks Highway to Nenana, where it would continue south along the presently proposed route. | As referenced in Section 2.6.4 of the Draft SEIS, the 2012 FEIS evaluated several route alternatives in the Fairbanks area including the Richardson Highway. Based upon this screening analysis, the Richardson Highway Route Alternative does not appear to include features that would result in less environmental impacts when compared to the Parks Highway Route. In October 2011, AGDC conducted a desktop delineation and classification of wetlands along the Fairbanks Route Variation. The desktop study utilized the same resources and methodologies that were used to complete wetland delineations and classification for the proposed Project (AGDC 2011c, 2011d). The alternatives study phase that resulted in the Stand Alone Gas Pipeline Route Alternatives Analysis (State of Alaska 2009) identified numerous conditions along this route that are not conducive to pipeline construction. Unfavorable site elements identified along this route variation included constructability constraints resulting from unfavorable geotechnical conditions (e.g., permafrost), as well as the presence of excessively rugged terrain throughout the northwest segment of the route variation. For these reasons, these route variations were eliminated from detailed analysis. In addition, the 2016 Draft SEIS Alternative 1 route alignment was refined to minimize potential impacts in the Minto Flats area. Specific route refinements such as these are provided in Final SEIS Appendix M: Part II. | No change            |
| ALT_19     | The Alaska Gasline Development Corporation needs to ensure an appropriate consideration of the risks at crossing near Pump Station 1, Atigun Pass and the Yukon River. The current ASAP design is to cross the Yukon River separate from the E.L.Patton bridge. The consequences of failure with co-use of the E.L. Patton bridge are extremely high. There is great need for a non-E.L. Patton bridge crossing. The spare rack located on the bridge is owned by the Trans-Alaska Pipeline System (TAPS) owners and they are not authorized to make commitments regarding its use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Comment acknowledged. The proposed Project would comply with PHMSA requirements for locating the pipeline. The proposed alternative for crossing the Yukon River is horizontally directional drilling beneath the river, downstream of the E.L. Patton Bridge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change            |
| ALT_2      | Comments opposing Alternative 2. An aboveground pipeline from MP 0-62 as part of Alternative 2 could impede or alter migrations of important subsistence species and other wildlife and would have greater negative impacts to the viewshed. The Alaska Gasline Development Corporation strongly objects to the concept of elevating the first 62 miles of pipe.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Comment acknowledged. The National Environmental Policy Act (NEPA) and Council on Environmental Quality (CEQ) guidance (40 CFR 1500-1508) requires evaluation of a "reasonable range of alternatives" in the SEIS. CEQ guidance (1981) further states "A lead agency has the responsibility to respond to all substantive comments raising significant issues regarding a draft EIS" (Section 1503.4). During development of SEIS alternatives, cooperating agencies raised concerns about burying the pipeline in the Arctic Coastal Plain. Therefore, Alternative 2 includes elevation of the first 62 miles of the pipeline as a reasonable alternative to the proposed action.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change            |
| ALT_20     | The Project is following the Trans-Alaska Pipeline System (TAPS) pipeline, using the same corridor?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | As described in Section 2.2.9.1, the proposed alignment would continue to generally parallel the TAPS and Dalton Highway corridor for most of the way to near Livengood, northwest of Fairbanks. The proposed alignment continues to be located within the established federal utility corridor managed by U.S. BLM under Public Land Order 5150. At Livengood, the revised Mainline route would continue south, to the west of Fairbanks and Nenana. The pipeline would bypass Denali NPP to the east and then essentially parallel the Parks Highway corridor to Willow, continuing south to its connection into ENSTAR's distribution system at MP 39 of the Beluga Pipeline southwest of Big Lake.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No change            |
| ALT_21     | Minto should receive a spur line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Please refer to the response to comment ALT_3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Section #s of Change |
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| ALT_22     | In Section 2.7, the statement that the Bureau of Land Management's (BLM) preferred alternative is the proposed action is in error. The BLM has not yet identified a preferred alternative for the proposed ASAP Project; a decision will come after a review of all comments submitted on the Draft SEIS and finalization of the Alaska National Interest Lands Conservation Act Section 810 subsistence analysis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Thank you for your comment. The text in Section 2.7 has been revised accordingly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2.7                  |
| ALT_23     | The proposed gravel pit at MP 245 of the Parks Highway in Healy is unnecessary because there is already a state pit at this milepost and four other gravel pits within a few miles range.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Comment acknowledged. Two material sites in the area have been selected for use by the Project in the vicinity of MP 245 of the Parks Highway: MS 3D-G (existing), and MS 3D-H (new). They are 1 mile apart along the highway. AGDC has selected the most logically feasible locations for pipeline construction while minimizing the environmental impact.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change            |
| ALT_24     | I strongly encourage the Corps to authorize the use of the alternative variation through the Park. The route would avoid impacting virgin wildlife habitat toward Moody Creek, avoid crossing Revine Creek to the east of the park's boundary, and avoid crossing a seismic hazard at Lynx Creek in the park. It will remain within the visitor impact areas of the park and outside of wilderness land classifications. It will avoid placing a line near steep terrain in order to circumvent a natural hazard and limit visual impacts to park visitors. The proposed route will improve safety of the line, facilitate maintenance, address engineering concerns, reduce the need for buried river crossings, require less specialized construction equipment, require fewer access roads for construction, and enable winter-time construction. The Denali Park alternative will better protect the environment and transport natural gas to Southcentral. The Denali National Park Improvement Act of 2013 (P.L. 113-33) legislation was intended to prevent impacts to wildlife and scenic views that would have occurred if the line ran further from the existing highway. The Denali route also benefits the park by allowing the park's facilities to switch to gas energy, and permitted the use of compressed natural gas to run park buses and vehicles and improve air quality. This revised route does not require the consolidated permitting process under the Alaska National Interest Lands Conservation Act. It also would avoid a fault line near Lynx Creek. | USACE appreciates the detailed comments on Alternative 2. These issues are evaluated in detail in Chapter 4 of the SEIS and have been considered in the selection of the preferred alternative. Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change            |
| ALT_25     | WACO is opposed to the preferred route alternative from pipeline mile 707, south through the Willow Creek SRA and the West Gateway Trail System. We support either of two route variations, the Parks Highway/Port MacKenzie Rail Corridor or an Alaska Energy Authority Alaska Intertie corridor. The Willow Creek State Recreation Area, the West Gateway Trail System and a developing community park are three areas most effected by the proposed pipeline. A 100' wide right-of-way that will never grow back to its natural state will create more unattended trails and unnatural environment. This will negate extensive public trail planning and compromise detailed trail designs and trail user experiences. The conclusions of the EIS should not be based solely on economics.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The State Legislature authorized a specific alignment to traverse the Willow Creek State Recreational Area. The Project proponent would construct and operate the pipeline within the corridor approved by the Legislature. The State right-of-way lease contains the following stipulations with respect to public access:<br>1.14.2 Public Access<br>1.14.2.1 The Lessee shall regulate or temporarily prohibit public access and vehicular traffic on Roads on State Land, which are not managed or owned by the Alaska Department of Transportation and Public Facilities (DOT&PF), as required for activities in the immediate vicinity of the Pipeline and Related Facilities. The Lessee shall provide appropriate warnings, flagging, barricades, and other safety measures when the Lessee is regulating public access.<br>1.14.2.2 Pipeline Activities shall not interfere with the public's free and unrestricted access to and upon the Leasehold, except that, with the Pipeline Coordinator's approval, the Lessee shall regulate or prohibit access, including vehicular traffic, to and upon the Leasehold to the extent necessary to facilitate Pipeline Activities, maintain Pipeline integrity, or to protect the public and wildlife from hazards associated with Pipeline Activities.<br>1.14.2.3 The creation of any permanent obstruction to the passage of small craft in streams is prohibited, unless otherwise approved by the Pipeline Coordinator.<br>1.14.2.4 The Lessee shall make provisions for suitable permanent crossings for the public where the Leasehold or Access Roads cross existing Roads, foot trails, winter trails, easements or other rights-of-way, unless otherwise authorized by the Pipeline Coordinator.<br>1.14.2.5 After completion of Construction of the Pipeline, and with the concurrence of the Lessee, the Pipeline Coordinator may designate areas of the Leasehold to which the public shall have free and unrestricted access.<br>The right-of-way lease gives the State Pipeline Coordinator, as the delegated land manager for the leasehold, the authority to address specific needs related to access. AGDC will work with the State Pipeline Coordinator to address Willow Creek State Recreation Area access issues. | No change            |
| ALT_26     | We urge the agency to develop and assess fully both the currently proposed Denali National Park and Preserve (NPP) alternative as well as a modified Denali NPP alternative that would follow the Parks Highway all the way through the Yanert Valley (the 2012 FEIS route). A route that follows the Parks Highway on through the Yanert Valley would be environmentally preferred, affecting fewer acres of wetland, would use the existing Nenana River crossing, and would avoid the new path through Denali.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Per CEQ guidance (40 CFR 1502.22), the analysis in the SEIS is based on the best available data for the Project Area. Since the 2012 FEIS, the Project proponent has provided additional information on the Denali NPP route variation. The analysis of Alternative 2 presented in Chapter 4 of the SEIS is based on the best available scientific literature, field data, reports and other readily available information as required under NEPA. The SEIS complies with NEPA's "hard look" standard.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No change            |
| ALT_27     | There are additional appropriate and practicable avoidance and minimization measures that could further reduce potential aquatic resource impacts. For example, the Draft SEIS indicates that potentially thousands of acres of impacts could be avoided by elevating the pipeline on using vertical support members in wetland areas underlain by permafrost, similar to the existing Trans-Alaska Pipeline. The EPA believes that opportunities to elevate the pipeline should be more thoroughly evaluated to determine if they could reduce the impacts to wetlands underlain by permafrost. We also recommend evaluating the use of Dock Head 4 at West Dock and removal of gravel in the construction right-of-way as potential opportunities to minimize impacts to resources. Such additional evaluations are critical to adequately identify the least environmentally damaging practicable alternative under the Guidelines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The USACE has considered inclusion of an alternative that evaluates the use of Dock Head 4 and an alternative that evaluates elevating the pipeline on VSMs from MP-0 to MP-168. Since publication of the Draft SEIS in June 2017, additional information regarding the potential use of Dock Head 4 has been provided by the Project proponent and incorporated into Section 2.6. The Final SEIS has been revised to include rationale for screening out the Dock Head 4 Alternative. The Final SEIS also includes an evaluation of the feasibility of an alternative elevating the pipeline on VSMs from MP0-MP168. Additional avoidance and minimization has occurred from MP0-MP62 by utilizing ice pads and ice roads for work surfaces in lieu of discharging gravel for pad/road construction.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2.6                  |
| ALT_28     | I request that the pipeline route be shifted east at least 200 meters between MP 93 and 94 because of an ongoing long-term ecological experiment close to the proposed route.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | AGDC acknowledges that the feature in question is ice rich material. The alignment of the pipeline reflects the underlying material because it is routed along or nearly on the ridgeline of the feature. Moving the alignment to the east would create additional environmental impacts over time due to increasing the side hill cutting of ice rich material and placing the alignment closer and just upslope of an apparent water feature.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change            |
| ALT_29     | Alternative 2 includes several changes elsewhere in the project, which make it difficult to compare the two Denali route options. A section just comparing the pros and cons of these two routes would have been helpful to us. Absent a compelling reason to place the pipeline through undisturbed portions of Denali, the route around the park appears to be the best option.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The USACE appreciates the comment. Table 2.2-1 includes a summary comparison of design changes and refinements between the 2012 FEIS and the 2016 Application for Permit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change            |
| ALT_3      | A spur line or station should be built at the Yukon River so that it could be used to supply villages along the Yukon River. Fairbanks and Nenana do not need spur lines because they already have access to cheaper gas and other products already.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Comment acknowledged. The SEIS evaluates the proposed action to construct a natural gas pipeline from Alaska's North Slope to southcentral Alaska. As described in Section 2.3, the proposed action currently includes a spur line to Fairbanks. The scope of the Project does not include any community infrastructure (e.g., offtake valves, decompression stations, or local distribution infrastructure for communities along the line); however, it is a reasonably foreseeable action that some communities would want access to gas and request to tap into the line to feed local distribution infrastructure, which would be developed in the future.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change            |
| ALT_30     | The Willow Trail Committee recommends alternative sites for the proposed storage yard. Site A (61° 45'54", 150° 07'25") is parallel to the Willow Creek Parkway and closer to the pipeline easement. It also is in an area devastated by the 2015 Sockeye wildfire. This site would not directly conflict with trails, parks or residential areas. Another possible site, B (61° 45'35", 150° 05'10") is east of the Parkway and along N Thomas St. The advantage of this area is that it will minimally effect the Willow Creek State Recreation Area, Newman's Park and trails while providing suitable terrain for the storage yard.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Comment noted. AGDC assumes that this comment refers to the Pipe Storage Yard in Willow; the Pipe Storage Yard in question does not actually bisect the trail, but the trail is on the eastern side of the Pipe Storage Yard. The Pipe Storage Yard will be moved 150' to the west of the north-south feeder to Lucky Shot Trail from Willow Creek Parkway. This will provide a 150' vegetative buffer from the eastern edge of the Pipe Storage Yard and the feeder trail. The access road for the Pipe Storage Yard will not move.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Section #s of Change    |
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| ALT_31     | If Alternative 2 is selected, it will have a significant impact on the Project and the Alaska Gasline Development Corporation's ability to deliver natural gas to Alaskans. The Draft SEIS did not adequately represent the information provided to support the belowground mode of construction for the first 62 miles of the project (MP 0-62).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Per CEQ guidance (40 CFR 1502.22), the analysis of Alternatives 1 and 2 in the SEIS are based on the best available data, field data, scientific literature, available research reports and other information for the Project Area. The evaluation of Alternative 1 (belowground mode) complies with NEPA's required "hard look" standard (40 CFR 1502.22) by objectively evaluating potential impacts based on available information. As with Alternative 1, the analysis of Alternative 2 includes an evaluation of potential acres of wetlands to be impacted, potential impacts to soils and geology, water resources, wildlife and other resources as described in Chapter 4.                                                                                                                                                                                                                                                                                             | No change               |
| ALT_32     | The Borough would like to connect Anaktuvuk Pass to the Alaska Stand Alone Pipeline. Natural gas would provide Anaktuvuk Pass with a more environmentally friendly and affordable energy source for heating and electricity generation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Thank you for your comment. Please see the response to ALT_3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change               |
| ALT_33     | There is some justification for a gasline from the North Slope to Fairbanks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change               |
| ALT_34     | The Denali Citizen's Council is concerned that routing near Denali National Park, including access roads and infrastructure placement. The map still shows only one route near the park, but we are aware that an alternative through the national park is still on the table and its fine points not thoroughly vetted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Thank you for your comment. Alternative 2 as presented in the Draft SEIS represents the current option for route alignment through Denali NPP. Chapter 4 of the SEIS provides a detailed assessment of potential impacts associated with routing the alignment through a portion of Denali NPP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change               |
| ALT_35     | Alternative 2 uses vertical support members (VSMs) in only the first 62 miles of the pipeline. The proposed action should include elevating the pipeline on VSMs in the ACP ecoregion as well as other areas where thaw-unstable permafrost exists in order to minimize impacts to wetlands. This will prevent thermokarsting due to trenching, and the resulting alterations to natural drainage systems which could significantly impact large areas of higher-value wetlands. Use of VSMs in areas of permafrost offers significant reductions in impacts. Consideration of additional alternatives that use VSMs over more of the route that crosses permafrost would offer greater impact reduction and also reduce the need for costly maintenance and repairs due to permafrost thaw, frost bulbs, and altered drainage.                                                                                                                         | As discussed with Cooperating Agencies during development of the Draft SEIS, Alternative 2 proposes to elevate the first 62 miles of the pipeline to provide a comparison of potential impacts to the Arctic Coastal Plain. This aspect of Alternative 2 was based on multiple discussions with USFWS in February 2015 as well as a March 3, 2016 letter which specifically states: "The Service continues to have concerns regarding the plan to bury all or large portions of the gas pipeline on the Arctic Coastal Plain (ACP). A comprehensive set of alternatives should include a pipeline raised on vertical support members (VSMs) for the first twenty to thirty miles of the route (the area containing a high density of oriented thaw lakes)." USACE incorporated this concept into Alternative 2 and extended the length of elevated line through the southern edge of the Arctic Coastal Plain to address these concerns.                                       | No change               |
| ALT_36     | Burying the pipeline in the meander belt at the same elevation as the depth under the river or stream (e.g., at least 4 feet or 120 percent of the expected maximum-scour depth elevation) and including scour protection measures would allow floodplain channels to migrate freely across the meander belt without exposing inadequately buried pipe.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Thank you for your comment. USACE has considered these potential issues in development of Sections 4.6 - 4.9 of the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4.6, 4.7, 4.8, and 4.9. |
| ALT_4      | The route should be kept simple and should be built along the Parks Highway.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change               |
| ALT_5      | The larger capacity Alaska Liquefied Natural Gas Project, with a design that utilizes the historically preferred alternative route from Livengood south along the Trans Alaska Pipeline System utility corridor to Valdez (Valdez AKLNG Alternative) is the most reasonable alternative that remedies the proposed Project's defects. The Valdez AKLNG Alternative maximizes project benefits and minimizes environmental impacts by: 1) utilizing existing utility corridors and avoiding environmentally sensitive areas; 2) providing volumes of gas that satisfy future demand in the Fairbanks area, which will improve Fairbanks air quality and promote economic growth in Interior Alaska; 3) providing access to gas for Richardson Highway communities that otherwise have no access to natural gas; and 4) transporting higher volumes of gas with only marginally greater capital costs and comparable, if not less, environmental impacts. | USACE appreciates the suggestion for an alternative that would follow existing utility corridors and terminate in Valdez. As described in Section 2.6, in compliance with CEQ guidance, alternatives were "rigorously explored and objectively evaluated" using the criteria shown in Table 2.6-1, which also includes a brief description of the rationale for eliminating alternatives. As different from the AKLNG Project, the proposed ASAP Project does not include export of natural gas and therefore, termination of the pipeline in Valdez is not necessary and would extend the pipeline length unnecessarily. The Richardson Highway alternative would lengthen the pipeline to a total of 845 miles. This route variation was previously eliminated from detailed evaluation in the 2012 Final EIS and based on screening analysis, does not appear to include features that would result in less environmental impacts when compared to the Parks Highway Route. | No change               |
| ALT_6      | The Toolik Field Station's experiments as a whole should be taken into account when routing the pipeline. Consider routing around the area to the maximum extent possible to avoid disruption of the ongoing experiments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | According to the Project proponent, the gravel mining activity for the ASAP Project will be confined to the footprint submitted with the 404 Permit Application (provided as an appendix to the Final SEIS). Granular material mining activities at ASAP MS 10-C will be confined to the footprint proposed, which extends due east from the existing pit. The material sites referenced in the comment as Dalton Highway MP 277 and MP 287 are not part of the ASAP Project footprint. Research access through ASAP MS 10-C will not be blocked, but third party personnel wishing access through the site will have to comply with Project safety policies and procedures and will also be required to complete Project safety training.                                                                                                                                                                                                                                     | No change               |
| ALT_7      | Comments in support of Alternative 2. Alternative 1 would bisect numerous drainages outside of Denali National Park and it would require significant new access routes. Alternative 2 utilizes more of the existing George Parks Highway corridor and would provide the opportunity for the construction of a bike path along the highway corridor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change               |
| ALT_8      | The Corps should consider an alternative that includes building a new Dock Head 4 at the seaward end of West Dock. This variation would minimize dredging and disposal of dredged material. This is a reasonable and practicable alternative that is being considered by the Alaska LNG Project and the Federal Energy Regulatory Commission (FERC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Since publication of the Draft SEIS in June 2017, additional information regarding the potential use of Dock Head 4 has been provided by the Project proponent. The rationale for screening out Dock Head 4 as a reasonable and practicable alternative is described in detail in Section 2.6 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No change               |
| ALT_9      | Locating a man camp at MP 640.9 or at any of the access points north of Trapper Creek is problematic. Worker housing at this location would significantly compound access problems to private land in the area. It would be more practicable to house the workers at Trapper Creek or the "Y" intersection of the Parks Highway and the Talkeetna Spur Road because workers will need to be bussed to their work sites anyway.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | There is no camp located at ASAP MP 640.9. The Swan Lake Camp and Pipe Storage Yard are located at approximately ASAP MP 645, and are situated in and adjacent to an old material site. Workers will be bussed to the camp locations; personally owned vehicles will not be allowed at the ASAP Construction Camps. Camp locations are selected to minimize worker travel time from camp to work location, and are generally in the middle of the areas the camps are intended to serve.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change               |
| CUL_1      | The direct impact area and indirect impact areas identified in the following statement are not equivalent to the direct and indirect APE as proposed in the draft PA circulated in 2016, "The direct impact area consists of...The indirect impact area is the 1-mile...These analysis areas are based on those currently proposed in the PA to address the Area of Potential Effect."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The statement, "these analysis areas are based on those currently proposed in the PA to address the Area of Potential Effect" has been removed from the text.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3.15.1;<br>4.19.2       |
| CUL_10     | NRHP eligibility status is important for Section 106, but lack of status does not preclude analysis of impacts for the purposes of an EIS. The wording of this paragraph beginning with "AGDC is working to provide recommendations of eligibility..." indicates a commitment on the Alaska Gasline Development Corporation's (AGDC) part to complete National Register of Historic Places (NRHP) evaluations prior to SEIS finalization. AGDC would prefer that this be worded more generically to indicate the percentage of sites that are unevaluated for the NRHP, and why that matters or is considered incomplete information, and reference to the Programmatic Agreement outlining a process for addressing any remaining eligibility questions.                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to indicate that a Programmatic Agreement is being developed by the 106 Work Group to address known eligible site mitigation and identify steps to be taken for the future evaluation and treatment of unknown and/or known, unevaluated sites.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4.19.1.1                |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Final Response                                                                                                                                                                                                                                                                                                                                                                | Section #s of Change |
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| CUL_11     | The Alaska Gasline Development Corporation (AGDC) would prefer that the section beginning with "Lastly, AGDC has not yet fully identified..." be more generic to indicate that this incomplete information is addressed more thoroughly and specifically in the Section 106 process. Recommend rewording to something like... "As part of the Section 106 consultation process, AGDC is working to determine which cultural resources will be avoided and incorporate this information into the PA. The PA will also delineate processes for the minimization and mitigation of adverse effects. Because development of the PA is in progress and these processes are not yet fully identified, the magnitude of impacts to cultural resources in this analysis is likely higher than the actual magnitude of effects will be once avoidance, minimization and mitigation has been finalized in the PA." | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                   | 4.19.1               |
| CUL_12     | The areas of analysis do not directly correlate with the APEs proposed in the PA circulated in 2016--the PA included 4 APEs including an indirect more narrowly defined than the indirect proposed here, and a visual ape that better correlates with the indirect impact area proposed here. To eliminate confusion, and because the APEs proposed in the PA may change as a result of consultation, we recommend striking this sentence. Modify "These analysis areas are based on the APEs..."                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                   | 4.19.2               |
| CUL_13     | This is confusing "Paleontological- fossilized cultural resources..." Paleontological resources are typically considered natural resources, not cultural resources. Cultural resources analysis discussions are generally separate from paleontological discussions. Cultural resources that may be fossilized generally fall within the archaeological site type discussed in 1. Paleontological resources identified in AHRS are more appropriately addressed in a separate, paleontological section of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                      | The paleontology discussion is included in the cultural resource section because fossils are included as prehistoric resources in the Alaska Historic Preservation Act and are documented in the AHRS. The referenced text has been revised to "Paleontological -fossilized environmental resources..."                                                                       | No change            |
| CUL_14     | In the section beginning with "Types of mitigation strategies that AGDC..." substitute "would" for will for each of the 5 strategies that say "the PA will..." The Alaska Gasline Development Corporation (AGDC) does not have control over the Programmatic Agreement (PA) process and consultation has not yet occurred to determine if AGDC's proposed strategies are acceptable. Use of "will" indicates a commitment to these strategies, commitment should be made when consulting parties are in agreement on acceptable mitigation.                                                                                                                                                                                                                                                                                                                                                              | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                   | 4.19.3               |
| CUL_15     | This statement needs to be modified "Public involvement (as well as tribal consultation) would help to lessen..." This sentence and the remainder of this paragraph suggest avoidance/minimization strategy. While a good idea to discuss this in consultation, it is not appropriate to include here, as no other discussions of site types and impacts include a suggestion for avoidance, minimization or mitigation strategies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                   | 4.19.4.1.1.2         |
| CUL_16     | The Nuiqsut Cultural Landscape has not been evaluated and is not documented in AHRS-- it is unclear why it is included in Table 4.19-3, given that it has not been evaluated for the NRHP. Recommend consider inclusion of all unevaluated resources within the direct APE in this table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | The USACE appreciates the comment. The SEIS has been revised to include a site-by-site analysis for those known, unevaluated sites, including Nuiqsut, for disclosure of site characterization and potential impact for NEPA public disclosure.                                                                                                                               | Table 4.19-3         |
| CUL_17     | Has the U.S. Army Corps of Engineers (USACE) submitted to the State Historical Preservation Office (SHPO) the National Register of Historic Places (NRHP) evaluations that the Alaska Gasline Development Corporation completed in May for the 25 sites, and have these evaluations received concurrence (or requests for additional information yet)? If not, then they should be included in 'no determination' counts in total counts and in Table 4.19-3. It is very possible that the U.S. Department of Energy (DOE) will in fact receive concurrence, but these should be considered similar to DOE-P-S sites for now if no consultation between USACE and SHPO on the report has actually occurred.                                                                                                                                                                                              | USACE submitted a concurrence request to SHPO for the referenced 25 sites on June 5, 2017. The SHPO provided concurrence with the DOE's on June 28, 2017.                                                                                                                                                                                                                     | No change            |
| CUL_18     | This phrase should be modified "at this time, AGDC has not yet committed..." Recommend striking this phrase and modifying so sentence reads "These mitigations are based on the mitigation strategies that AGDC has proposed for the Project (see Section 4.19.3); specific site mitigation measures will be finalized in the PA".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                   | 4.19.4.3.1.1         |
| CUL_19     | The second paragraph of Section 5.5.2.5 of the Cultural Resources Management Plan is acceptable at this time but will need to be updated when the Areas of Potential Effect (APEs) have been well defined.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Comment acknowledged. The CRMP is currently under development and review by the 106 work group. This revision to the CRMP has been shared with the Project Proponent.                                                                                                                                                                                                         | Appendix K           |
| CUL_2      | The draft Cultural Resources Management Plan should have been circulated to consulting parties for review prior to dissemination to the public as part of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Comment acknowledged. The CRMP is currently under development and review by the 106 work group.                                                                                                                                                                                                                                                                               | No change            |
| CUL_20     | Please define the categorizations of impact for the site-by-site analysis. It is unclear what constitutes major, moderate, minor and negligible impact in the site-by-site analysis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Definitions have been added for categorization of site-by-site impact rankings of major, moderate, minor, and negligible.                                                                                                                                                                                                                                                     | 4.19.2.1             |
| CUL_21     | Paleontological resources are not cultural resources and are therefore not eligible for the National Register of Historic Places (NRHP). Recommend removal of paleontological resources from the cultural resources chapter or otherwise separating the discussions of the two different types of resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | The paleontology discussion is included in the cultural resource section because fossils are included as prehistoric resources in the Alaska Historic Preservation Act and are documented in the AHRS.                                                                                                                                                                        | No change            |
| CUL_22     | We recommend striking sentences that say "AGDC is conducting analysis of the remaining # sites..." Instead include site by site impact analysis of both eligible and unevaluated sites (to incorporate potentially eligible sites that are part of those remaining few unevaluated sites).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Thank you for your comment. The SEIS has been revised to include a site-by-site analysis for those known, unevaluated sites for disclosure of site characterization and potential impact for NEPA public disclosure. In lieu of a completed survey of the sites and subsequent DOE's, the SEIS discloses the type of project and provides an indication of potential impacts. | 4.19.4.3.1.1         |
| CUL_23     | This discussion seems orphaned "For example, scoping comments..." Is this related to the place names sentence on page 4-503?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Yes, this is a formatting issue and relates to the place name paragraph. It provides additional information regarding input from local tribes during scoping related to place names. The formatting has been fixed.                                                                                                                                                           | 4.19.4.3.4           |
| CUL_24     | We recommend rewording "A site revisit to confirm..." to "confirmation and documentation of the site's loss of integrity could help address the effects of the Project thereby reducing the overall effect to negligible."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                   | 4.19.4.3.4.1         |
| CUL_25     | We recommend deleting "Public involvement to identify an appropriate re-location..." The Alaska Gasline Development Corporation did not propose this mitigation and it does not affect reduction of effect from major to minor. Would be more appropriate to bring up in Programmatic Agreement consultation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text will be revised to include the recommendations described in the comment.                                                                                                                                                                                    | 4.19.4.3.4.1         |
| CUL_26     | Additional discussion is needed here beginning with "The proximity of long-term operational..." regarding Montana and Fish creek area ancestral villages. The Alaska Gasline Development Corporation rerouted the mainline to avoid the Montana Creek area for which concern was expressed during consultation, not just to avoid native allotments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment. The following text has been added, "and in response to consultation concerns regarding cultural resources."                                                                       | 4.19.4.3.4.2.1       |
| CUL_27     | CMTs should be discussed and defined where they are first mentioned in the document. OHA's policy regarding the documentation and eligibility of CMTs should be discussed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment. Additional text has been included to describe the OHA policy regarding CMTs.                                                                                                      | 4.19.2.1             |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Section #s of Change                           |
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| CUL_28     | In the fourth paragraph of Section 5.5.2.6 of the Cultural Resources Management Plan, if the Dalton Highway is still considered Treated as Eligible at the time of ASAP construction this will need a more in-depth explanation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Comment acknowledged. The CRMP is currently under development and review by the 106 work group. Additional explanation regarding the NRHP status of the Dalton Highway and the Historic Roads PA has been requested from the Project Proponent.                                                                                                                                                                                                                                           | Appendix K                                     |
| CUL_29     | In Table 4.19-13, the characterization of both Construction and Operation Impact Rating combined is inconsistent with other Impact Rating tables and is not valid since the disrupted footprint of the project is impacted during construction. Operations and maintenance will be conducted in areas of any previous impact and there would not represent an additional impact to Cultural Resources. The section narrative should be revised accordingly.                                                                                                                                                                                                                                                                                                                                                 | Construction and Operation effects has been added into the Table 4.19-13 and text has been revised throughout.                                                                                                                                                                                                                                                                                                                                                                            | 4.19                                           |
| CUL_3      | Better descriptions of the Alaska Heritage Resource Survey (AHRs) (the state's inventory of cultural resources), Revised Statute 2477s and the Traditional Land Use Inventory (TLUI) are needed, including what they are and their limitations -- currently the emphasis seems to be on the Nuiqsut cultural landscape and place names, because so much space is dedicated to describing what these resources are.                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Additional text has been added to better describe the concerns included in the comment. Additionally, text has been added to describe the limitations for related text in Section 4.19.1.1, <i>Incomplete or Unavailable Information</i> .                                                                                                                                       | 3.15.1 and 4.19.1.1                            |
| CUL_30     | In site-by-site discussions, specific interpretive elements are proposed as mitigation for sites eligible under Criteria A. Recommend general interpretive elements be proposed in the SEIS rather than specific (e.g. artifact display in museum or interpretive signage) to better reflect that specific mitigation will be developed in consultation during PA development.                                                                                                                                                                                                                                                                                                                                                                                                                              | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Mitigation has been updated throughout the chapter based on the January 19, 2018 Draft CRMP                                                                                                                                                                                                                                                                                      | 4.19.4.3.1.1 and 4.19.4.3.4.1                  |
| CUL_31     | Section 3.15.1 states, "NEPA's regulations do not provide a general age rule for scientific, cultural, or historical resources." The meaning of this statement is unclear. Is it referring to the National Historic Preservation Act (NHPA), Section 106, definition of historic properties as being 50+ years old? BLM recommends that the Final SEIS provide further clarification. Also in this section, the 36 CFR 800.16(l) definition of historic properties should include the entirety of the definition paragraph, as it pertains to places of traditional religious or cultural significance. Additionally on page 3-411, Table 3.15-1 includes the column heading "Finds," which has negative connotations. We suggest it be changed to "Material Culture."                                      | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Additional text has been added to better describe the concerns included in the comment.                                                                                                                                                                                                                                                                                          | 3.15.1, 3.15.5.1.1, 3.15.5.2.1, and 3.15.5.3.1 |
| CUL_32     | Section 3.15.5.2.1 is lacking necessary references related to the archaeological and ethnographic literature available for Interior Alaska. This section also does not adequately capture known information about the affected environment for this region. BLM recommends revising to include settlement and subsistence patterns, demographics, social organization, material culture, etc. The time period divisions used in this section are not commonly used in the regional literature for Interior Alaska. BLM suggests revisiting the appropriate literature and defining this chronology with more commonly used terms, as can be found in work by Goebel, Potter, Yesner, Bigelow, Wygal, and others. Additionally, Table 3.15-8 follows this text, but does not match up with the text.         | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No change                                      |
| CUL_33     | BLM recommends revising Section 4.19 for clarity and brevity. There is a lot of repetition, particularly when discussing the tables. The discussion of project impacts to cultural resources is now fairly thorough, but the lengthy text and often-reiterated information makes it somewhat difficult to grasp the salient points: what are the impacts to known cultural resources by alternative, and what is the potential for impacting undocumented cultural resources. Table 4-19-13 probably contains the most succinct information out of the entire section, and BLM recommends striving for this degree of clarity in the narrative text. Use of appendices for the lengthier tables and descriptive text would help streamline the section.                                                     | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. This comment is acknowledged.                                                                                                                                                                                                                                                                                                                                                    | No change                                      |
| CUL_34     | In Section 4.19.1, BLM recommends including an appendix that outlines the progress and consultation meetings that have occurred for the development of the programmatic agreement (PA). It is unclear how many meetings have occurred and at what development stage the PA is in.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates the comment. Development of the PA and the consultation process have been summarized in Section 1.9, Tribal Government-to-Government Consultation and Coordination.                                                                                                                                                                                                                                                                                                     | 1.9                                            |
| CUL_35     | In Section 4.19.2.1, regarding the discussion on site types, it is not clear what the purpose is of creating the 11 site types. These arbitrary categories will ultimately not help with management decisions, and these site types have no bearing on a Determination of Eligibility (DOE), which is the primary focus for Section 106. BLM recommends changing this to a table format and including information that would be relevant to management decisions (project impacts to each site type; how the PA potentially intends to avoid, minimize, or mitigate each site type; etc.)                                                                                                                                                                                                                   | EPA and DNR/OHA requested the EIS analysis summarize the types of cultural resources identified. BLM also requests this section include Project impacts by site type; however, it would not be appropriate to introduce Project impacts to each site type in this Methods Section 4.19.2.1. Section 4.19.7 already includes a summary of Project impacts to each site type. Potential mitigation measures are included for each site-by-site analysis under each Project segment section. | No change                                      |
| CUL_36     | In Section 4.19.3, for the numbered mitigation strategies and in the interest of brevity, there is no need to continually reference the PA. It was referenced in the heading paragraph, and it is clear to the reader that the specific strategies will be discussed in the PA. The BLM recommends revising this section to improve readability.                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Redundant text has been removed where applicable to better describe the concerns included in the comment.                                                                                                                                                                                                                                                                        | 4.19.3                                         |
| CUL_37     | Section 4.19.4.3.1 states, "Included within the 401 cultural resource sites is the Gallagher Flint Station National Historic Landmark, which would require special consideration from the National Park Service and consultation to assess and mitigate effects." BLM recommends adding a citation to Section 110(f) of the NHPA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Additional text has been added to better describe the concerns included in the comment.                                                                                                                                                                                                                                                                                          | 4.19.4.3.1                                     |
| CUL_38     | In Section 4.19.4.3.1, BLM again notes the decision to divide the sites into the selected categories. The same Section 106 processes must be followed, regardless if a site is an "isolate," a "linear transportation feature," or a "cultural modified tree." Additionally, the category of "archaeological" is confusing; does this mean Alaska Heritage Resources Survey (AHRs)-listed sites? Prehistoric sites? Sites without any information? Subsurface sites? The category of historic artifact/activity areas is also confusing. We recommend that the categorization process also include prehistoric activity areas and not limit this to historic sites only. The BLM also recommends the Final SEIS address direct effects in a reorganized fashion consistent with a revised Section 4.19.2.1. | EPA and DNR/OHA requested the EIS analysis summarize the types of cultural resources identified for NEPA purposes. We acknowledge the comment stating that the same Section 106 processes must be followed regardless of site type. These sites types were included for NEPA purposes based on other agency requests.                                                                                                                                                                     | No change                                      |
| CUL_39     | On page 4-484, the discussion on place names is confusing and out of place. BLM suggests including detailed place name information as either an appendix or shorten the in-text information to be more succinct.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. This section summarizes the numbers of AHRs sites, TLUI sites, RS 2477 trails, and place names that could be potentially impacted by the Project. The nine lines of text related to place names seem to be an appropriate level of detail for this resource.                                                                                                                     | No change                                      |
| CUL_4      | The Programmatic Agreement (PA) will outline the processes for resolution of all adverse effects, both those already determined and those that may not yet be determined. Modify this phrase "...process for mitigating potential adverse effects..." Also, the PA will outline the processes for remaining identification efforts (not just those due to potential project design changes). Modify "The PA will outline..." The PA will include more than just mitigation. The PA will include measures to avoid, minimize and mitigate adverse effects to NRHP-eligible sites. Modify "The PA will include mitigation measures..."                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                                                                                                                               | 4.19.1                                         |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                             | Section #s of Change |
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| CUL_40     | The goal of an SEIS is to be succinct, but detailed enough that the public and land managers can make informed decisions about the proposed project. In Section 4.19.4.3.1.1, the ten pages of detailed narrative about eligibility criteria and potential mitigation strategies may be better presented as an appendix with a shorter in-text summary and table/matrix that displays the pertinent information.                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. This comment is acknowledged.                                                                                                                                                                                                                                                                                                     | No change            |
| CUL_41     | Section 4.19.4.3.1.2.6 states, "Given their singular nature, the magnitude of effects to isolates would be lower than that to larger archaeological or historic activity area cultural resources." This would be true if these sites were truly isolates. Many sites are reported to the AHRs based on only one flake or tool, without further delineation of the site boundaries. BLM recommends revising this statement to account for the possibility that an "isolate" site could be large and extensive if and when further survey research is conducted there.                                      | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                                                                                | 4.19.4.3.1.2.6       |
| CUL_42     | Regarding Section 4.19.4.3.1.2.10, Section 106 and DOE/National Register of Historic Places status only applies to "historic properties," not paleontological resources. It may be worth addressing paleontological sites in a separate section and referencing the Paleontological Resources Protection Act. Additionally, Chapter 3 had a separate section for paleontological resources; this should be echoed in the Chapter 4 Environmental Consequences discussion.                                                                                                                                 | The paleontology discussion is included in the cultural resource section because fossils are included as prehistoric resources in the Alaska Historic Preservation Act and are documented in the AHRs. For consistency, discussions of paleontological resources have been consolidated to the Soils and Geology sections of both Chapter 3 and 4.                                                                                         | No change            |
| CUL_43     | The term "Glitter Gulch" is a colloquial term for the Denali Village area. BLM recommends changing this term to its official place name throughout the document to prevent confusion or misinformation                                                                                                                                                                                                                                                                                                                                                                                                    | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text will be revised to include the recommendations described in the comment. This change has also been incorporated throughout the SEIS where the term "glitter gulch" has been used.                                                                                                                                        | 4.19.4.3.3           |
| CUL_44     | Table 4.19-12 includes a column labeled, "Delineated and Location Exact?" While this category would be important for the PA, it is unnecessary to include for a SEIS. BLM recommends removing this column. Also within this table is the column labeled "Site Within Project Component?" The meaning of this heading is not clear. Does it stand for direct or indirect or both? BLM recommends that the Final SEIS include further clarification.                                                                                                                                                        | This column intends to assist the reader to differentiate levels of impact (e.g., location is known to the extent that the site is reliably located outside or inside Project disturbance footprint). Revised "Site Within Project Component" heading to "Site Within Footprint of Project Component."                                                                                                                                     | Table 4.19-12        |
| CUL_45     | In Chapter 5, the Persons Consulted list appears incomplete. For the Section 106 portion alone, the U.S. Army Corps of Engineers (USACE) should, at a minimum, consult with the Alaska State Historic Preservation Office, all landholders, land-managing agencies, tribes, and Native corporations associated with the areas the proposed project would cross.                                                                                                                                                                                                                                           | As required under NEPA, Section 1.9 provides a description of agencies participating/consulted in the SEIS process, while Section 1.10 provides information on tribal government-to-government consultation through the SEIS process. Chapter 5 is intended to provide a List of Preparers and contributing authors who were consulted during the SEIS process.                                                                            | No change            |
| CUL_46     | In Appendix C, the ASAP SEIS Public Scoping Report, it appears that the only scoping that was held was public scoping. Under Section 106, it is mandated that government-to-government consultation takes place for interested federally-recognized tribes (36 CFR 800.2(2)(iii)(C)). The BLM recommends that the Final SEIS include a detailed summary of all government-to-government consultation efforts, including initiation letters and dates of meetings and other relevant information.                                                                                                          | Section 1.10 of the SEIS describes the requirement to consult with Native American Tribal Governments (EO 13175) and explains that USACE invited 22 potentially affected, federal recognized tribes to consult on the SEIS. Specific government-to-government outreach has been and will continue to be conducted throughout the SEIS process.                                                                                             | No change            |
| CUL_47     | In Table 1.10-1, BLM recommends adding for U.S. Department of the Interior agencies (i.e. BLM, U.S. Fish and Wildlife Service (USFWS), and National Park Service): "The Paleontological Resources Protection Act: Public Law 111-11, Title VI, Subtitle D; 16 U.S.C. §§ 470aaa - 470aaa-11."                                                                                                                                                                                                                                                                                                              | The USACE appreciates and agrees with the recommendation. The BLM's suggested revision has been included in Table 1.10-1.                                                                                                                                                                                                                                                                                                                  | No change            |
| CUL_48     | Include the source of information for the first paragraph of Section 5.8 in the Cultural Resources Management Plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Comment acknowledged. The CRMP is currently under development and review by the 106 work group. This revision to the CRMP has been shared with the Project Proponent.                                                                                                                                                                                                                                                                      | Appendix K           |
| CUL_49     | In Section 4.19.1, the Native Village of Minto is omitted from the list of "Indian Tribes that have chosen to participate in consultation..." but is included on a list for "tribes and corporations that responded with expressed interest in 106" from a "Summary of Tribal Consultation Outreach" submitted to the BLM in February 2017. BLM recommends confirming which list is correct. The Final SEIS should also note that Ahna Inc., Arctic Slope Regional Corporation, and Cook Inlet Region, Inc. are Alaska Native Claims Settlement Act regional Native corporations and not "Indian Tribes." | Native Village of Minto has expressed interest in the 106 process but has not chosen to participate in consultation, to present date. The Corps provides Project updates and meeting invites, etc. The Corps feels that the information as summarized accurately depicts information and consultation preferences received from communications with the Native Village of Minto. Language has been added referring to Native corporations. | 4.19.1               |
| CUL_5      | There has been no determination as to whether archaeological monitoring during construction is an appropriate impact minimization strategy. While it may be employed, it is premature to list it as something for which the PA will outline a process. Recommend striking this part of the phrase "...the processes for archaeological and/or tribal monitoring during construction..." and leaving only "potential discovery of previously unidentified cultural resources..."                                                                                                                           | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                                                                                | 4.19.1               |
| CUL_50     | For Section 4.19.2.1, paleontological resources are distinct from "cultural resources" and are referred to as their own resource type. BLM suggests the Final SEIS include the language, "fossilized environmental resources that can yield..." P.L. 111-011 defines the term as, "The term 'paleontological resource' means any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth."                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text will be revised to include the recommendations described in the comment.                                                                                                                                                                                                                                                 | 4.19.2.1             |
| CUL_51     | We recommend putting in a placeholder explaining that failure to execute the Programmatic Agreement (PA) would likely delay the Final SEIS, as the PA execution should slightly precede or be concurrent with the Final SEIS (so that it is complete before the Record of Decision is signed). At a minimum, the timeline of PA execution as it relates to meeting the Section 106 requirements should be made explicit within this section.                                                                                                                                                              | The PA will be executed before the Record of Decision is signed.                                                                                                                                                                                                                                                                                                                                                                           | No change            |
| CUL_52     | Emphasis should be placed on the fact that this analysis is based on what is currently known. There are still more things to work through that may alter the analysis.                                                                                                                                                                                                                                                                                                                                                                                                                                    | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. This topic is addressed in Section 4.19.1.1, Incomplete or Unavailable Information.                                                                                                                                                                                                                                               | No change            |
| CUL_53     | In Section 4.19.1, is there new survey data? New Determinations of Eligibility (DOEs)? This is unclear.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. This topic, including discussion of previous surveys and DOE status, is addressed in Section 4.19.1.1, Incomplete or Unavailable Information.                                                                                                                                                                                     | No change            |
| CUL_54     | The last sentence of 4.19.1 is confusing. Will the PA identify steps to address consideration of or consultation on? What about known and evaluated sites? What about those in the direct APE? What is the intent?                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. This sentence is referring to the magnitude of effects and not the entire PA process. Refer to beginning of Section 4.19.1 for overview of PA process. Specific details regarding PA process and OHA's involvement should be raised during the PA meetings.                                                                       | No change            |
| CUL_55     | Text should be added to "AGDC is working on providing recommendations of eligibility for 62 of 202 identified cultural resources in the direct impact area that prior to ASAP were unevaluated." Add "...that prior to ASAP project planning efforts were unevaluated."                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                                                                                | 4.19.1.1             |
| CUL_56     | Update the Cultural Resources Management Plan to be consistent with the bullet points in 4.19.2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The CRMP and Section 106 process are not required to directly align with the impact areas identified in NEPA. Consultation during the PA and development of the CRMP has and will likely result in further refinements to the APEs.                                                                                               | No change            |
| CUL_57     | Further explanation is needed in Section 4.19.2 where it states "...loss of cultural identity with a resource."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                                                                                | 4.19.2               |
| CUL_58     | In Section 4.19.2.1, we recommend emphasizing how the project will avoid sites by addressing it singularly, then move on to minimize and mitigate.                                                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Avoidance of cultural resources and other minimization and mitigation measures are addressed in Section 4.19.3.                                                                                                                                                                                                                   | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Section #s of Change |
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| CUL_59     | In the Cultural Resources Management Plan, it is unclear why the word 'consultation' is used here: "This Plan provided an overview of cultural resource identification, consultation, and ..."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the comment. Part of the intent of the CRMP is to provide an overview of all cultural resources work conducted, including consultation efforts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| CUL_6      | Consultation with the State Historical Preservation Office needs to be worked into the first paragraph of Section 5.5.2.1 of the Cultural Resources Management Plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The CRMP is currently under development and review by the 106 work group. AGDC has updated the CRMP has been updated to reflect recent consultation comments and concerns (including those of the SHPO) and to layout the mitigation elements that all consulting parties (again, including the SHPO) are agreeing to as part of the PA process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change            |
| CUL_60     | In the Cultural Resources Management Plan, it's unusual to have the exact same number of direct and indirect Ares of Potential Effect (APEs). Is 202 correct for both counts?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Comment acknowledged. During Section 106 consultation meetings in September, it was decided that the CRMP would be the vehicle for all the information that would normally be included in an HPTP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change            |
| CUL_61     | In the Cultural Resources Management Plan, the definition for "undertaking" in the Section 106 regulations should be 36 CFR 800.16(y). Unsure where the 36 CFR 500.16(y) reference is coming from.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the comment. This has been corrected in the CRMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Appendix K           |
| CUL_62     | Update the second paragraph of Section 5.3.1 of the Cultural Resources Management Plan. Was the report that was expected to be complete on May 10, 2017 completed?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes, this language was included because the CRMP included in the Draft SEIS was prepared prior to May 10, 2017. The CRMP has been updated to reflect the current status of DOE's for the AHRs sites in the APEs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Appendix K           |
| CUL_63     | In Section 5.5.1 of the Cultural Resources Management Plan (CRMP), the State Historical Preservation Office would prefer to have the Historic Properties Treatment Plan as part of the CRMP and not as part of the Programmatic Agreement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Comment acknowledged. During Section 106 consultation meetings in September, it was decided that the CRMP would be the vehicle for all the information that would normally be included in an HPTP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Appendix K           |
| CUL_64     | In Section 5.5.1.1 of the Cultural Resources Management Plan, how much has been re-routed to accommodate un-evaluated sites? Rerouting the pipeline before Determinations of Eligibility (DOE) have been done on the cultural sites discovered can be both costly (compared to mitigating effects on the resource), and unnecessary, as the DOE may find that the cultural resource may not be eligible for the National Register and thus not an impediment to going forward with the project. After the DOE's have been made on the sites the ones not eligible can be ignored, and the sites eligible can have mitigation spelled out in an MOA and the project moves forward without needing any re-routing. Whether the site(s) are determined to be eligible or not, rerouting the pipeline before the DOE's were done could potentially cost substantially more versus just following the Section 106 process evaluation process to completion. | The USACE appreciates the comment. The alignment routing has been developed to accommodate a number of resource and engineering concerns, however it is difficult to say how many small shifts (if any) occurred due solely to the presence of cultural resources. In the case of Montana Creek, the alignment was rerouted to help address concerns expressed by the Knik Tribe over the alignment's proximity to cultural resources, not to avoid having to evaluate the eligibility of resources or to follow the 106 process to completion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change            |
| CUL_65     | In Section 5.5.1.1 of the Cultural Resources Management Plan, we recommend modifying "Specifically, these measures may include..." to using "conditions/parameters" instead of measures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The USACE appreciates the suggested change. The CRMP has been updated and the term measures has been replaced with "uses of conditions and parameters".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Appendix K           |
| CUL_66     | In Section 5.5.2.1 of the Cultural Resources Management Plan, we recommend modifying "...avoided by ground disturbing activities can be mitigated through the recovery of a site's data..." to replace recovery with excavation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The USACE appreciates the suggested change accepted and the CRMP has been updated to reflect the suggestion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Appendix K           |
| CUL_67     | In Section 5.5.2.1 of the Cultural Resources Management Plan, we recommend modifying "...Determining how much of a site must be excavated to constitute data recovery..." by using "...constitute sufficient data recovery..."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The USACE appreciates the suggested change and the CRMP has been updated to reflect the suggestion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Appendix K           |
| CUL_7      | Additional information regarding consultation methods, including who has been invited and how, should be included or referenced in this discussion. Modify "The Section 106 process, which is ongoing and being conducted...and AGDC."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Additional information has been added regarding invited participants.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.19.1               |
| CUL_8      | The concept of a visual APE has not been discussed previously in the SEIS chapters. The PA will outline consultation processes regarding the discovery and NRHP evaluation of new cultural resources within the entire APE. Modify "The PA will identify steps to address consultation...."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to include the recommendations described in the comment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.19.1               |
| CUL_9      | This sentence is not appropriate in the Cultural Resources Management Plan: "AGDC recommends the USACE and consulting parties take a closer look at the definitions of these APE's to confirm that they adequately capture cultural resources that may be affected by the Project."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Comment acknowledged. AGDC has revised the CRMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Appendix K           |
| ECO_1      | The Project's economic benefits to urban versus rural communities will not be fair. How will the Project benefit bush communities?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The USACE appreciates the comment. AGDC is mandated by State law to investigate opportunities to provide reasonably priced natural gas to in-state communities. AGDC is working with utilities, municipal governments, local communities and others to evaluate how to provide reasonably priced natural gas to local users. Bush communities may not be able to directly access natural gas from the pipeline, but should indirectly benefit from the Project-generated revenue deposited into the State's general fund. The Alaska Legislature will determine how revenues are appropriated and AGDC can make no commitment related to funding of the Power Cost Equalization Program. The Alaska Energy Authority (AEA) was tasked in 2014 by the 28th Alaska Legislature under Senate Bill 138 to provide recommendations to improve the affordability of energy in areas of the state that are not expected to have access to a North Slope natural gas pipeline. The Alaska Affordable Energy Strategy (AkAES) was the result of this effort and information from AEA can be accessed at: <a href="http://www.akenergyauthority.org/Policy-Planning/AlaskaAffordableEnergyStrategy">http://www.akenergyauthority.org/Policy-Planning/AlaskaAffordableEnergyStrategy</a> .                                                                                                                                                                                                          | No change            |
| ECO_10     | The Project will lower the cost of natural gas throughout the state of Alaska. This affordable resource will be a long-term source of energy for residents of Interior Alaska and at other locations along the corridor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change            |
| ECO_11     | The Alaska Gasline Development Corporation will not hold true to their promises because Alyeska did not hold their promises that they would provide long-term jobs to village residents.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The AGDC Board of Directors is comprised of Alaskans appointed by the Governor. The Board has made a point to emphasize that the Project should use Alaskan contractors, businesses and workers. AGDC cannot comment on the previous experience described in the comment, but Alaska's Gas Pipeline Development Corporation is serving the citizens of the State of Alaska and there is a strong commitment within the organization to support local Alaskan businesses and to facilitate the participation of local residents in the Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No change            |
| ECO_12     | Questions regarding funding and if the State of Alaska has funded the Project this year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The AGDC capital funds balance totaled approximately \$128 million for the fiscal year ending June 30, 2016. The Project did not receive additional Legislative capital funding fiscal year 2017 or 2018. Additional financial information can be found in the AGDC 2016 Annual Report : <a href="https://agdc.us/wp-content/uploads/2016/08/AGDC_2016-Annual-Report_Final.pdf">https://agdc.us/wp-content/uploads/2016/08/AGDC_2016-Annual-Report_Final.pdf</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change            |
| ECO_13     | Questions regarding which companies are supporting/funding the Project. How much profit will remain in-State and how much will go to lower 48 corporations?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Currently, the ASAP Project only receives funding from the State of Alaska and is 100% owned by AGDC (an independent public corporation of the State of Alaska).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change            |
| ECO_14     | There would not be a positive return on investment for this Project. \$4.20 per million British thermal units (BTUs) is required to be profitable, but the current spot price is \$2.85.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | We believe your comment is targeted to the Alaska LNG Project, which is an LNG export Project that has included participation from North Slope Producers. North Slope Producers have not participated in developing the ASAP Project. The ASAP Project is being pursued at the direction of the Alaska Legislature. AGDC has a Board of Directors, appointed by the Governor, comprised of Alaskans that oversee the ASAP Project and ensure the mandates of the Legislature are being fulfilled. The ASAP Project has been referred to as "Plan B" because, from an economic perspective, the larger Alaska LNG Project would deliver gas at a lower cost per unit due to the higher throughput volume. The Alaska LNG Project is preferred by the State, but if it is unable to move forward, ASAP provides a viable method to commercialize North Slope natural gas through in-state delivery. The costs to existing natural gas users in the Fairbanks area would be less than the current LNG truck delivered price and would encourage additional distribution in the area. The costs to existing Southcentral users may be slightly higher than current costs, however, the ASAP pipeline will ensure the long-term reliability of supply that Cook Inlet natural gas cannot provide. Additionally, the ASAP Project is a mega-Project in size and will provide a significant boost to the State economy as a whole and many of the communities along the corridor in particular. | No change            |
| ECO_15     | The residents of Willow are a great resource to utilize for determining a pipeline alignment in the area. These resources should be utilized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section #s of Change |
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| ECO_16     | Alaska's natural gas is a stranded resource. A natural gas pipeline from the Arctic coast to tidewater could bring more than 240 tcf of natural gas (by mean estimates) to market.                                                                                                                                                                                                                                                                                                                                                                                                                                                | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_17     | A natural gas pipeline is vital to the state's economic future. Alaska Gasline Development Corporation's proposed pipeline projects have the potential to produce about 12,000 direct jobs during construction and approximately 1,000 full-time jobs during operation. And, by historical estimates, these projects could generate \$40 billion to \$80 billion over the life of the initial 34 trillion cubic feet (tcf) of gas. Recent estimates have pegged the state's revenue from a gas line at "billions of dollars," while previous studies point to the federal government receiving about \$50 billion in tax revenue. | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_18     | Alaska's gas has been stranded far too long. It's time we used it for the benefit of Alaska's people. The ASAP project brings hope to Alaska, and will provide affordable energy to lower heating costs, improve air quality, and provide a foundation for other business development within the state.                                                                                                                                                                                                                                                                                                                           | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_19     | The National Parks Conservation Association supports the use of cleaner natural gas wherever possible. A well-defined and funded plan that allows the park to use natural gas could change the cost-benefit evaluation of the route through the park.                                                                                                                                                                                                                                                                                                                                                                             | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_2      | How would the community of Manley Hot Springs benefit from the Project?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Project related revenue would be deposited into the State's general fund and the legislative appropriation process would determine how the funds are spent. Oil and gas revenue to the State has helped support statewide education funding, power cost equalization, construction and maintenance of rural roads and airstrips, management of fish and game, public health services.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_20     | The Denali Citizens Council find the ASAP and Alaska LNG processes needlessly duplicative and suggest that efficiencies can be obtained by further merging the projects. Running separate NEPA processes on these two projects expends valuable public funds at a time when financial realities make the smaller line barely viable. The state of Alaska has been reluctant to fund large projects, given budget shortfalls. A moratorium on planning, at least for ASAP, is advisable at this time.                                                                                                                              | The ASAP Project is in the final stages of the NEPA process. The Final ASAP NEPA document should provide a significant resource for other similar Projects such as the Alaska LNG Project, which is a much larger Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No change            |
| ECO_21     | The Denali Citizens Council is not convinced that ASAP will reduce the price of gas to any individual Alaskans, even in more populated areas, given the high cost of building the line and the availability of gas from other sources.                                                                                                                                                                                                                                                                                                                                                                                            | The ASAP Project is being pursued at the direction of the Alaska Legislature. AGDC has a Board of Directors, appointed by the Governor, comprised of Alaskans that oversee the ASAP Project to ensure the mandates of the Legislature are being fulfilled. The ASAP Project has been referred to as "Plan B" because, from an economic perspective, the larger Alaska LNG Project would deliver gas at a lower cost per unit due to the higher throughput volume. The Alaska LNG Project is preferred by the State, but if it is unable to move forward, ASAP provides a viable method to commercialize North Slope natural gas through in-state delivery. The costs to existing natural gas users in the Fairbanks area would be less than the current LNG truck delivered price and would encourage additional distribution in the area. The costs to existing Southcentral users may be slightly higher than current costs, however, the ASAP pipeline intends to ensure the long-term reliability of supply that Cook Inlet natural gas cannot provide. Additionally, the ASAP Project is a mega-Project in size and will provide a significant boost to the State economy as a whole and many of the communities along the corridor in particular.                                                                                                                                                      | No change            |
| ECO_22     | The cost estimated presented in the Draft SEIS associated with an aboveground should include an estimate for only elevating the first 62 miles of pipeline. The Alaska Gasline Development Corporation maintains the costs associated with an aboveground pipeline are more expensive than the belowground pipeline. Based on an average increased cost per mile (i.e., 81% divided by 733 miles = 0.111% per mile), elevating the pipeline on vertical support members (VSMs) for the first 62 miles will increase the project cost by 6.85 percent.                                                                             | Information on the potential costs associated with constructing Alternative 2 in aboveground pipeline mode through the approximate length of the Arctic Coastal Plain has been added to Section 2.6.3 of the SEIS. Based on information provided by AGDC, the proposed hybrid design to elevate the pipeline MP 0 – 168 presents additional geotechnical challenges. In the area between MP 62 (the edge of the Arctic Coastal Plain) and MP 168 (approximately the base on Atigun Pass), the subsurface conditions are less uniform (i.e., a mixture of silts, sands, gravels, cobbles, boulders, and rock) than the Arctic Coastal Plain. Installing VSMs in this area would require that multiple types of specialized equipment be on location depending on conditions encountered. Based on information provided by AGDC, the extra cost to consumers associated with a completely aboveground Project is estimated at a minimum of \$670,000,000 per year. A hybrid project in which approximately 634 miles is aboveground would be approximately 10 percent less [than the completely elevated pipeline]. Additional cost information provided by AGDC is confidential. As described in Section 2.6.3, a hybrid pipeline which includes elevating the pipeline from MP 0 -168 has been eliminated as a reasonable alternatives based on the screening criteria presented in Table 2.6-1 of the SEIS. | 2.4 and 2.6          |
| ECO_23     | The Fairbanks North Star Borough strongly supports the ASAP Project and its underlying purpose. The affordable natural gas the ASAP Project could provide the Fairbanks area is vital for the economic well-being of Interior Alaska.                                                                                                                                                                                                                                                                                                                                                                                             | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_24     | The section "Impacts on O&M Employment" understates the Project's impact on unemployment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Comment acknowledged. Adequate justification has not been provided to support the modification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change            |
| ECO_25     | The section "Impacts on O&M Housing" understates the Project's impact on housing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Comment acknowledged. Adequate justification has not been provided to support the modification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change            |
| ECO_26     | Sections regarding state and local property tax state that the Project will permit taxes to be applied to the Project, this may not be the case.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_27     | In Section 4.6, the SOA has selected land in the Ray River drainage for its alluvial rare-earth-element (REE) potential. The ASAP may cross this area, and alluvial materials may be extracted from material sites. The economic potential of this area's gravel should be determined, and if the ASAP uses these material sites, REE's should be recovered if economically feasible to do so and of financial benefit to the SOA.                                                                                                                                                                                                | AGDC would be required to apply to the DNR for material sales for any material sites on State land. During this permitting process, DNR would ask for a review by other State agencies, and if there are potential conflicts with valuable subsurface resources within any specific material site, then those conflicts will be resolved at that time. AGDC would rely on the expertise of DNR's Division of Geologic and Geophysical Surveys to determine if economically viable concentrations of REEs occur within those sites, and how best to address the situation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change            |
| ECO_28     | Under Alternative 1 for Operations, the Impact Rating for Population Trends and Projections and Housing Property Values being the same as Construction is not supported. Operations should clearly be less negative impact than Construction due to many orders of magnitude less activity. In addition, the characterization that impact to Infrastructure and Services from Operations is higher than Construction is not supported. Long-term operations with a workforce of approximately 240 represents negligible impact to Infrastructure and Services. Ratings should be revised accordingly in Table 4.18-23.            | A detailed analysis is provided in the text and tables referenced below, while the overall impact categories referenced in Table 4.18-23 provide a more generalized impact rating. Although the overall the impact to one resource may be greater during construction than during operations (i.e. population impacts would likely be slightly greater during construction), the four general impact criteria ratings (negligible, minor, moderate, major) may not reflect this level of detail. In many cases the magnitude and geographic extent of the impact could be greater during construction, but duration of the impact would offset part of this rating as it would be greater during operations and maintenance than construction. Detailed reasoning for the impact findings in terms of the impact criteria are described in Tables 4.18-6 and Table 4.18-15 for population, in Tables 4.18-9 and Table 4.18-16 for employment, and in Tables 4.18-13 and Table 4.18-21 for infrastructure and services.                                                                                                                                                                                                                                                                                                                                                                                       | No change            |
| ECO_29     | In the Socioeconomics section (page 4-851), some of the direct impacts need to be changed from moderately positive to major.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Comment acknowledged. Adequate justification has not been provided to support the modification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change            |
| ECO_3      | The project would benefit the MatSu Borough.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_30     | Table 4.18-22 understates the Project's impact on access to natural gas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Comment acknowledged. Additional justification is needed to support the requested modification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change            |
| ECO_31     | In several tables (Tables 4.18-12, 4.18-20, 4.18-21, 4.18-22, and 4.18-23) there is lack of clarity on application of Impact Criteria for Socioeconomic Resources and inconsistent with (+) and (-) indicators. The identified Impact Level of "Major" is inconsistent with Table 4.18.9 and summary Table 4.18-23 which identifies "Major Positive Impact." The Impact Level as "Major" does not indicate whether this is positive or negative. The impact should clearly be positive.                                                                                                                                           | Thank you, this comment is appreciated. Tables 4.18-12, 4.18-20, 4.18-21, 4.18-22 have been revised to indicate whether the impact is anticipated to be positive or negative, consistent with Table 4.18-23. For employment, the impacts are identified as major positive in both Table 4.18-9, and Table 4.18-23.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4.18.4               |
| ECO_32     | The section "Impacts on Government Revenue" understates the benefits to the government revenues.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Comment acknowledged. Adequate justification has not been provided to support the modification.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change            |
| ECO_4      | The project will benefit Alaskan villages by providing a less expensive heating option.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_5      | There is a great need for natural gas in remote areas of the state, such as Rampart, Bethel, and Atkasuk.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |
| ECO_6      | What are the cost differences between burying and above ground?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the comment. The cost differences between buried and aboveground pipeline options are described in Section 2.6. These differences in labor and logistics costs associated with an aboveground pipeline option would include: additional mainline wall thickness for low temperature fracture control; pre-insulated pipe and jacketing for aboveground piping; insulation kits at girth welds; horizontal support members (HSM) for slide and anchor supports; and slide, guide, and anchor shoes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Final Response                                                                                                                                                                                                                                                                         | Section #s of Change              |
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| ECO_7      | Which communities/villages will have access to the gas?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | At this point of the Project planning process, only Fairbanks and the ENSTAR facility near Big Lake will have direct access to the gas from the pipeline. Other communities along the pipeline will need to develop individual plans and their own facilities with AGDC to access gas. | No change                         |
| ECO_8      | The State of Alaska cannot afford this Project. The pipeline will be expensive for Alaska and its people.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Comment acknowledged.                                                                                                                                                                                                                                                                  | No change                         |
| ECO_9      | We request that to the maximum extent allowed, that employment opportunities be afforded to the Ahtna people and our shareholders. We also request that contracting and other business opportunities be afforded to Ahtna and Alaska Native owned businesses.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | AGDC believes in local hire and using qualified Alaska businesses and contractors to complete Projects. Employment opportunities will be provided to qualified Alaskans, businesses and contractors to the maximum extent allowed by law.                                              | No change                         |
| EDI_1      | The determinations in the BA need to match those listed in the Draft SEIS. There are currently discrepancies in the BA which should be reconciled.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates this comment. The summary table in the Biological Assessment (BA) was incorrect. The determinations for the two species are correctly stated in section 5.1.1 of the BA and the table has been corrected.                                                            | BA                                |
| EDI_10     | Page: ES-34<br>Original Phrase: Legend on Map, fourth line, ASAP v6.1 MP 62 - 733 (Aboveground)<br>Comment: Legend in Map would indicate that the pipe is above ground from MP 62 to MP 733 (purple line). This is incorrect. Alternative 1 is below grade for the entire length with the exception of fault crossings and aerial bridge crossings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Figure ES-12 has been updated to show the correct belowground configuration for Alternative 1.                                                                                                                                                                                         | Figure ES-12                      |
| EDI_11     | Page: ES-35<br>Original Phrase: Legend on Map, fourth line, ASAP v6.1 MP 62 - 733 (Aboveground)<br>Comment: Legend in Map would indicate that the pipe is aboveground from MP 62 to MP 733 (purple line). This is incorrect. Alternative 2 is below grade from MP 62 to MP 733 with the exception of fault crossings and aerial bridge crossings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Figure ES-13 has been updated to show the correct aboveground configuration for Alternative 2.                                                                                                                                                                                         | Figure ES-13                      |
| EDI_12     | Page: 1-14<br>Original Phrase: Consequently, following completion of the SEIS, the State of Alaska will make some decisions on the entire proposal. AGDC submitted a Right-of-Way Leasing Act AS 38.35.050 Application for Pipeline Right-of-Way Lease on March 21, 2011. The State of Alaska issued Right-of-Way Lease ADL 418977 to AGDC on July 25, 2011 (Appendix B).<br>Comment: ADNRR amended the ROW lease in 2014 and 2016.                                                                                                                                                                                                                                                                                                                                                                                 | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Chapter 1                         |
| EDI_13     | Page: 1-14<br>Original Phrase: The State of Alaska is responsible for regulating activities and developments on federal, state, and private lands that may affect air or water quality or resident species of fish and wildlife.<br>Comment: ADF&G is also responsible for managing anadromous fish streams in Alaska. AS 16.871.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Chapter 1                         |
| EDI_14     | Page: 1-27<br>Original Phrase: Protect fish habitats and populations.<br>Comment: Specify the protections are only for species specifically identified under the EFH statute.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Chapter 1                         |
| EDI_15     | Page: 2-30<br>Original Phrase: At MP 638, the proposed alignment would cross the Chulitna River and move south, west of the river, to avoid private land crossed by the 2012 route located east side of the river. Between MP 658 and MP 732, several sections of the current alignment shifts slightly (less than 1 mile) from the 2012 route to minimize impacts to wetlands and avoid private property.<br>Comment: Change MP 732 to: MP 707                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Chapter 2                         |
| EDI_16     | Page: 2-41<br>Original Phrase: AGDC proposes to establish 13 stationary construction camps (SCCs) (12 along the Mainline, plus one at the GCF) and 26 PSYs to support construction (Figure 2.2-16) (AGDC, 2016b). Most of the SCC locations would be collocated within 1 mile of a PSY. Schematics of proposed campsites are provided in Appendix D, beginning on Sheet 48. The PSYs and SCCs would primarily be located in previously disturbed areas that were used for construction of TAPS, ARRC facilities, or public events. PSYs have been sized based on conditions at each specific location, but would average about 9 acres, and SCCs would range between 15 and 40 acres in size.<br>Comment: Place a space between "between" and "15"                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Chapter 2                         |
| EDI_17     | Page: 2-43<br>Original Phrase: By regulation, these MLBV's would be aboveground features, with one valve at least every 20 miles.<br>Comment: This statement is not correct as written. These MLBV's would be primarily belowground features, with one valve at least every 20 miles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Chapter 2                         |
| EDI_18     | Page: 2-43<br>Original Phrase: The proposed Project would install and maintain 40 MLBV's and one Fairbanks Lateral block valve. By regulation, these MLBV's would be aboveground features, with one valve at least every 20 miles. Siting of exact locations would depend on suitability of terrain. The MLBV's would be spaced in accordance with 49 CFR 192.179 and are currently proposed to be controlled by the pipeline Supervisory Control and Data Acquisition (SCADA) system.<br>Comment: The statement: By regulation, these MLBV's would be aboveground features is incorrect and should be struck or modified to read in accordance with the regulations. 49 CFR 192 has no position on abovegrade versus belowgrade valve locations. It is correct that MLBV's can be spaced no further than 20 miles. | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Chapter 2                         |
| EDI_19     | Page: 2-44<br>Original Phrase: 2.2.10.7. Temporary Workspaces, HDD Pads, and False Right-of-Ways<br>Comment: This is grammatically incorrect. It should read: ...Rights-of-Way. Please make consistent throughout the document.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Chapter 2                         |
| EDI_2      | Page: ES-12<br>Original Phrase: Additionally, no operations and maintenance requirements would not exist.<br>Comment: Additionally, no operations and maintenance requirements would exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Executive Summary                 |
| EDI_20     | Page: 2-44<br>Original Phrase: Horizontal bores would also require two pits, typically 100 feet by 250 feet, a majority of which would typically be contained within the construction footprint, on either side of the road or railroad to be crossed. These TWs would be set back at least 50 feet from all waterbodies and wetlands.<br>Comment: The statement is not correct and should be removed. The TWs are not setback 50 feet from all waterbodies or wetlands. Some are in wetlands. This is likely to have been a relic statement that should be removed.                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                | Sections 2.2.9.7 and 4.11.4.1.8.5 |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Section #s of Change                                                                      |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| EDI_21     | <p>Page: 2-46<br/>Original Phrase: The Seward Marshalling Yard would be located near the Seward Harbor and the ARRC terminus. Pipe would arrive by barge and would be transported directly to the Seward Marshalling Yard or placed on railcars. The Seward Marshalling Yard would be required for 30 months, allowing 4 months to coordinate mobilization activities and 2 months for demobilization. It is assumed that pipe would be delivered to the Port of Seward and transferred to the Seward Marshalling Yard over a 24-month period, with each ship requiring 7 to 10 days to fully discharge the load. During the ship offload cycles, operations would proceed for 24 hours each day with multiple crews.<br/>Comment: The term ship is used twice later in the paragraph, replace ship with: vessel</p> | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chapter 2;<br>Chapter 4                                                                   |
| EDI_22     | <p>Page: 2-79<br/>Original Phrase: For a completely elevated (aboveground) pipeline, the extraordinary capital costs for construction and maintenance, as well as concerns for safety and security risks, make this alternative infeasible and impracticable. Therefore, it has been eliminated from detailed analysis. While Alternative 2 also proposes to use the aboveground mode between MP 0 and 634, the portion of the pipeline that would intersect more populated areas (i.e., where they may be additional safety or security risks) would be buried (see Section 2.4).<br/>Comment: The highlighted segment should read: MP 0 and 62</p>                                                                                                                                                                 | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chapter 2                                                                                 |
| EDI_23     | <p>Page: 2-1<br/>Original Phrase: Alternative 1: ASAP Project including use of Dock Head 3 (DH3) at West Dock, nearshore disposal of dredge material, buried pipeline (except at fault crossings, elevated bridge stream crossings, piggings facilities, and block valve locations), strain-based pipeline design in discontinuous permafrost as required, and Horizontal Directional Drilling (HDD) at the Yukon River.<br/>Comment: Delete highlighted reference to strain-based design, as strain-based design is not required for the belowgrade installation of the pipeline. Ensure Alternative 1 description matches description in the Executive Summary.</p>                                                                                                                                                | Based on further geotechnical analysis and a decision by AGDC to use thicker wall pipe, AGDC has determined that there is no need for a SBD Special Permit. In a letter from PHMSA, dated 16 January, 2018, PHMSA is no longer considering the request for a special permit understanding that the pipeline would comply with Part 192, which requires the pipeline be able to "maintain the structural integrity of the pipeline under temperature and other environmental conditions that may be anticipated: and "withstand anticipated external pressures and loads that will be imposed on the pipe after installation" to include strains imposed by permafrost and discontinuous permafrost soils. | Executive Summary,<br>Sections 2.2.5.3, 4.25.9.3, 4.25.12, 4.6.4.2, 4.7.4.2.5, and 4.25.2 |
| EDI_24     | <p>Page: 2-1<br/>Original Phrase: Alternative 2: Denali National Park and Preserve (NPP) Route Variation, use of Dock Head 2 (DH2) at West Dock, ocean disposal of dredge material, pipeline elevated on vertical support members (VSMs) from MP 0 to 62, no strain-based design used in discontinuous permafrost, and aerial crossing at Yukon River.<br/>Comment: Delete highlighted reference to strain-based design as strain-based design is not required for the belowgrade installation of the pipeline. Ensure Alternative 2 description matches description in the Executive Summary.</p>                                                                                                                                                                                                                   | Based on further geotechnical analysis and a decision by AGDC to use thicker wall pipe, AGDC has determined that there is no need for a SBD Special Permit. In a letter from PHMSA, dated 16 January, 2018, PHMSA is no longer considering the request for a special permit understanding that the pipeline would comply with Part 192, which requires the pipeline be able to "maintain the structural integrity of the pipeline under temperature and other environmental conditions that may be anticipated: and "withstand anticipated external pressures and loads that will be imposed on the pipe after installation" to include strains imposed by permafrost and discontinuous permafrost soils. | Executive Summary,<br>Sections 2.2.5.3, 4.25.9.3, 4.25.12, 4.6.4.2, 4.7.4.2.5, and 4.25.2 |
| EDI_25     | <p>Page: 2-7<br/>Original Phrase: Four lines supported on 17 VSMs spaced 60 feet apart; approximately 1 kilo foot of line required<br/>Comment: 1 kilo foot should read: 1,000 feet</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chapter 2                                                                                 |
| EDI_26     | <p>Page: 2-22<br/>Original Phrase: Table 2.2-3 identifies the pipeline location classes, wall thickness, and MAOP for the Mainline, which has a 36-inch outer diameter, gradeline pipe.<br/>Comment: Delete: , gradeline pipe</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chapter 2                                                                                 |
| EDI_27     | <p>Page: 2-25<br/>Original Phrase: As described in detail in Appendix G, using route geotechnical data in conjunction with the results of the demand and capacity analyses, a segment-by-segment design would be completed to identify the frost heave potential along the proposed alignment. The segment-by-segment design approach would follow the general steps described below.<br/>Comment: Prior to frost heave add: thaw settlement and</p>                                                                                                                                                                                                                                                                                                                                                                 | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chapter 2                                                                                 |
| EDI_28     | <p>Page: 2-26<br/>Original Phrase: The ASAP Project would propose a permanent operational ROW that would range from a 53-foot easement at its narrowest point to a 350-foot easement at its widest point. This maximum distance would be used during the O&amp;M phase of the proposed Project to maintain certain side slope cuts performed during the construction phase of the Project. The Fairbanks Lateral Operational ROW would range from a 30-foot easement at its narrowest point to a 350-foot easement at its widest point to access and maintain the land.<br/>Comment: After cuts add: and/or fills</p>                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chapter 2                                                                                 |
| EDI_29     | <p>Page: 2-29<br/>Original Phrase: The proposed route would follow the Yukon River to approximately MP 402. From MP 402 to MP 435, the proposed alignment departs to higher elevation contours to the east of the route proposed in the 2012 FEIS. Moving southward, the revised route would climb the crest of the Summer Ridge lying east of Minto Flats to the junction with the Fairbanks Lateral at MP 440, 2.5 miles south of the Mainline Chatanika River crossing. This change was made to avoid wetlands and improve constructability. As in the 2012 alignment, the proposed route crosses lands in the Minto Flats State Game Refuge and the Tanana Valley State Forest.<br/>Comment: Replace Yukon River with: Dalton Highway</p>                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chapter 2                                                                                 |
| EDI_30     | <p>Page: ES-20<br/>Original Phrase: Impacts to navigation resources result ng from increased navigational resource use by vessels<br/>Comment: This appears to be a typographical error that should read "resulting".</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Executive Summary                                                                         |
| EDI_31     | <p>Page: 2-29<br/>Original Phrase: South of the Fairbanks Lateral, the proposed alignment deviates from the 2012 route near MP 440.8, moving upslope to the east to traverse drier terrain and avoid crossing Native allotments and private lands. Around MP 471.5, the proposed alignment shifts to the west side of the Nenana River. The two alignments cross at MP 497.5 where the proposed alignment shifts east closer to the Nenana River to avoid crossing Native allotments and private lands. Both alignments overlap between MP 511 and MP 521.<br/>Comment: Delete: Both alignments overlap between MP 511 and MP 521.</p>                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Chapter 2                                                                                 |
| EDI_32     | <p>Page: 3-37<br/>Original Phrase: The Nenana River originates in the Alaska Range in Denali NPP.<br/>Comment: The Nenana River does not originate in Denali NPP. Delete: in Denali NPP.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Section 3.3.4.2.1.8                                                                       |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Final Response                                                                                                                                                                                                                         | Section #s of Change |
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| EDI_32     | <p>Page: 3-01<br/>Original Phrase: Significant changes have been proposed that have the potential to impact soil and geologic resources. Much of the information provided in the 2012 FEIS was preliminary, and in many cases, current estimates have been revised due to Project refinement rather than significant Project changes, which include: Winter dredging of a navigation channel and turn basin at West Dock; Nearshore disposal of dredge material on bottomfast sea ice; Pipeline burial along the entire route, except at elevated bridge crossings, fault crossings, piggings facilities, and valves; Topsoil to be replaced only on agricultural lands; Increase in the volume of required fill from 13.1 million cubic yards to 25 million cubic yards needed from gravel sources as a result of Project refinement; Decrease from 546 potential borrow sources to 91 borrow sources, including 89 new sites and two existing sites (5,200 acres of land total); and Increase from 133 access roads to 298 new access roads totaling 174.4 miles.<br/>Comment: The highlighted statement is untrue and should be corrected. While there have been changes in the project as it was further developed since the 2012 FEIS, the intent of having a buried pipeline between Prudhoe Bay and Southcentral Alaska has not changed. With regards to the bulleted list: Bullet 1 is a change; Bullet 2 is a change; Bullet 3 is neither a change or a refinement and should be deleted from the list. The pipeline was always intended to be buried; Bullet 4 is a refinement; Bullet 5 is a refinement; Bullet 6 is a refinement; Bullet 7 is a refinement</p> | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.2.1        |
| EDI_33     | <p>Page: 3-06<br/>Original Phrase: The portion of the Bering Sea that would be impacted by the proposed Project is described in the next subsection.<br/>Comment: Replace Bering Sea with Beaufort Sea.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.2.3        |
| EDI_34     | <p>Page: 3-25<br/>Original Phrase: A second significant change between the 2012 FEIS project description and the current project description is the addition of West Dock for receiving barge loads of material. This made providing details for the dredging and disposal operation necessary. Dredging and disposal would include:<br/>Comment: After West Dock, add: DH3</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.3.1        |
| EDI_35     | <p>Page: 3-29<br/>Comment: The first and last row on this page appear to be duplicates (although the language is a little different).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The first row regards EPA's authority under Section 404 of the CWA and the last row the USACE's under Section 404 of the CWA. | No change            |
| EDI_36     | <p>Page: 3-297<br/>Original Phrase: A complete list of agencies, and regulations that apply to this project are included in Chapter 1, Section 1.10 of this SEIS. A list of the land owners and their associated regulations that pertain to land use in the Revision 6.1 alignment are included below:<br/>Comment: Section 1.10 is "Tribal Government-to-Government Consultation;" not a list of agencies, and regulation that apply to this project. 1.12 Permits, Approvals, Compliance with Executive Orders and Regulatory Requirements may be the intended reference. The term "Statutes" should be added to "regulations" in both the original SEIS phrase commented on here as well as the 1.12 title as the applicable legal authorities include statutes as well as regulations.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.11.2.1     |
| EDI_37     | <p>Page: 3-297<br/>Original Phrase: NPS<br/>Comment: The NPS statutes and regulations section should also include: Denali National Park Improvement Act (P.L. 113-33), Title XI Implementing Regulations (43 CFR 36), and NPS right-of-way regulations (36 CFR Part 14).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.11.2.2     |
| EDI_38     | <p>Page: 3-298<br/>Original Phrase: Section 6(f) of the Land and Water Conservation Fund (LWCF)<br/>Comment: Duplicate entries.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.11.2.2     |
| EDI_39     | <p>Page: 3-298<br/>Original Phrase: ARRC<br/>Comment: Duplicate reference to ARRC land.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.11.2.2     |
| EDI_4      | <p>Page: ES-20<br/>Original Phrase: While impacts would be similar overall under each alternative, Alternative 2 would result in the following slightly increased impacts to navigation: dredging impacts at Prudhoe Bay; vessel traffic at Prudhoe Bay; navigational impacts along the Yukon River as a result of aerial suspension bridge construction; and two crossings of the Nenana River proposed along the Denali NPP Route Variation, one HDD and one suspension bridge.<br/>Comment: There should be no impacts to Navigation Resources due to dredging at Prudhoe Bay (for either Alternative), because the dredging will be done in the winter off of the ice, when there will be no vessel traffic.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Table ES-1           |
| EDI_40     | <p>Page: 3-298<br/>Original Phrase: ROW Leasing Act AS 38.35.050 Application for Pipeline ROW Lease<br/>Comment: Delete this reference as it is included under ADNRR (AS 38.35 ROW Leasing Act).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.11.2.3     |
| EDI_41     | <p>Page: 3-298, 299<br/>Original Phrase: State<br/>Comment: The University of Alaska is not listed. UofA lands are managed consistent with the Board of Regents' Policy 05.11 - Real Property.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.11.2.3     |
| EDI_42     | <p>Page: 3-299<br/>Comment: The University of Alaska should be included under the State section.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 3.11.2.3     |
| EDI_43     | <p>Page: 4-80<br/>Original Phrase: Minor affects to stream bank stability are expected to be associated with both the OC crossing, as described in Section 4.7.4.1.3, Stream Bank Stability and Geomorphology.<br/>Comment: Remove "both".</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 4.7.5.1.1    |
| EDI_44     | <p>Page: 4-89<br/>Original Phrase: Various compressor stations, the Straddle and Offtake Facility, and the natural gas liquid extraction plant were omitted from the proposed Project, eliminating vegetation and wildlife impacts from those Project elements.<br/>Comment: The term omitted may have negative connotations. Please use the term 'removed from the project as described in the 2012 EIS.'</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                | Section 4.8.3        |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Final Response                                                                                                                                                                          | Section #s of Change |
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| EDI_45     | Page: 4-1<br>Original Phrase: The environmental impact assessment presented is based on the following technical reports and updates, as appropriate:<br>Comment: Include the following document to the list: The ASAP Belowground Pipeline Mode: Selection, Construction, Operation, and Maintenance on Alaska's North Slope<br>ASAP-22-RTA-DDD-DOC-00066 March 24, 2016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | Section 4.0          |
| EDI_46     | Page: 4-324<br>Original Phrase: Table 4.14.3<br>Comment: References to vessel activities in Proposed Action Causing Potential Impact for Operations and Maintenance in the table should be removed. There are no planned vessel activities during operations and maintenance of the ASAP Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | Table 4.14-3         |
| EDI_47     | Page: 4-480<br>Original Phrase: Footnote 1- For AHRS site descriptions....<br>Comment: Recommend rewording second sentence in footnote to read "The list of sites in the direct impact area in this table does not include unevaluated cultural resources"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Comment acknowledged.                                                                                                                                                                   | No change            |
| EDI_48     | Page: 4-484<br>Original Phrase: Other potential mitigation may be identified..<br>Comment: Recommend "Other potential minimization and mitigation strategies may be identified"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Comment acknowledged.                                                                                                                                                                   | No change            |
| EDI_49     | Page: 4-652<br>Original Phrase: Mitigation Measures<br>Comment: In this section AGDC commits to a blast control plan. At this time, we have not developed such a plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Comment acknowledged.                                                                                                                                                                   | No change            |
| EDI_5      | Page: ES-20<br>Original Phrase: While impacts would be similar overall under each alternative, Alternative 2 would result in the following slightly increased impacts to navigation: dredging impacts at Prudhoe Bay; vessel traffic at Prudhoe Bay; navigational impacts along the Yukon River as a result of aerial suspension bridge construction; and two crossings of the Nenana River proposed along the Denali NPP Route Variation, one HDD and one suspension bridge.<br>Comment: With reference to the crossings of the Nenana River utilizing the Denali NPP Route Variation, the first aerial crossing is placement of the pipe on the existing pedestrian bridge (not a suspension bridge). The second crossing of the Nenana River (northeast from McKinley Village) is an open cut crossing, not an HDD crossing. The Navigational impacts should not change, but the crossing types need to be correctly identified. | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | Executive Summary    |
| EDI_50     | Page: 4-721<br>Original Phrase: Table 4.26-2<br>Comment: This summary table should be revised to reflect comments presented on contributing tables.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | No change            |
| EDI_51     | Page: 4-754<br>Original Phrase: A new plant expansion project at Plant 2 would provide 120 MW when complete in 2016<br>Comment: This plant has been completed and was placed into operation in 2016. Suggest updating this section to address the plant as being in service.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | 4.26.7               |
| EDI_52     | Page: 7-795<br>Original Phrase: The Kenai LNG project currently has a 2-year export license approved by DOE through February 2018, allowing export of up to 40 billion cubic feet (bcf). ConocoPhillips is currently in the process of selling its Cook Inlet gas field but plans to retain the Nikiski LNG plant. The facility shipped five cargoes between May and September 2014, and six cargoes between May and October 2015. Cook Inlet production in 2016 has instead been sold to local markets.<br>Comment: This statement needs to be updated, as CPAI found no buyers and is currently in the process of shutting down the plant.                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | 4.26.9.7             |
| EDI_53     | Page: xiv<br>Original Phrase: A: Part I: Rationale for ASAP Strain Based Design, and Part II: The ASAP Belowground Pipeline Mode: Selection, Construction, Operation, and Maintenance on Alaska's North Slope<br>Comment: Part I and Part II address different issues. Each should be a stand alone appendix, especially Part II as it addresses the first 60 miles of pipeline construction.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Rationale for ASAP Strain Based Design has been removed from the document as AGDC no longer proposes strain based design.                                                               | Appendices           |
| EDI_54     | Page: 7<br>Original Phrase: South of the Nenana River, the alignment has moved to the west of the Nenana River into undeveloped forest and away from the disturbed transportation corridor. This change was made to straighten the alignment and move onto drier terrain. The route moved onto steeper slopes but improves the crossings of streams and reduces bog crossings; and<br>Comment: Shouldn't the first Nenana River in this sentence read Tanana River ?                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | Section 4.9.3.1      |
| EDI_55     | Page: 13<br>Original Phrase: Train operation and construction crews regarding polar bear awareness.<br>Comment: This is stated twice.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | Section 4.14.3       |
| EDI_56     | Page: 14<br>Original Phrase: Prior to construction, AGDC would enter into a comprehensive agreement with ADOT&PF for the use of highways and other facilities under the jurisdiction of ADOT&PF.<br>Comment: This is a duplication of Item 122.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | Section 4.15.3.1     |
| EDI_57     | Page: 4-126<br>Original Phrase: ENTIRE SECTION<br>Comment: See Comment 61, same comments apply<br>This section requires editing. There will be no clearing, grubbing, or grading during operations. Clearing, grubbing and grading will have been completed during construction. Mowing will be the only maintenance of the ROW, and mowing will preclude any necessity for clearing.<br>All references to clearing, grubbing, or grading need to be removed from the section.<br>Mowing will not be required on the Beaufort Coastal Plain.                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | Section 4.8.5.2.1.1  |
| EDI_73     | More specifically, in Section 4.26.8.3.2, on page 4-769, the Bureau of Land Management recommends restating the paragraph to note that while wildfires can be destructive to man-made structures and activities, they play a very important part in sustaining the ecological health of many systems in Alaska. Additionally, the information about the 2015 fire season should be removed. There is no reason to highlight 2015, as opposed to any other season in the context of the paragraph. An average of acres burned or a range of acres over the years would provide better context. Statistics can be found at <a href="https://fire.ak.blm.gov/predsvcs/intel.php">https://fire.ak.blm.gov/predsvcs/intel.php</a> .                                                                                                                                                                                                      | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated. | Section 4.26.8.3.2   |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Section #s of Change                                                                   |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| EDI_58     | In Table 3.7-2, the discussion about Coho salmon "Found in coastal waters of Southeast and South-central Alaska and in the Yukon River to the Alaska-Yukon border. Occur in nearly all accessible bodies of fresh water; avoid riffles." should have "avoid riffles" removed from the description.                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Table 3.7-2                                                                            |
| EDI_59     | In the Fish section, the word "Statutes" is misspelled as "statues" in at least one location.                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Chapter 3                                                                              |
| EDI_6      | Page: ES-20<br>Original Phrase: A buried pipeline is considered less susceptible to random acts of violence and somewhat less susceptible to terrorism. The very remote location of the portion of the Alternative 2 pipeline on VSMs also provides significant protection from intentional damage.<br>Comment: The following statement needs to be struck: "somewhat less susceptible to". A buried pipe is much harder to damage than a pipe elevated above the ground.                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Table ES-1                                                                             |
| EDI_60     | 3.17.6; Text: This information has been updated where both of the following conditions are met: ...<br>Comment: The information following this sentence provides 3 conditions. Change wording of 'both'                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section 3.17.6                                                                         |
| EDI_61     | 3.17.6.1; Text: Table 3.17-4; Comment: Double check the SEIS section numbers for the HEC locations. Some of these appear to be incorrect or missing                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Table 3.17-4                                                                           |
| EDI_62     | 3.17.6.2.1.6; Text: Table 3.17-10; Comment: Table is almost unreadable. Recreate.                                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Table 3.17-10                                                                          |
| EDI_63     | Air Quality; Text: Paragraph three: Regional Haze modeling would need to be performed.<br>Comment: The text should refer to Regional Haze modeling.                                                                                                                                                                                                                                                                                                                                                                      | This request is unclear, the text in question refers to regional haze modeling.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                        |
| EDI_64     | Air Quality; Text: However, it is known that natural gas combustion has fewer air quality impacts than from combustion of the more commonly (and currently) used fuel oil or wood burning stoves. Comment: This sentence should be edit to read "combustion of the more commonly (and currently) used fuel oil, coal, or wood burning stoves.                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section 4.22.6                                                                         |
| EDI_65     | Cumulative Effects; Text: Increases in climate temperature (RFFA No. 67) could result in earlier breakup of river ice....<br>Comment: The word "climate" refers to the prevailing weather conditions in an area over a long period and as such does not have a temperature. Perhaps the writer meant to say "increases in climate change could result in earlier breakup of river ice...."                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section 4.26.9.2.1                                                                     |
| EDI_66     | In multiple places, it is not clear why the Umiat Access project is included. On page 4-738 it was made clear that the project was not considered in environmental consequences, so why would it be included in RFFAs? Please explain.                                                                                                                                                                                                                                                                                   | The USACE appreciates the comment. The Umiat Access Road was considered in environmental consequences; the "N" in Table 4.26-3 was in error. Table 4.26-3 has been updated to reflect recent information (i.e., ADNRR's North Slope Road Network)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Table 4.26-3                                                                           |
| EDI_67     | Cumulative Effects; Text: Paragraph two: The impacts to noise resulting from Alternative 1, the proposed Action are described in Section 4.23, Noise.<br>Comment: This sentence should be rewritten to read "The noise impacts resulting from Alternative 1, the proposed Action are described in Section 4.23, Noise. Noise is not a resource that can be impacted.                                                                                                                                                     | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section 4.26.9.18                                                                      |
| EDI_68     | An incorrect acronym (ADNR) is used for Alaska Department of Natural Resources (ADNR) in at least one location.                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | All                                                                                    |
| EDI_69     | On page 1-31 in the table, the correct name of the permit is a Temporary Water Use Authorization.                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Table 1.10-1                                                                           |
| EDI_7      | Page: ES-20<br>Original Phrase: According to PHMSA, each alternative would require a special permit issued by PHMSA to waive the requirement to comply with one or more of the federal pipeline safety regulations.<br>Comment: This entire statement is incorrect and should be struck. Recent analysis has shown that differential pipe movement can be mitigated with the addition of thicker pipe in specific locations, thus reducing the strain below the levels requiring Strain Based Design by 49 CFR Part 192. | Based on further geotechnical analysis and a decision by AGDC to use thicker wall pipe, AGDC has determined that there is no need for a SBD Special Permit. In a letter from PHMSA, dated 16 January, 2018, PHMSA is no longer considering the request for a special permit understanding that the pipeline would comply with Part 192, which requires the pipeline be able to "maintain the structural integrity of the pipeline under temperature and other environmental conditions that may be anticipated: and "withstand anticipated external pressures and loads that will be imposed on the pipe after installation" to include strains imposed by permafrost and discontinuous permafrost soils.                                                                                                             | Executive Summary, Sections 2.2.5.3, 4.25.9.3, 4.25.12, 4.6.4.2, 4.7.4.2.5, and 4.25.2 |
| EDI_70     | The current director of ADNRR DML&W is Brent Goodrum, this is incorrect on page 6-1.                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Chapter 6                                                                              |
| EDI_71     | On page 6-4 in the list, the correct department is the Alaska Department of Natural Resources and not Alaska Department of Fish and Game.                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Chapter 6                                                                              |
| EDI_72     | Section 4.19.1; Text: first sentence ...discusses AGDC's proposed mitigation strategies that are being developed as part of the PA to avoid, minimize, etc.<br>Comment: should read as ...developed as part of the Section 106 PA to avoid                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4.19.1                                                                                 |
| EDI_8      | Page: ES-20<br>Original Phrase: Assuming a special permit could be obtained, pipelines built under Alternatives 1 or 2 would provide similar levels of reliability and safety as both would use strain-based design.<br>Comment: Based on the comment above, strike the following: Assuming a special permit could be obtained. The balance of the bullet is correct.                                                                                                                                                    | Based on further geotechnical analysis and a decision by AGDC to use thicker wall pipe, AGDC has determined that there is no need for a SBD Special Permit. In a letter from PHMSA, dated 16 January, 2018, PHMSA is no longer considering the request for a special permit understanding that the pipeline would comply with Part 192, which requires the pipeline be able to "maintain the structural integrity of the pipeline under temperature and other environmental conditions that may be anticipated: and "withstand anticipated external pressures and loads that will be imposed on the pipe after installation" to include strains imposed by permafrost and discontinuous permafrost soils. Reference to the requirement for a Special Permit for the ASAP Project have been removed from the document. | Executive Summary, Sections 2.2.5.3, 4.25.9.3, 4.25.12, 4.6.4.2, 4.7.4.2.5, and 4.25.2 |
| EDI_9      | Page: ES-21 - ES-27<br>Original Phrase: General comment on Table ES-2<br>Comment: Any changes to Direct, Indirect, or Cumulative Effects caused by comments above need to be reflected in Table ES-2.                                                                                                                                                                                                                                                                                                                    | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Table ES-2                                                                             |
| EFF_1      | The sections "Impact level" and "Summary of Impacts" understate the positive impacts of the Project.                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggestion to modify the referenced impact rating; however, justification or evidence are necessary to support this modification. No changes have been made to the SEIS in response to this comment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change                                                                              |
| EFF_10     | In cumulative effects, it would be useful for the casual reader to briefly explain why the Port of Seward is included in the geographic scope of this cumulative impact analysis.                                                                                                                                                                                                                                                                                                                                        | Section 4.1 of the SEIS has been revised to clarify why the Port of Seward has been included in the cumulative effects analysis due to anticipated delivery of Project materials in this location.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.1                                                                                    |
| EFF_11     | It is not clear why land use plans are included in a list of major actions and natural events considered in the cumulative effects analysis (Table 4.26-3). The text appears to imply that the plans would provide additional protection, but some plans could encourage additional resource development, so this does not make sense.                                                                                                                                                                                   | Management plans have been included as a positive net effect in regard to potential impacts to resources because they establish goals and objective for the resource, establish standards and guidelines, assist in fulfilling state and federal requirements, and create an additional venue for regulatory and community input into resource management.                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change                                                                              |
| EFF_12     | The 'additional description' boxes in Table 4.26-3 needs to be updated.                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the comment. This table has been updated to reflect changes to RFFAs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No change                                                                              |
| EFF_13     | In Section 4.26.7.1.1, this sentence is difficult to understand "In general, these facilities are capable (and include infrastructure for) oil/gas/water separation, gas dehydration/compression/reinjection, and water treatment/reinjection." Please clarify the point you are trying to get across.                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4.26.7.1.1                                                                             |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Section #s of Change   |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| EFF_14     | In Section 4.26.7.1.4 regarding the Point Thomson Project Badami Pipeline, the pipeline has already been constructed so the text should be updated to reflect that.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.26.7.1.4             |
| EFF_15     | This sentence needs clarification "The following activities are expected to result in effects to water resources that are affected by the proposed project." There is not a list of activities following this sentence. Is this sentence meant to read that climate change and natural occurrences are activities?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The sentence in question has been removed from the text. The following section, 4.26.9.2.1 has been updated to begin with the following, "Climate change and natural occurrences are also expected to result in effects to water resources that are also affected by the proposed Project."                                                                                                                                                                                                                                                                                                                                    | 4.26.9.2               |
| EFF_16     | It is not clear how management plans are classified as having a major positive net effect when the management plans could actually lead to large-scale resource development and filling of wetlands with gravel pads and roads. Tables 4.26-8 and -9.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Management plans have been included as a positive net effect in regard to potential impacts to resources because they establish goals and objective for the resource, establish standards and guidelines, assist in fulfilling state and federal requirements, and create an additional venue for regulatory and community input into resource management.                                                                                                                                                                                                                                                                                                                                                                              | No change              |
| EFF_17     | It is not clear how proposed Project winter construction activities would intersect with regularly scheduled supply deliveries for Prudhoe Bay and other North Slope operations, since those happen during the open water season. Please clarify this sentence "At West Dock (see Figure 4.26-1), proposed Project winter construction activities are not likely to intersect with many RFFAs aside from regularly scheduled supply deliveries for Prudhoe Bay and other North Slope operations."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.26.9.7               |
| EFF_18     | This statement needs to be updated "Currently, the Bureau of Ocean Energy Management (BOEM) is undertaking an EIS to evaluate the potential effects of a lease sale in Cook Inlet." Cook Inlet Lease Sale 244 was held on June 21, 2017 and resulted in \$3 million in bids for 14 tracts covering roughly 76,615 acres.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been updated to reflect the most current status of the Cook Inlet Lease sale.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.26.9.7               |
| EFF_19     | This sentence is not clear "These events would occur regardless of whether the proposed Project were constructed, and are considered cumulative effects associated with Alternative 3, the no action alternative." It is not clear what "these events" is referring to in this sentence. Are they referring to the effects outlined in the previous bullets?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.26.9.16              |
| EFF_2      | Wiseman does not want to see borrow pits near the community. The noise will disrupt our way of life. Previous proposals had borrow pits farther away from Wiseman than what is currently proposed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The USACE appreciates the comment. The Project material sites near Wiseman are existing material sites. According to AGDC, the commenter is correct in that changes were made to the shape of the material site to minimize the visual impacts. Federal, state, and borough permits, and other land manager agreements, would be required for developing new or existing material extraction sites.                                                                                                                                                                                                                                                                                                                                     | No change              |
| EFF_20     | This statement is not clear "While the likelihood of these events ranges from unlikely to very likely, it is overall somewhat likely that the effects resulting from the majority of these events would occur at the same time." It is not clear what "the majority of these events" refers to in this sentence and it is equally confusing to summarize a broad range of possibilities with the phrase "it is overall somewhat likely". This does not follow with the NEPA focus on taking a hard look and making informed decisions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.26.9.16              |
| EFF_21     | This statement is not clear "When combined with Alternative 1, the proposed Action, the impacts resulting from the events described above would be expected to increase in magnitude and geographic extent." It is not clear what "the impacts resulting from the events described above" is referring to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates the observation. The "impacts resulting from the events described above" refers to the bullet list of activities preceding the statement in question. The text has been updated to better reflect to purpose of the statement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4.26.9.15.1            |
| EFF_22     | In general, the ASAP will not affect non-fuel mineral resources (excluding industrial minerals such as sand and gravel). There may be minor impacts to placer gold operators if there are claims within ASAP right-of-way. Claim activity should be checked prior to construction, and claim owners notified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Prior to issuing the ROWs for the Project, state and federal agencies each will review the ROW corridor and identify any potential land conflicts, including active mining claims. If there are any active mining claims within the corridor, AGDC and the relevant agency must address the impacts to the subsurface claim holder.                                                                                                                                                                                                                                                                                                                                                                                                     | No change              |
| EFF_23     | The key assumption that "Past federal, state, and local authorizations (including the relatively recent 30-year right-of-way renewal) to operate the TAPS are effective in avoiding and minimizing adverse cumulative impacts from that project" (Section 4.26.5.1, third bullet) suggests all past authorized activities are negligible and, therefore, do not contribute to the ASAP Project's cumulative assessment. The Service believes avoidance and minimization measures developed for each individual project do not nullify the residual cumulative impacts of each project. Individual projects have no quantitative way of stipulating how synergic and additive impacts from future projects will influence cumulative impacts. We recommend a comprehensive analysis to determine which direct and indirect effects warrant an in-depth assessment of cumulative effects. The cumulative effects analysis, therefore, needs to take into account cumulative impacts of past actions, not just the action of interest. The Service suggests cumulative impacts should assess the baseline of the environment prior to disturbance (e.g., before the development of Prudhoe Bay), incorporating the impacts of past development through the development of the current proposed project and into the foreseeable future as defined. Prudhoe Bay development should be included in Table 4.26-3 under oil and gas as a cumulative impact to assess for all resources (e.g., soils, vegetation, wetlands, wildlife, etc.). | Section 4.26.5.1 has been revised to reflect consideration that TAPS likely contributes to cumulative effects on certain resources that may also be impacted by the proposed Project. USACE does not intend to suggest that mitigation measures and other avoidance measures nullify potential effects and this is not stated in the SEIS. A comprehensive cumulative effects analysis is provided in the SEIS following CEQ (1987) and EPA (1999) guidance as described in detail in Section 4.26.1.                                                                                                                                                                                                                                   | 4.26                   |
| EFF_24     | It is unclear whether impacts of pads used during construction have been considered temporary or permanent impacts. The revegetation Plan states that the compacted gravel areas would be ripped to mitigate compaction, graded for drainage, and scarified to allow natural revegetation. These impacts appear to be permanent and should be accounted for as such in the SEIS and in proposed mitigation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The impacts of the gravel pad and scarification/revegetation of the pad are designated as permanent impacts to wetlands.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change              |
| EFF_25     | It is not clear whether impacts due to spreading excess ditch topsoil (as described in the Revegetation Plan) are considered temporary or permanent impacts. If fill material is discharged to wetlands along the alignment, it should be considered a permanent impact unless fill is removed and impacted areas restored.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The ROW will already be permanently impacted by construction. Areas within the ROW are currently accounted for as permanent impacts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change              |
| EFF_26     | The proposed alignment will pass within close proximity to a large number of public and private drinking water sources. Additional analysis of potential effects and on-site mitigation should be considered to address this issue. The SEIS should include finer-scale maps to show areas designated as Source Water Protection Areas to help the Alaska Gasline Development Corporation with future consultations and compliance with regulations related to protecting water supply.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ADEC maintains an interactive web map on their website that displays Drinking Water Protection Areas and well/intake locations for known active public water systems. This map can be found at: <a href="http://www.arcgis.com/home/webmap/viewer.html?webmap=13ed2116e4094f9994775af9a62a1e85">http://www.arcgis.com/home/webmap/viewer.html?webmap=13ed2116e4094f9994775af9a62a1e85</a> . The SEIS Has been updated to include this reference. AGDC has indicated that they are using this map to ensure compliance with recommendations to avoid impacts to the quality of the water supplies traversed by the Project, and to ensure compliance with all applicable ADEC laws and regulations for the protection of water supplies. | Section 3.3.5.3, 3.3.6 |
| EFF_27     | It is not clear that the proposed project's direct, secondary, and cumulative impacts on aquatic resources have been adequately evaluated to support the factual determinations required by the CWA 404(b)(1) Guidelines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Project changes related to construction techniques, the relocation or elimination of infrastructure, avoidance, minimization and additional mitigation measures have occurred as a result of public comment and discussions with the Project proponent. The Army Corps of Engineers is continuing its evaluation of the Project for adherence to the CWA 404(b)(1) Guidelines.                                                                                                                                                                                                                                                                                                                                                          | No change              |
| EFF_3      | The Project would negatively impact tourism.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Comment acknowledged. Tourism is discussed in Sections 4.16 and 4.18 of the SEIS. Although the proposed Project may have some impact to tourism, they would be limited to the construction phase of the proposed Action and localized to the area of construction. The phased approach of the Project would also limit the geographic extent of the impact during a single tourism season.                                                                                                                                                                                                                                                                                                                                              | No change              |
| EFF_4      | The Project would negatively impact the community of Willow.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Comment acknowledged. AGDC met with residents at the USACE's Anchorage / Willow meeting, the Trapper Creek meeting, and again at an added Willow meeting. AGDC indicates that they have met regularly engaged with the residents of Willow at meetings and through other correspondence since 2014.                                                                                                                                                                                                                                                                                                                                                                                                                                     | No change              |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Section #s of Change                                                                   |
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| EFF_5      | The cumulative effects analysis should be revised to address potential effects in each ecoregion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Section 4.26.9.3 has been updated to include potential cumulative effects by ecoregion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4.26.9.3                                                                               |
| EFF_6      | The temporal scope for the cumulative effects analysis should be extended to include a longer period of time.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The rationale for the temporal scope is described in detail in Section 4.1 which states "While the design life and the amount of gas reserves available on the North Slope may extend beyond 30 years, the timeframe for the SEIS analysis is defined as 2018 through 2038, approximately 10 years into operation of the pipeline. Analysis beyond 2038 is considered speculative given the dynamic nature of the environment. In addition, future Project-related activities, such as permit renewals or decommissioning of the pipeline, would warrant a new evaluation under the National Environmental Policy Act (NEPA), providing an opportunity for agencies and the public to review and evaluate the proposed activities.                                                                                    | No change                                                                              |
| EFF_7      | We recommend the cumulative effects analysis compare the baseline prior to development of Prudhoe Bay with past, present and reasonably foreseeable future projects, not just the action of interest.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section 4.26.7.1 of the Draft SEIS generally describes the baseline environment on Alaska's North Slope prior to oil and gas activities beginning in the 1970s. This important context provides an understanding of how oil and gas exploration and development activities have affected this region as described in Section 4.26.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change                                                                              |
| EFF_8      | Not only would the Minto Flats Route directly damage "a unique biological resource" as a result of construction and maintenance of the pipelines and access roads within the Refuge, but the increased access to the area as a result of introducing new ROWs, where none previously existed, will also cause long-term continual degradation of the environment. USACE has stated that "increased user access along the proposed Project ROW, particularly in the Minto Flats region, would be a long-term concern and could affect subsistence uses" and that access roads required for the construction and maintenance of the pipeline in the Refuge "would add to the impact of a cleared ROW by increasing the ease of access." USACE also recognizes that concerns about "contamination, risk of fires, decreased resource availability, and increased competition ... near Minto Flats, have potential indirect implications for hunters' efforts, costs, and risks associated with having to travel to other places in search of resources or obtaining substitute foods." | The primary reason to modify the ASAP alignment in the Minto Flats area was to reduce construction and operation activities in wetlands and to avoid the associated impact to wetlands. From version 6.1 milepost (MP) 413 to 435 the alignment shifted significantly to the east to access uplands. From MP 455 to 465 the alignment did move slightly to the west. The potential impacts to Minto Flats wetlands are discussed in Section 4.9.4 of the SEIS.                                                                                                                                                                                                                                                                                                                                                        | No change                                                                              |
| EFF_9      | Figures ES-7 through ES-29 tend to generalize impacts, either positively or negatively and do not accurately reflect the actual character of a project which spans over 733 miles in length. Suggest deletion of ES-29 through ES-51, unless more resolution (additional figures at reasonable scale) is added to accurately reflect project impacts, both positive and negative.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the comments regarding context figures throughout Chapter 4 of the SEIS. The context figures are intended to summarize the Project's overall impacts at a larger scale. The figure page size has been increased to improve clarity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Executive Summary, Chapter 4                                                           |
| ENG_1      | The pipeline should be made from U.S.-made materials rather than importing materials.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the comment. The material vendors for ASAP have not yet been selected. Vendors will be selected based on compliance with Project specifications, material quality, and pricing, which will represent the best value to AGDC and the State of Alaska.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                                                                              |
| ENG_10     | A new bullet should be added after "Areas of continuous permafrost, low water table, or where the pipeline operating temperature is greater than 32°F would not be susceptible to frost heave, and therefore, no rigorous frost heave analysis would be required." Add "Areas of continuous permafrost where the pipeline operating temperature is less than 32°F would not be susceptible to thaw settlement, and therefore, no rigorous thaw settlement analysis would be required."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.2.7                                                                                  |
| ENG_11     | Several edits are needed in this sentence "Areas where the predicted curvature (from digital piggings analysis) due to frost heave for any span length exceed the allowable curvature are classified as having high heave potential and mitigation measures would be implemented during design and construction." Prior to "Areas" add: "During Operations"; Prior to "frost heave" add: "thaw settlement"; and Replace "length exceed" with: "lengths exceeding"; Delete: "during design and construction."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.2.7                                                                                  |
| ENG_12     | Several edits are needed in this sentence "Areas where the predicted curvature (from digital piggings analysis) due to frost heave for any span length remain below the allowable curvature are classified as being heave susceptible and would require ongoing monitoring. Should the measured curvature reach the intervention curvature limit over time, then mitigation measures would be implemented; and" Prior to "Areas" add: "During Operations"; Prior to "frost heave" add: "thaw settlement and"; Replace "length remain" with: "lengths remaining"; Replace "second heave" with: "movement".                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2.2.7                                                                                  |
| ENG_13     | There appears to be errors referring to CNG, which is not a product used by FNG. A larger, prototype trailer with a 13,000 gallon-capacity successfully transported LNG via the road system in 2016. In the fall of 2016, the Alaska Railroad also began test shipping LNG via rail from Anchorage to Fairbanks, where the LNG-containers would be transferred to the Fairbanks Natural Gas company storage facility (Frontiersman, 2016). Edit these sentences accordingly "A larger, prototype trailer with a 13,000 gallon-capacity successfully transported CNG via the road system in 2016. In the fall of 2016, the Alaska Railroad also began shipping CNG via rail from Anchorage to Fairbanks, where the CNG containers would be transferred to the Fairbanks Natural Gas company storage facility (Frontiersman, 2016)."                                                                                                                                                                                                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3.14.5.3                                                                               |
| ENG_14     | As of this time, strain-based design is not being utilized as a mitigation for liquefaction. Edit this sentence accordingly "Other options include utilization of strain-based design, increased pipe wall thickness, and changes to the pipeline profile (to go deeper or wider to be outside of the area of influence of lateral spreading)."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Based on further geotechnical analysis and a decision by AGDC to use thicker wall pipe, AGDC has determined that there is no need for a SBD Special Permit. In a letter from PHMSA, dated 16 January, 2018, PHMSA is no longer considering the request for a special permit understanding that the pipeline would comply with Part 192, which requires the pipeline be able to "maintain the structural integrity of the pipeline under temperature and other environmental conditions that may be anticipated: and "withstand anticipated external pressures and loads that will be imposed on the pipe after installation" to include strains imposed by permafrost and discontinuous permafrost soils. Reference to the requirement for a Special Permit for the ASAP Project have been removed from the document. | Executive Summary, Sections 2.2.5.3, 4.25.9.3, 4.25.12, 4.6.4.2, 4.7.4.2.5, and 4.25.2 |
| ENG_15     | This sentence needs modification: "Re-accessing remote portions of the pipeline to mitigate design or construction issues may not be practical and could result in long-lasting environmental consequences." This seems to editorialize, and does not take into account Alaska Gasline Development Corporation's (AGDC) primary responsibility which is pipe integrity. If a segment of pipe needs maintenance, AGDC will perform the maintenance no matter where the pipe is located along the alignment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4.6.5                                                                                  |
| ENG_16     | The assumption that the installation time required for the suspension bridge is the same as the HDD is incorrect. The suspension bridge would take substantially longer than the HDD, probably on the order of a couple of years. The impact rating for the HDD should be the same or lower than the bridge alternative. This needs to be reflected in this sentence: "This impact rating accounts for the distance to the closest residential receptor (i.e., 0.55 mile from the camp), short term duration (10-25 weeks)" and in Table 4.23-7.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The SEIS has been revised to reflect the longer duration for the suspension bridge construction and increased noise magnitudes from piling. The impact rating for the Yukon Aerial Crossing in Alternative 2 has also been revised.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4.23.5.1.3 and Table 4.23-7                                                            |
| ENG_17     | This sentence needs to be removed: "As a result, it may be possible to use thinner pipe (pending completion of strain-based design)." The pipe wall thicknesses utilized on the project are correctly stated in Section 2.2.5.2, Table 2.2-3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4.25.1                                                                                 |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Section #s of Change                 |
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| ENG_18     | This statement needs modification "However, 49 CFR 192.179 requires spacing between block valves as not more than 10.0 miles in Class 1; 7.5 miles in Class 2; 4.0 miles in Class 3; and 2.5 miles in Class 4, unless the PHMSA Administrator finds that alternative spacing would provide an equivalent level of safety." 49 CFR 192.179 as of July 25, 2017 clearly states: (a) Each transmission line, other than offshore segments, must have sectionalizing block valves spaced as follows, unless in a particular case the Administrator finds that alternative spacing would provide an equivalent level of safety: +G74 (1) Each point on the pipeline in a Class 4 location must be within 21/2 miles (4 kilometers) of a valve. (2) Each point on the pipeline in a Class 3 location must be within 4 miles (6.4 kilometers) of a valve. (3) Each point on the pipeline in a Class 2 location must be within 7 1/2 miles (12 kilometers) of a valve. (4) Each point on the pipeline in a Class 1 location must be within 10 miles (16 kilometers) of a valve. It appears the author has misinterpreted the code. Item 4 for instance would allow the valves to be spaced on 20 mile increments in a Class 1 location. | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The following text has been added to address the concern, "Block valve spacing regulations are set forth in 49 CFR 192.179, which requires that each point on a pipeline must be within 10.0 miles of a valve in Class 1 locations, within 7.5 miles of a valve in Class 2 locations, within 4.0 miles of a valve in Class 3 locations, and within 2.5 miles of a valve in Class 4 locations, unless the PHMSA Administrator finds that alternative spacing would provide an equivalent level of safety."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4.25.2 and 4.25.9.2                  |
| ENG_19     | This statement needs modification "Preliminary class locations for Alternative 1 (Proposed Action) have been developed based on the relationship of the pipeline centerline to other nearby structures and manmade features. This assessment is based on aerial photographs of the pipeline route and has not been field verified." Class location 2 and Class location 3 areas have been field verified. For remote areas of Class location 1, field verification is not required as the aerial photography has fine enough resolution to show buildings intended for human habitation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The following text has been added to address the concern, "The Class 2 and Class 3 locations have been field verified; field verification was not used for Class 1 locations as aerial photography resolution was sufficient to identify nearby structures and manmade features."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.25.2                               |
| ENG_2      | The permafrost thaw lobe in the Dietrich River Valley is a danger to the Project. The Project alignment is parallel to this area and should instead be routed way out into the floodplain to avoid the thaw lobe. The State of Alaska is moving the highway in this area soon as well.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The current alignment avoids the debris lobe near ASAP MP 196. AGDC is exploring utilizing a trenchless installation method for the pipeline in the area of the debris lobe.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No change                            |
| ENG_20     | This statement should be modified "Forest fires are not considered an instantaneous threat. Should a facility or valve location be threatened, there would likely be sufficient time to muster resources to protect the pipeline or shut down the transportation of gas until the fire risk has passed. Under Alternatives 1 and 2, portions of the pipeline would be located near a highway for access to the buried and aboveground facilities." Shutting down the pipeline may not be the safest thing for the pipeline, as the flowing gas can cool the areas where the pipe is exposed. Suggest deleting "or shut down the transportation of gas."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4.25.5.2                             |
| ENG_21     | This statement should be modified "The pipeline burial depth of at least six feet below grade in permafrost areas." Suggest using "at least 30 inches of cover", as this is more accurate.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The bullet point referenced in the comment has been updated based on AGDC's suggestion and now states, "Pipeline burial with at least 30 inches of cover in permafrost areas."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Section 4.25.8.1                     |
| ENG_22     | This statement is untrue "In comparison to the Alternative 1, Alternative 2 would require less material handling." While there would be less gravel movement, each vertical support member (VSM) would have to be shipped to the north slope. Potentially there would be more truck or barge traffic bringing in the VSMs than hauling the gravel required for Alternative 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Section 4.25.10.1                    |
| ENG_23     | The section beginning with "Aboveground Construction for First 62 Miles and Remote Location" and the general category of safety risk throughout this section is woefully inadequate at presenting the significant risk of an aboveground pipeline in Alternative 2 for MP 0-62. Regardless of remote location, the above-ground pipeline is available to be accessed directly from a nearby public highway that has no access restrictions. This section should be revised to fully account for the safety risk of an aboveground pipeline alternative.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The safety risks associated with aboveground pipelines on the North Slope of Alaska are well understood. This approach has been used successfully for many hundreds of miles of pipe. The associated risks were evaluated and rated based on the extensive use of aboveground pipelines in this setting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change                            |
| ENG_24     | To reduce wetland impacts in permafrost areas, we recommend increased consideration of vertical support members (VSMs) through the continuous permafrost region. Incorporating the use of VSMs appears to be environmentally preferable, and may be the Least Environmentally Damaging Practicable Alternative.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | AGDC has proposed additional avoidance and minimization of wetland impacts over areas of continuous permafrost by utilizing ice pads and ice roads from MP0-MP62. Information on the potential costs associated with constructing Alternative 2 in aboveground pipeline mode through the approximate length of the Arctic Coastal Plain has been added to Section 2.6.3 of the SEIS. Based on information provided by AGDC, the proposed hybrid design to elevate the pipeline MP 0 – 168 presents additional geotechnical challenges. In the area between MP 62 (the edge of the Arctic Coastal Plain) and MP 168 (approximately the base on Atigun Pass), the subsurface conditions are less uniform (i.e., a mixture of silts, sands, gravels, cobbles, boulders, and rock) than the Arctic Coastal Plan. Installing VSMs in this area would require that multiple types of specialized equipment be on location depending on conditions encountered. Based on information provided by AGDC, the extra cost to consumers associated with a completely aboveground Project is estimated at a minimum of \$670,000,000 per year. A hybrid project in which approximately 634 miles is aboveground would be approximately 10 percent less [than the completely elevated pipeline]. Additional cost information provided by AGDC is confidential. As described in Section 2.6.3, a hybrid pipeline which includes elevating the pipeline from MP 0 - 168 has been eliminated as a reasonable alternatives based on the screening criteria presented in Table 2.6-1 of the SEIS. | 2.6.3, 4.9.4.1.1                     |
| ENG_25     | VSMs and aboveground pipeline provide a safety hazard to subsistence users traveling by snowmachine, potentially resulting in human injury or mortality. This should be included in the document and noted in the scoring tables.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The following text will be added to the document: "During periods of poor visibility due to inclement weather, VSMs and aboveground pipeline could potentially pose a safety hazard to subsistence users traveling by snow machine, potentially resulting in human injury or mortality." A primary safety concern of off road travel on the North Slope is lack of landmarks to guide navigation in the flat, almost featureless terrain. The pipeline would serve as such a landmark. No change to the rating is warranted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4.25.10.2                            |
| ENG_26     | According to tables presented in Draft SEIS, many of the identified private drinking water wells in proximity to the proposed right-of-way are very shallow. Construction and operation of the pipeline could affect the quantity and/or quality of shallow drinking water sources by altering hydrology. We recommend that the applicant commit to avoiding construction in close proximity to private drinking water wells to the maximum extent practicable by making any available adjustments to trench location within the right-of-way.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | AGDC will avoid construction activities in close proximity to these wells and adjust the location of construction activities within the ROW where necessary and practicable. There are 21 identified drinking water wells within 500 feet of the pipeline route, ranging in depth from 38 feet to 420 feet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Final SEIS Appendix M, Section 4.7.3 |
| ENG_27     | Ninety-six percent of commercial and private residences along the route are within a Class I location, which requires a pipeline to be buried to a minimum of 30 inches of depth. A majority of the commercial and private residences along the Parks Highway right-of-way corridor are currently in close proximity to the Parks Highway right-of-way limit, which in most instances is 150 feet on both sides of the highway centerline. The proposed pipeline is planned to be off the running surface of the highway and remain within the highway right-of-way corridor. The distance between the highways running surface, the proposed pipeline route and commercial and private residences will be only several feet distance from pipeline to constant human activity. The safety of residents located in close proximity to the pipeline through acts of terrorism, pipe integrity, mechanical failure, arctic hazards, human error or incidental accidents are too great a risk to leave unaccounted for and are not adequately addressed in the ASAP Draft SEIS.                                                                                                                                                    | The pipeline is required to be designed, constructed, operated, and maintained in accordance with 49 CFR Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards, Part 192, which specifies depth of cover, proximity to habitat structures, and proximity to road rights of way. The ASAP will be designed, constructed, operated, and maintained in accordance with Part 192. This is addressed in Section 1.9.2.2 of the Draft SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Section #s of Change |
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| ENG_28     | While the Department recommends elevating the pipeline to prevent thermokarsting where thaw-unstable permafrost is encountered, especially on the Arctic Coastal Plain, if the proposed pipeline must be buried in soils prone to thermokarst, it should be positioned at some distance from these existing linear infrastructure as permafrost in their embankment vicinity has generally been degrading (e.g., active layer deepening, warmer permafrost temperatures). The Department also recommends maintaining an adequate distance from TAPS and its associated Fuel Gas Line for reasons of reliability and safety. These concerns are described in detail in Enclosure 2.                                                                                 | Please refer to response to ENG_24 regarding the aboveground pipeline alternative.<br><br>AGDC indicates that the proposed Project would comply with PHMSA requirements. PHMSA regulates pipeline proximity to other infrastructure, pipeline crossings and highway crossings. The ASAP, TAPS and Dalton Highway alignments are all within a utility corridor with several pinch points that minimize alignment options. Landowners have commented that use of previously disturbed areas is preferred which by design consolidates infrastructure into a smaller footprint. The ASAP alignment considers all of these factors, including the requirement to minimize wetland impacts. | No change            |
| ENG_29     | In Section 4.25, Reliability and Safety, BLM recommends evaluating the proximity of the ASAP to the Trans-Alaska Pipeline System (TAPS). Particularly at crossings, the consequences of a gas pipeline rupture pose risks to the integrity of TAPS. Incidental damage to TAPS resulting in an oil spill or combustion could lead to significant environmental and socioeconomic impacts. The BLM recommends incorporating the information and methodology contained in the recently released Resource Report No. 11 from the Alaska LNG Project to analyze the risks that the proposed Project presents to the integrity of TAPS and identify the potential measures that would mitigate those risks.                                                              | AGDC indicates that the Project would comply with all PHMSA requirements for pipeline proximity, pipeline crossings and highway crossings. The ASAP, TAPS and Dalton Highway alignments are all within a utility corridor with several pinch points that minimize alignment options. Landowners have commented that use of previously disturbed areas is preferred which by design consolidates infrastructure into a smaller footprint. AGDC also understands that the BLM grant of right-of-way and the State of Alaska right-of-way leases will contain technical stipulations that require coordination/consultation with the TAPS owners.                                         | No change            |
| ENG_3      | How fast will the pipeline be laid?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Pipe lay will typically average between 1/2 to 1 mile per day over the course of a construction season.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change            |
| ENG_30     | The Service particularly has concerns regarding the installation of new aerial infrastructure on the ACP where poor visibility conditions often exacerbate this risk. We encourage pursuing alternatives to elevated and aerial lines whenever possible or co-locating such lines with other, more visible infrastructure. If aerial lines will be required on the ACP, the Service can provide input on design and placement to minimize potential impacts to migratory birds.                                                                                                                                                                                                                                                                                    | Comment acknowledged. AGDC agrees that buried pipeline would eliminate impacts to bird strikes which would otherwise be associated with an aboveground pipeline and VSMs. Buildings and approximately one mile of smaller aboveground connecting lines from the GCF to the CGF will be required. Buildings would be lighted to provide mitigation for bird strikes on these features.                                                                                                                                                                                                                                                                                                  | No change            |
| ENG_4      | The proposed gasline should be designed to maximize safety, and minimize any actual or potential conflicting resource use and environmental quality issues.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | For most of the length that ASAP parallels TAPS, the land is managed by either the State of Alaska or BLM. The TAPS owners have a right-of-way agreement with both ADNRR and BLM. Although the agreements are not exclusive, ADNRR and BLM must consider or have a mechanism to consider existing authorized uses prior to issuing a right-of-way for ASAP. This would include existing water sources used by Alyeska. The air shed is regulated by the Alaska Department of Environmental Conservation and prior to construction, ASAP must undergo a rigorous permitting process to ensure air quality standards can be maintained.                                                  | No change            |
| ENG_5      | The AKLNG TAPS Impact Study may provide an initial design framework for ASAP to progress its project objectives while minimizing impacts to TAPS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change            |
| ENG_6      | Will there be HDD drilling in the Denali area under both Alt 1 and Alt 2?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | HDD drilling would not occur in the Denali National Park and Preserve (NPP) under Alternative 1. The Alternative 1 route does not enter the Denali NPP, that route is specific to Alternative 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change            |
| ENG_7      | Above ground portions of the pipeline should be made bullet proof.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change            |
| ENG_8      | We encourage the use of multi-customer, multi-user material sites to prevent the generation of numerous smaller material sites throughout the state.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Comment acknowledged. AGDC proposes the use of several pre-existing sites that have been used by other entities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change            |
| ENG_9      | A new bullet should be added after "Areas of continuous permafrost where the pipeline operating temperature is less than 32°F would not be susceptible to thaw settlement, and therefore, no rigorous thaw settlement analysis would be required." Add "In areas predicted during design to have thaw settlement or frost heave in excess of 0.5 percent strain for standard wall thickness pipe, the Project will add heavier wall thickness pipe and/or utilize other means to stabilize the pipe and prevent ground movement (such as thermal siphons), these areas will be identified for curvature surveillance during operations utilizing digital pigging analysis."                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2.2.7                |
| FISH_1     | The Project needs to avoid spawning seasons for select fish species.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Comment acknowledged. The ASAP Project will be required to obtain a Fish Habitat Permit from the ADF&G prior to any in-water work in fish bearing streams. In addition, the current ASAP right-of-way lease from the State of Alaska authorizes the State Pipeline Coordinator to protect spawning habitat. AGDC assumes, when finalized, the BLM grant of right-of-way will have a similar stipulation.                                                                                                                                                                                                                                                                               | No change            |
| FISH_10    | 3.7.2 Of these waterbodies, 70 support anadromous fish; Comment: There are 70 anadromous crossings for mainline and access roads, but there is also 1 impacted anadromous waterbody by material sites...so the total is 71 (as described in chapter 2 (2.2.12))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.7.2                |
| FISH_11    | 3.7.3. Amphidromous fish include Dolly Varden, Arctic char, Arctic cisco, and broad whitefish; Comment: Although Arctic char are documented as anadromous/amphidromous in other regions of North America, they are not found in this form along the pipeline corridor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.7.3                |
| FISH_12    | 3.7.6. A total of 181 fish-bearing waterbodies (70 anadromous) have been documented with approximately 50 percent of fish streams located in the Interior Region (Table 3.7-1); Comment: Again this number of anadromous streams (70) is different from that stated in chapter 2 (2.2.12)...it says there is also 1 anadromous stream impacted by a material site.                                                                                                                                                                                                                                                                                                                                                                                                 | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.7.6                |
| FISH_13    | 3.7.6.: by the pipeline and off ROW features, and document resident fish species' occurrences. The ASAP Fish Stream List provides information on the name, location, and species information for streams known to contain fish, the name and location for streams targeted by ASAP for fish sampling, life stage information for salmon, the year of site visit, and the proposed stream crossing mode.; Comment: This paragraph reads strange, consider revision.                                                                                                                                                                                                                                                                                                 | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.7.6                |
| FISH_14    | In Table 3.7-2., the text "Alaska brook lamprey: Found in Chatanika and Chena rivers near Fairbanks and the Alaska Peninsula and Kenai Peninsula. Spawn in spring and summer in shallow streams and lakes. Spend 4 years as ammocoetes (lamprey larva), then matures in the fall, and moves downstream into lakes over winter." should be edited to say "...in shallow streams and lakes" Should say "...into lake habitat ? to over winter". This species is also found in Southcentral (Mat-Su).                                                                                                                                                                                                                                                                 | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Table 3.7-2          |
| FISH_15    | In Table 3.7-2, Rainbow Smelt also occurs in Southcentral, so the Southcentral box should be checked.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Table 3.7-2          |
| FISH_16    | 3.7.6.3.1: Waterbodies on the North Slope known to support overwintering fish are considered sensitive from October through April, not November through December.; Comment: Delete "not November through December".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.7.6.3.1            |
| FISH_17    | What is the plan for identifying all the overwintering areas within the proposed project area? This would be a significant effort that, to this point, has not been pursued in any effective way. To achieve this, winter-time sampling effort will need to be applied at many crossing locations. This mitigation measure sounds good, but I have seen no evidence that the Alaska Gasline Development Corporation (AGDC) plans to pursue any effective overwintering habitat assessments. Fish and habitat assessments undertaken by AGDC in 2014 and 2015 marginally assessed the possibility of overwintering habitats at most of the stream crossings, but this was based on characteristics observable during summer months and is therefore non-conclusive. | AGDC is not attempting to characterize or identify overwintering fish habitat across Alaska and does not intend to conduct fish overwintering surveys. AGDC will work with ADF&G to summarize existing information along the TAPS corridor (from Prudhoe Bay to Livengood). ADF&G routinely issues Fish Habitat Permits for winter in-water work and in the past ADF&G has worked with permittees to create overwintering fish habitat as restoration for material sites. AGDC will work with agency biologists as each individual Fish Habitat Permit is requested.                                                                                                                   | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Section #s of Change             |
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| FISH_18    | 4.11.3: Bullet 11: Avoid constructing crossings where reds (nests of fish eggs) are present; implement standard BMPs to protect any downstream crossings.<br>Comment: Is it supposed to say, "implement standard BMPs to protect any downstream habitats"?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4.11.3 and Final SEIS Appendix M |
| FISH_19    | 4.11.4.1.6: Water Withdrawals: Last sentence 4th paragraph reads: Also in the Arctic region, spring freshet is the only time when fish can move around because of the ephemeral nature of many watercourses.<br>Comment: This sentence is misleading and unnecessary; suggest removal or revision.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4.11.4.1.6                       |
| FISH_2     | Elevated stream crossings over specific stream crossings could benefit fish species, e.g. the TAPS crossing of the Jim River.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The ASAP Project will be required to obtain a Fish Habitat Permit from ADF&G prior to any in-water work in fish bearing streams in order to minimize impacts. Section 4.11 of the SEIS assesses potential impacts to freshwater, marine, and anadromous fishes and their habitat resulting from all aspects of the proposed Project construction and operations. The crossing locations were selected by hydrologist and were based primarily on optimal hydrologic and geomorphologic conditions for pipeline integrity, while also taking into account fish habitat. In addition to elevated stream crossings, horizontal directional drilling, a trenchless crossing method would be used at several locations to avoid direct impacts to waterbodies by drilling beneath them. | No change                        |
| FISH_20    | 4.11.4.1.8.1: Stream Crossings: Last 2 sentences in paragraph 4 reads: Additionally, as a stipulation, all known overwintering fish habitat would be avoided. Overwintering fish habitat would be identified through close coordination with ADF&G, and review of existing fish distribution data.<br>Comment: This is misleading. Aside from a scattered few known sensitive overwintering habitats, there is no significant understanding of overwintering habitat distribution across Alaska. Without additional collected information, overwintering habitat locations will not be known and therefore not avoided. This statement makes it sound like overwintering habitats will be identified and avoided; Without significant additional research this will not be the case.                                                                                                                                   | AGDC is not attempting to characterize or identify overwintering fish habitat across Alaska and does not intend to conduct fish overwintering surveys. AGDC will work with ADF&G to summarize existing information along the TAPS corridor (from Prudhoe Bay to Livengood). ADF&G routinely issues Fish Habitat Permits for winter in-water work and in the past ADF&G has worked with permittees to create overwintering fish habitat as restoration for material sites. AGDC will work with agency biologists as each individual Fish Habitat Permit is requested.                                                                                                                                                                                                               | No change                        |
| FISH_3     | Based on the information provided, NMFS agrees with your EFH determination that any adverse effects will be short-term during the construction phase and practicably alleviated through proposed mitigation measures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change                        |
| FISH_4     | NMFS' primary concerns are with roadway and pipeline alignments and anadromous stream crossings. We have recommended that (1) waterway crossings be designed, constructed, and installed according to the Anadromous Salmonid Passage Facility Design (NMFS 2011), (2) bridges and culverts span waterways to not restrict adequate fish passage and to retain full access to spawning areas where streams are braided, and (3) all crossings should be based on site-specific information, such as anadromy, seasonal instream flows and peak discharge, and flood plain regime (50-year to 100-year flood events). Typically, open-bottom arch culverts, or similar designs, prove sufficient to retain substrate and maintain channel complexity for rearing and migrating fish. We recommend post-construction evaluation to ensure the crossings function as intended and to assist in designing future projects. | AGDC indicates that for culvert and bridge installation and maintenance in fish bearing streams, AGDC is required to apply to the Alaska Department of Fish and Game for a Fish Habitat Permit. ADF&G maintains specific guidance documents for these activities which are located on their website: ( <a href="http://www.adfg.alaska.gov/index.cfm?adfg=uselicense.culvertdocs">http://www.adfg.alaska.gov/index.cfm?adfg=uselicense.culvertdocs</a> ). AGDC will utilize these guidelines in the design and maintenance of stream crossing structures.                                                                                                                                                                                                                          | 4.11.3                           |
| FISH_5     | The Alaska Gasline Development Corporation has conducted many years of fish surveys to inventory the presence of fish at the time of survey. No information on life phase was collected (unless juveniles, eggs, etc.) were observed during the survey.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | This mitigation measure has been revised to "Identify all known fish streams within the proposed Project construction and operations area where soil material is expected to be suspended in water as a result of proposed pipeline activities."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4.11.3                           |
| FISH_6     | Original Phrase: Each water crossing would be individually permitted by ADF&G and all in-stream pipeline crossing construction methods would avoid the anadromous and resident fish migration and spawning time periods for in-stream work.<br>Comment: ADF&G has determined that, at times, the best time for in-stream construction work is during periods of migration.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | USACE appreciates the comment. The original text will be revised to now read, "Each water crossing of a fish stream will require a Fish Habitat Permit from the Alaska Department of Fish and Game (ADF&G)." AGDC will comply with site specific ADF&G permit stipulations designed to protect fish and fish habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4.11.3                           |
| FISH_7     | Original Phrase: A Fish Habitat Permit from ADF&G would be required for any blasting operations that occur either in or near the banks of a fish-bearing waterbody.<br>Comment: Change to: A Fish Habitat Permit may be required for any blasting operations that occur either in or near the banks of a fish-bearing waterbody as determined by AS 16 jurisdiction.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4.11.3 and Final SEIS Appendix M |
| FISH_8     | Original Phrase: ADF&G would apply Blasting Standards to both anadromous and resident fish stream crossings, where appropriate.<br>Comment: Change to: ADF&G would apply Blasting Standards stipulations to both anadromous and resident fish stream crossings permits, as required by AS 16.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4.11.3 and Final SEIS Appendix M |
| FISH_9     | 3.3.5.1 Last paragraph; Text: Many are important bird nesting habitat during the summer.<br>Comment: Given that the previous paragraphs focusing on waterbodies classified as "streams" explicitly indicate that important fish habitats are often present, this paragraph describing HPOI's is misleading in that it does not mention fish habitat. Many HPOI's are in fact important fish habitat. Of the 179 HPOI's, 40 are currently documented to support fish including 13 that support anadromous species.                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3.3.5.1                          |
| GEO_1      | The Soil and Geology Figure 4.6-1 context map is an inaccurate generalization of the whole project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | USACE appreciates the comments regarding context figures throughout Chapter 4 of the SEIS. The context figures are intended to summarize the Project's overall impacts at a larger scale at a quick glance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change                        |
| GEO_10     | 4.6.4.2. Operations and Maintenance: List of geohazards resulting from seismic events; In a thrust system, blind reverse/thrust faults (and their backthrusts) can cause significant co-seismic tilting and warping without any co-seismic surface rupture. This makes them more difficult to identify in the geomorphology and it complicates behavioral forecasts of other known faults. Suggest adding "Co-seismic tilting/warping of ground surface" (or similar) to list of geohazards.                                                                                                                                                                                                                                                                                                                                                                                                                           | Comment acknowledged. AGDC indicates that in reference to the comment pertaining to tilting/ warping of the ground surface as a result of seismic events, please refer to Final SEIS Appendix D "Identification and Evaluation of Time-Dependent Route Geohazards" Section 7.1, pg. 55. The technical analyses covering topics inclusive of surface fault rupture, tectonics, seismicity, liquefaction, landslides and mass movement (slope stability) specific to the risk of seismic activity along the proposed mainline route have been assessed through probabilistic seismic analyses, seismic liquefaction and fault displacement hazards, and slope stability and mass movement assessments.                                                                               | No change                        |
| GEO_11     | 4.6.4.2. Operations and Maintenance; "Buoyancy" is ambiguous and not explained anywhere. Suggest defining/describing this phenomenon and how it is related to seismic activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The following text has been added following the word buoyancy, "(forces that cause the pipeline to rise vertically)."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.6.5                            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section #s of Change |
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| GEO_12     | 4.6.4.3. Summary of Potential Direct and Indirect Effects of Alternative 1 on Soil and Geologic Resources: "The potential for heat to be added to the system through water flow paths is not considered in the model used to provide the predicted thaw depth."; Neglecting the potential for heat to be added to the system may give results that seriously underestimate the amount of thawing. Recognizing the limitations of the modeling, appropriate monitoring and mitigation should accommodate the potential greater extent of thawing.                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p>Comment acknowledged. AGDC has not proposed additional mitigation for this potential impact as they do not expect subsurface water flow on the ROW to be significant based on the following justification: "Fine-grained soils (silts and clays) have very low hydraulic conductivity and as such, any groundwater flow through these soils is expected to have an insignificant effect on subsurface heat transfer along typical overland terrain sections of the pipeline. Although coarse-grained soils (sands and gravel) have relatively high hydraulic conductivity, these soils are typically not ice-rich and as such are not thaw sensitive. In terrain that is generally flat with a relatively shallow active layer depth (such as terrain conditions on the North Slope), there is little to no terrain slope to drive subsurface flow. In areas where terrain is naturally sloped, surface water control measures will avoid the possibility of free flowing water at the ground surface on the ROW. Furthermore, AGDC expects that monitoring programs for pipeline integrity will provide data regarding any unexpected thaw settlements along the pipeline route."</p> <p>The following additional considerations have been raised by the Corps as disclosed in Section 4.6.4.3 of the SEIS and have been considered in the impacts analysis: Although it is true that finer grain sized soils have lower hydraulic conductivity (K), in areas of patterned ground (like much of the North Slope) the primary flow paths for supra-permafrost groundwater (SPGW) are not between individual soil particles, but along the tops of ice wedges. In that scenario, K becomes irrelevant. Although rates of SPGW flow are expected to be low, they are unlikely to be insignificant. Even a small amount of flow can have significant thermal impacts and result in new surface water bodies.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change            |
| GEO_13     | 4.6.4.3. Summary of Potential Direct and Indirect Effects of Alternative 1 on Soil and Geologic Resources; Permafrost thaw of more than 6.5 meters in interior Alaska, estimated based on thermal conductance, can cause major changes in surface water concentration and routing. It has been observed that these surface changes in the landscape can thermally erode ice wedges and form below ground conduits. These conduits cause very fast thermal erosion in the path of the water flow. These are also known as thermal erosional gullies (Fortier et al., 2007). Modeling this behavior is difficult but the risk can be reduced with monitoring of subsidence and repairing damage quickly, as per the mitigation measures proposed. Reference: Fortier, D., Allard, M., and Shur, Y., 2007, Observation of rapid drainage system development by thermal erosion of ice wedges on Bylot Island, Canadian Arctic Archipelago: Permafrost and Periglacial Processes, v. 18, no. 3, p. 229-243. | <p>Comment acknowledged. In reference to monitoring please refer to Chapter 4 Section 4.6.4.2 pg. 4-29; Final SEIS Appendix G "Identification and Evaluation of Time-Dependent Route Geohazards" Section 7.1 comment 1e, page 55; and Appendix M Part I: Applicant Proposed Design Features, Mitigation Measures and Best Management Practices.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No change            |
| GEO_14     | 4.26.9.2.1. Climate Change and Natural Occurrences: There is discussion over whether the effects of permafrost degradation would occur in the next 10 years. The damage to the energy balance of the ground and permafrost is immediate and major. The loss of ground ice is very likely to occur within 10 years. Subsidence due to the loss of ground ice could take longer to be visual due to relaxation of the soil above the damaged permafrost. However, any ground ice that is lost is likely irreversibly lost, because climate change very likely prevents the formation of new ground ice. Especially in discontinuous permafrost where ground ice is deeper, the effects of disturbance and warming on subsidence will be delayed; however, heat entering the ground is immediate and cannot be stopped. The described careful monitoring and prompt mitigation will be critical to minimizing impacts in the next 10 years and beyond.                                                     | <p>Comment acknowledged. AGDC indicates that "Changes to the energy balance at the ground surface, and subsequently to the underlying permafrost, are dependent on the degree of ground surface disturbance. On the North Slope, construction techniques intended to protect tundra terrain are expected to result in little to no damage to the tundra on the ROW except at the pipeline trench. Accordingly, the surface energy balance is not expected to be significantly altered on the ROW and no thaw settlement is expected on the North Slope ROW.</p> <p>In treed terrain in discontinuous permafrost, tree clearing on the ROW changes the surface energy balance and is expected to result in long-term progressive thaw depth deepening beneath the ROW. However, thaw deepening on the ROW does not necessarily result in thaw settlement and will depend on the excess ice content of the fine-grained soils. It is expected that the rate of thaw settlement will be greatest in the first several years after ROW tree clearing and will decrease thereafter because of the reduced rate of thaw depth penetration with time, and because of the decrease in excess ice content with depth below the active layer. Thaw settlement itself in the areas where it could occur may be of little environmental consequence as long as it does not negatively affect other environmental components such as surface water drainage or wildlife habitat."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change            |
| GEO_15     | The Service recommends reconsidering the following broad statement in Section 4.26.9.5: "Cumulative impacts to habitat associated with changes in permafrost and vegetation are therefore considered minor adverse for all alternatives." Stripping the organic layer and topsoil from the pipeline corridor may have major effects that could degrade the value, integrity, and function of soil and geologic resources where permafrost is present. Destruction of this material could cause long-term changes not likely to be reversed over a period of decades (pages 4-32 and 4-33).                                                                                                                                                                                                                                                                                                                                                                                                              | <p>Thank you for your comment. Although not currently proposed as a mitigation measures, stripping of the top layer of soil in wetland areas is required by the Corps. The SEIS has been revised to include a new subsection titled "Agency-Proposed Mitigation Measures" describing this proposed measures and the impact analysis has been updated to include a discussion of the associated impacts. The SEIS has been updated to include an assessment of impacts to wetlands, vegetation, and soils under the assumption that the top layer of soil would be segregated and replaced on the top of the excavated trench, for comparison. The Corps requires the following Special Conditions of the 404 permit:</p> <ol style="list-style-type: none"> <li>1) To prevent erosion, disturbed areas shall be stabilized immediately after construction. Revegetation of the site shall begin as soon as site conditions allow and in the same growing season as the disturbance unless climatic conditions warrant additional time. Additional time must be approved by the Corps. Native vegetation and topsoil removed from Project construction shall be stockpiled separately and used for site rehabilitation. Topsoil is defined as the upper, outermost layer of soil, usually the top two to eight inches. When backfilling, topsoil shall be placed as the uppermost layer to provide a seed bed for native species. Within 30 days from the date of completing the work authorized, the Permittee is required to conduct restoration of temporary wetland impacts to pre-existing contours, elevations, vegetation, habitat type, and hydrology.</li> <li>2) Natural drainage patterns shall be maintained using appropriate ditching, culverts, storm drain systems, and other measures to ensure hydrology is not altered.</li> <li>3) Trenches cannot be constructed or backfilled in such a manner as to drain waters of the U.S. (e.g., backfilling with extensive gravel layers, creating a French drain effect). Ditch plugs or other methods shall be used to prevent this situation.</li> <li>4) Except for material placed as minor trench over-fill or surcharge necessary to offset subsidence or compaction, all excess materials shall be removed to a non-wetland location. The backfilled trench shall achieve the original surface condition, within a year of disturbance unless climatic conditions warrant additional time and is approved by the Corps.</li> <li>5) Excavated material temporarily sidecast into wetlands shall be underlain with geotextile, ice pads, or similar material, to allow for removal of the temporary material to the maximum extent practicable.</li> <li>6) Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures (e.g. ice roads, compacted snow, low psi ground bearing weight, etc) must be taken to prevent soil disturbance.</li> <li>7) Culverts in fish bearing waters must be installed in accordance with a valid Alaska Department of Fish and Game, Fish Habitat Permit.</li> </ol> | 4.26.5.9             |
| GEO_16     | Section 3.2.5 generally omits any references to paleontological resources along the route outside of the North Slope. Specifically, no mention is made of scientifically significant resources located in the Alaska Range, such as in Denali National Park from the Cantwell Formation. The Bureau of Land Management recommends adding information about paleontological and other significant resources in the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | A general baseline description of paleontological resources is included in Section 3.2.5 and Section 4.6 of the Final SEIS has been revised to include a discussion of potential impacts to paleontological resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 4.6                  |
| GEO_17     | Thermal modeling on the North Slope for the proposed cold-temperature gasoline shows that impacts to the continuous permafrost (deep, solid blanket of frozen soil) will be localized and will occur slowly over decades. Even when climate change is factored in, the continuous permafrost will only be slightly impacted by the Project. The scoring tables and maps overinflate these negligible impacts to soils, geology and permafrost.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p>The 17 February 2017 Technical Memorandum on the subject of "Effect of Climate Warming on Expected Long-Term Thaw Depths on the ASAP Right-of-Way, Alaska Stand-Alone Pipeline Project" (Appendix M to the Final SEIS) indicates that it provides a broad scale analysis of the available thermal data and accounts for heat/cooling from the pipeline and additional thermal input from climate change. The Technical Memorandum does not appear to account for many of the changes that will take place as a more localized scale: the degraded condition of the vegetative mat, other modified surface conditions such as the potential accumulation of water, modifications to albedo, changes to soil hydraulic conductivity due to the proposed construction technique, and modifications superpermafrost groundwater flow pathways.</p> <p>Stripping of the vegetative mat and associated soil from the pipeline corridor may have major effects that could degrade the value, integrity, and function of soil and geologic resources in areas where permafrost is present. A healthy vegetative mat moderates the albedo of the surface and insulates. Destruction of this material could cause long-term changes not likely to be reversed over a period of decades. As stated by AGDC in the Environmental Evaluation Document: some sections of inundated trench may propagate permafrost thaw into the surrounding area. Rehabilitation of thawed permafrost generally requires spans of ten years and longer, and only after many decades do plant communities, ground ice conditions, and other site characteristics return to preexisting conditions (NSSI 2015). Propagation of thaw may occur directly adjacent to the pipeline or, due to the flow of supra-permafrost groundwater or surface water, at some distance to the pipeline. In areas of massive ground ice, propagation can cause a feedback loop, such that thaw and settling makes adjacent areas more susceptible to additional thaw.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section #s of Change |
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| GEO_2      | In Table 4.6-4, under Alternative 1, the characterization of Impact Ratings for Operation as "Major" is not supported by the fact that once the construction has occurred, and the ROW is stabilized, the pipeline will be an ambient temperature pipeline that will not contribute to major effects to soil and geology. The Impact Ratings should be reduced for Operations accordingly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Although AGDC plans to construct an ambient temperature pipeline, significant differences between the exterior temperature of the pipeline and the temperature of the surrounding subsurface environment would be present during the operations period. Such impacts would vary in location and time, but are expected to be most pronounced in areas of discontinuous permafrost. Pipeline temperature variability could result in the significant effects of permafrost thaw or creation of frost bulbs. In particular, impacts may occur in areas where soil temperatures and other characteristics change significantly over short distances. Such impacts may include alterations to drainage patterns and changes to the thermal regime. The impact level may be major resulting from a wide impact area and impacts that could last decades if the thermal regime is disrupted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change            |
| GEO_3      | Seismic events: Seismic events are not uncommon for west coast 48 contiguous states pipelines. Recommend deleting this bullet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4.25.4               |
| GEO_4      | The statement "The pipeline would be located in the active layer, which lies above the permafrost, and the active layer tends to thaw each year." should be edited to be more correct. It should be written "The pipeline would be located below or in the active layer, which lies above the permafrost, and the active layer tends to thaw each year."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4.25.5.2             |
| GEO_5      | The Department is concerned that the pipeline will be buried in areas of ice-rich and thaw-sensitive permafrost, and trenching may result in significant permafrost degradation that can induce stresses to the buried pipeline and divert overland flow away from traditional flow patterns. The potential accumulation of snow and water along the trench is also a great concern for exacerbating permafrost degradation. The Department continues to strongly recommend elevating the pipeline on vertical support members (VSMs) in the Arctic Tundra ecoregion and in other areas where thaw-unstable permafrost exists. The Department has concerns regarding potential impacts to ice-rich permafrost, which is typically characterized by a heterogeneous spatial distribution of ground ice. Excavating in ice-rich permafrost can expose ground ice to warmer temperatures and lead to differential thaw settlement that, in turn, induces stresses to a buried pipeline. Melting of wedge ice, which is widely present along the northern portions of the pipeline, can lead to severe differential thaw settlement and rapid linear erosion. Snow and surface water may also accumulate with time along the trench as thaw settlement progresses and further exacerbate permafrost degradation. Moreover, water may infiltrate below the buried pipeline and freeze back in winter, inducing stresses to the structure. Such thermokarsting can also damage fish and wildlife habitat. Thus, the Department recommends minimizing excavation of ice-rich permafrost and instead elevating the pipeline in these areas. | AGDC has revised the proposed project description to reduce wetland impacts over areas of continuous permafrost by utilizing ice pads and ice roads from MP0-MP62.<br><br>Based on information provided by AGDC, the proposed hybrid design to elevate the pipeline MP 0 – 168 presents additional geotechnical challenges. In the area between MP 62 (the edge of the Arctic Coastal Plain) and MP 168 (approximately the base on Atigun Pass), the subsurface conditions are less uniform (i.e., a mixture of silts, sands, gravels, cobbles, boulders, and rock) than the Arctic Coastal Plain. Installing VSMs in this area would require that multiple types of specialized equipment be on location depending on conditions encountered. Based on information provided by AGDC, the extra cost to consumers associated with a completely aboveground Project is estimated at a minimum of \$670,000,000 per year. A hybrid project in which approximately 634 miles is aboveground would be approximately 10 percent less [than the completely elevated pipeline]. Additional cost information provided by AGDC is confidential. As described in Section 2.6.3, a hybrid pipeline which includes elevating the pipeline from MP 0 -168 has been eliminated as a reasonable alternatives based on the screening criteria presented in Table 2.6-1 of the SEIS. | 2.6.3, 4.9.4.1.1     |
| GEO_6      | As discussed in the Draft SEIS, concerns arise if gas with a temperature below freezing travels in unfrozen ground and vice versa, as this may result in permafrost degradation (in frozen ground) or aggradation (in unfrozen ground) and potentially induce stresses to the pipeline. Modeling may be useful to estimate spatial distribution of frozen and unfrozen ground; however, the Department emphasizes that the permafrost-terrain-vegetation relationship is especially complex in the discontinuous permafrost areas, and changes from frozen to unfrozen soils (and vice versa) may occur on a very short distance/depth. Therefore, it is quite challenging to predict the ground thermal state, and a thorough understanding of the permafrost-terrain-vegetation relationship is critical to positioning the geotechnical boreholes at key locations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The permafrost-vegetation relationship has been modeled. An analyses of terrain units derived from geotechnical information collected from over 10,000 boreholes, Project-wide wetlands and vegetation data, and an analyses of potential indirect impacts to wetlands from the start of the pipeline to the terminus at MP733. Initial work is contained in the ASAP FEIS. Since the 2012 FEIS, additional technical reports were developed in 2016 and 2017. Analysis of potential indirect impacts to wetlands related to buried pipeline construction is provided in Appendix E Part II of the Final SEIS and identification and evaluation of time-dependent route geohazards is provided in Appendix D of the Final SEIS. Additional technical reports were developed in 2016 and 2017 as summarized in the SEIS impacts discussions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change            |
| GEO_7      | General comment on terminology: Permafrost does not melt, it thaws. Ice in permafrost can melt, but the permafrost itself is said to be thawing. Recommend replacing all instances of "melting permafrost" with "thawing permafrost."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Throughout Chapter 4 |
| GEO_8      | 4.6.4.2. Operations and Maintenance: "The proposed Project route would cross two seismic zones and five fault lines." (as well as any other instances in report); The term "fault lines" is ambiguous. Recommend changing all instances to "fault traces." A so-called "fault line" is not to be confused with a "fault-line scarp," which is an erosional remnant of a once-active fault (that juxtaposed materials of varying erosional resistance). A fault-line scarp, by definition, is inactive.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The term "fault line" has been replaced with "fault trace." The definition for fault trace has been added as a footnote, "Fault trace: The fault trace is the intersection of a fault with the ground surface; also, the line commonly plotted on geologic maps to represent a fault (USGS, 2017)."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.6.5                |
| GEO_9      | 4.6.4.2. Operations and Maintenance: "The proposed Project route would cross two seismic zones and five fault lines."; It may be worth clarifying that the proposed project crosses two seismic zones and five mapped Holocene-active fault traces. There are more unmapped faults out there, and there are others that are mapped but not Holocene active (e.g., the Healy Creek fault and the Stampede fault, active in the last 130,000 years).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Comment acknowledged. The text has been revised to clarify that "The proposed Project route would cross two seismic zones and five mapped Holocene active or potentially active fault traces (Table 4.6.3)."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4.6.4.2              |
| HAZ_1      | Cumulative Effects: It is not clear how an increase in population could lead to an increase in the potential for exposure to hazardous materials. Please explain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Comment acknowledged. The referenced text has been updated to state, "The increase in population would, however, place stress on current health services. Increasing populations within a limited geographical area could increase the number of people occupying areas in close proximity to hazardous materials, such as military installations."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.26.9.16            |
| HIA_1      | Pipelines kill caribou and Eskimo making them sick with pollution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Wildlife and subsistence resource impacts are discussed in 4.10 and 4.20 of the SEIS. Each of these sections also include a section called "Applicant-Proposed Design Features, Mitigation Measures, Best Management Practices, and Project Management Plans." These sections describe how the impacts suggested by the commenter would be minimized or prevented by AGDC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change            |
| HIA_10     | Give a definition of what poverty means in the statistics. Also, qualify this data with information on subsistence and that many communities are mixed economy and that the U.S. definition of poverty does not take the high cost of living in Alaska into account                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.17.6.2.1.2         |
| HIA_11     | The statement "Given the small sample size for the various communities, there is a large margin of error for some communities' median income estimates." is an example of a broad statement that would be useful to include at the beginning of PH section.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.17                 |
| HIA_12     | Table 3.17-7 needs a footnote for Coldfoot, Livengood, Prudhoe Bay, and Wiseman explaining why no median household income data are presented.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution. A footnote has been added.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Table 3.17-7         |
| HIA_13     | Access to health care section; More current information is available, especially specifics on MUA and HPSA populations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | USACE appreciates the comment. Table 3.17-11 (HPSAs and MUAs/MUPs for Potentially Affected Boroughs and Census Areas) has been updated to include the most current information available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Table 3.17-11        |
| HIA_14     | Data presented in several locations are not rates. Use the correct statistical terminology.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the comment. The text has been revised.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3.17.6               |
| HIA_15     | 2017 life expectancy data is now available and would be useful in this section                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | This section has been updated with information from the ADHSS Alaska Vital Statistics 2016 Annual Report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3.17.6.3.1           |
| HIA_16     | Figure 3.17-2 presents the leading five causes of death for the state of Alaska in 2014 compared with the U.S. in 2013. Table 3.17-2 title says that 2014 data are compared. This should be corrected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The title of Figure 3.17-2 has been updated to show the correct dates: "Leading Causes of Death, Alaska (2014) Compared with U.S. (2013)"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Figure 3.17-2        |
| HIA_17     | More current data should be presented for Section 3.17.6.3.1.2 and .3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Thank you for your comment. Revised data has been provided for Tables 3.17-13 through 3.17-16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3.17.6.3.1.2 and .3. |
| HIA_18     | A footnote is needed to mention the issue of small numbers potentially leading to unstable rates in Figures 3.17-3 and -4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Section #s of Change              |
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| HIA_19     | 3.17.6.3.1.3; Text: Alaska Native males have substantially lower age-adjusted cancer incidence rates than the U.S. White populations. There is an overall upward trend for both populations, but a downward trend in recent years. Comment: Clarify if these statements are significant.                                                                                                                                                                                                                                                                                                                                                                                                                                                         | These statements are significant as they provide baseline cancer incidence rates and trends for Alaska Natives and US white populations. There is potential for people from both of these categories to experience health impacts as a result of the proposed Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No change                         |
| HIA_2      | FNSB strongly supports the ASAP Project and its underlying purpose. The affordable natural gas the ASAP Project could provide the Fairbanks area is vital for the health and safety of FNSB residents. Poor air quality in the Fairbanks area is directly linked to the unavailability of affordable natural gas for heat and power generation. Providing the Fairbanks area with natural gas, which would allow conversion of residential and commercial heating systems, is estimated to reduce PM2.5 emissions from approximately 2,200 tons per year to less than 200 tons per year. Accordingly, providing affordable natural gas to the Fairbanks area is essential to eliminating the deleterious particle pollution presently occurring. | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change                         |
| HIA_20     | In Figure 3.17-13, please clarify if this is all Alaska population or AN/AI data. If this is just AN/AI data, that should also be reflected in the sentence preceding this figure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | This figure reflects all of the Alaska Native population.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change                         |
| HIA_21     | Both axes need to be labeled on the charts in Figures 3.17-18 and -20.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Figure 3.17-18 and Figure 3.17-20 |
| HIA_22     | A summary of baseline PH strengths and challenges most relevant to the project would be useful at the conclusion of this section.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | In order to determine which strengths and challenges are most relevant to the Project, the reader should be familiar with the potential Project impacts. As a result, baseline information that is most relevant to the Project is summarized and referenced in Chapter 4, Environmental Consequences based on the anticipated Project impact ratings.                                                                                                                                                                                                                                                                                                                                                                                                 | No change                         |
| HIA_23     | There is a lack of regional data (i.e. comparisons by borough) throughout this section (PH), particularly in terms of health indicators. Where possible, this level of data should be presented and discussed, especially since this project spans multiple boroughs that may have significant differences in burden for some of the health indicators.                                                                                                                                                                                                                                                                                                                                                                                          | The document has been revised to acknowledge that statewide data was used in place of regional data when regional or local data was not available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.21.1.1                          |
| HIA_24     | In Table 4.21-1, under accidents and injuries, increased rail/truck use should be included in the operations and management column. While less than in the construction phase, shipping of equipment/people will still be needed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Table 4.21-1                      |
| HIA_25     | Table 4.21-1 disagrees with statement in the Operations and Maintenance (O&M) column for infectious disease. This received a moderate impact rating and is discussed in section 4.21.4.2.6. Suggest comparing the table with subsequent sections to ensure consistency.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Table 4.21-1                      |
| HIA_26     | Table 4.21-1 is inconsistent with water and sanitation access. Is an increase in access expected, or is it better characterized as a 'change'? Use consistent descriptor in each column.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The first column of Table 4.21-1 has been revised to state "Change in potable water access" and "Change in demand on water and sanitation infrastructure."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Table 4.21-1                      |
| HIA_27     | Impact ratings should be focused on actual health outcomes/indicators rather than a collective and vague ranking of each HEC. Not all impacts within an HEC will always have the same rating.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Health outcomes/indicators that may be impacted by the proposed Project are summarized in Table 4.21-1. A detailed description of impacts related to these health outcomes/indicators is provided in the document text. The text also describes the reasoning for determining the overall impact ranking for the HEC based on the applicable health outcomes/indicators and the impacts criteria. The overall impact categories are intended to summarize this information and provide a more generalized impact rating for each HEC.                                                                                                                                                                                                                  | No change                         |
| HIA_28     | Entire rating sections; There is a lack of regional data discussed throughout these sections. Where possible, this level of data should be presented and discussed (i.e., the issue of greater subsistence impacts in Minto and Nenana), especially since this project spans multiple boroughs that may have significant differences in degree of burden for some of the potential health impacts (or even HEC ratings, in the case of this chapter)                                                                                                                                                                                                                                                                                             | The document has been revised to acknowledge that statewide data was used in place of regional data when regional or local data was not available.<br><br>Section 4.21.4.1.4 acknowledges that "The impact would likely be major in three communities, moderate in 10 communities, and minor in 16 communities (Table 4.20-6). The impact of construction on subsistence activities was ranked the highest in the communities of Wiseman, Coldfoot, and Minto (Table 4.20-4)."<br><br>The differences in degree of burden for some of the potential health impacts or HEC ratings are captured in the text. The overall impact categories (HECs) are intended to summarize this information and provide a more generalized impact rating for each HEC. | 4.21.1.1                          |
| HIA_29     | It is not clear what is meant by "could potentially result in human exposure to hazardous materials" in this public health section. The air quality section provided a clear detailed overview of the potential for impacts due to air emissions, but this general statement could be interpreted to imply that the current regulations are not protective of human health. Please summarize the air quality conclusion from elsewhere instead of using this sentence.                                                                                                                                                                                                                                                                           | Thank you for your comment. This statement has been revised accordingly: "Although air quality concentrations would be regulated by NAAQS regulatory thresholds, air quality could be degraded and pollutant concentrations could approach HAPs criteria pollutant thresholds."                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4.26.9.16                         |
| HIA_3      | Hazardous air pollutants (HAPs) from oil and gas activities on the north slope impact arctic residents east and west of the facilities. HAPs put our children and elders at risk of developing respiratory illnesses and life-long diseases. HAPs make the animals sick. HAPs increase acids in the atmosphere. The toxic emissions slowly make changes to the land and water, which changes people, animals, and their habitats.                                                                                                                                                                                                                                                                                                                | Thank you for your comment. Section 4.22 and 4.26.9.16 of the SEIS acknowledge that air quality could be degraded and pollutant concentrations could approach HAPs criteria pollutant thresholds.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4.26.9.16                         |
| HIA_4      | Table 3.17-3 lists the population for each PAC from north to south and the percentage of each population comprised of American Indian or Alaska Native descent.; Comment: Suggest mentioning why this statistic is included (E.J.).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Thank you for your suggestion. The text has been revised to state: "Table 3.17-3 includes the percent of the population that is Alaska Native. This information is useful to identify whether a proposed action would have a disproportionately high adverse impact on low-income populations, minority populations or Indian tribes due to a proposed action."                                                                                                                                                                                                                                                                                                                                                                                        | Table 3.17-3                      |
| HIA_5      | 3.17.5; Text: The previously discussed community profiles have not changed since the 2012 FEIS and are therefore not presented in this SEIS.; Comment: Include a word such as substantially. The communities have changed, just not much (according to this chapter).                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.17.5                            |
| HIA_6      | 3.17.6.1; Text: HECs that were rated with "medium" or "high" potential effect by the proposed Project in the 2012 FEIS are discussed in this SEIS in the sections provided in Table 3.17-4.; Comment: Disagree with this approach. Just because something was rated 'low' in the 2012 FEIS doesn't mean the same applies to a newly included community. Additionally, the baseline information still needs to be discussed in relation to the project changes necessitating this SEIS. Additionally, not all communities were in this 2012 assessment, so data for these communities should be included.                                                                                                                                         | The following sections have been added to Chapter 3: 3.17.6.3.2.3, Exposure to Hazardous Materials; Section 3.17.6.3.2.4, Water and Sanitation; and 3.17.6.3.2.5, Health Services Infrastructure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.17.6.3.2                        |
| HIA_7      | 3.17.6.1; Text: These HECs were therefore discussed only in limited detail, if at all, in this SEIS Affected Environment section: -Exposure to Hazardous Materials -Water and Sanitation -Health Services Infrastructure and Capacity; Comment: This baseline information still needs to be discussed in relation to the project changes necessitating this SEIS. Additionally, not all communities were in this 2012 assessment, so data for these communities should be included.                                                                                                                                                                                                                                                              | The following sections have been added to Chapter 3: 3.17.6.3.2.3, Exposure to Hazardous Materials; Section 3.17.6.3.2.4, Water and Sanitation; and 3.17.6.3.2.5, Health Services Infrastructure. Section 4.21.1.1 has been revised to acknowledge that statewide data was used in place of regional or local data was not available.                                                                                                                                                                                                                                                                                                                                                                                                                  | 3.17.6.3.2, 4.21.1.1              |
| HIA_8      | At some point early on in the PH section, there needs to be a mention of small numbers leading to potentially unstable/misleading rates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The following text has been added to Section 3.17.1 of the Final SEIS "Please note that in many instances throughout this section, data and rates have been calculated using small sample sizes for various communities, which may display a large margin of error or an unstable or misleading representation of results."                                                                                                                                                                                                                                                                                                                                                                                                                            | 3.17.1                            |
| HIA_9      | For the 2014 data presented, the poverty threshold for Alaska for a family of four was approximately \$30,000 (U.S. Department of Health and Human Services, 2016). This is higher than the 2014 poverty threshold of the 48 contiguous states of \$24,000. Comment: Suggest mentioning why the state poverty threshold is higher                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3.17.6.2.1.2                      |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section #s of Change                             |
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| INA_1      | A research study should be implemented to determine the natural gas pipeline impacts on customary and traditional use of wild game.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The effects on customary and traditional use of wild game is discussed throughout the SEIS in wildlife and subsistence chapters and throughout the FEIS. The subsistence section for the ASAP SEIS was developed based on existing information. In the Final SEIS, see Environmental Consequences Section 4.10 and 4.20; Affected Environment Section 3.6 and 3.16; and Analysis of Subsistence Impacts Appendix P.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No change                                        |
| INA_10     | The Draft SEIS states that impacts to Minto Flats have been minimized due to realignment; however, the alignment presented in Appendix E appears to have shifted further into Minto Flats. The Final SEIS should include more information about how impacts to Minto Flats have been reduced.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Comment acknowledged. The primary reason to modify the ASAP alignment in the Minto Flats area was to reduce impacts to wetlands and streams. From version 6.1 milepost (MP) 413 to 435 the alignment shifted to the east to access uplands. From MP 455 to 465 the alignment shifted to the west.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No change                                        |
| INA_11     | Based on our review and evaluation of the adequacy of the information and the potential environmental impacts of the action alternatives, the U.S. Environmental Protection Agency (EPA) is rating the Draft SEIS as Environmental Objections -Insufficient Information (EO-2). The EO rating indicates that the EPA review has identified significant environmental impacts to wetlands that should be avoided, as well as a need to consider additional means to mitigate those impacts, in order to adequately protect the environment. The "2" rating indicates that the EPA has identified additional information, data, analyses, or discussion as outlined in the enclosed comments that we recommend for inclusion in the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Since publication of the Draft SEIS, USACE has incorporated additional information provided by the Project proponent as well as other relevant scientific literature as necessary to address the most critical impacts associated with the proposed action.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Chapter 4                                        |
| INA_12     | The Public Notice on the proposed ASAP project did not include information required by both the EPA's and the Corps' regulations on how impacts associated with the proposed activity are to be avoided, minimized, and compensated for.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The public notices published in the Federal Register (FR) (79 FR 44758, 82 FR 29859 and 82 FR 39424) announced the USACE's intent to prepare the SEIS as well as the public comment period, respectively. These notices follow NEPA requirements for public notification. Proposed avoidance, minimization and mitigation measures are included in detail in the SEIS as required under NEPA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change                                        |
| INA_13     | The EPA also has a number of concerns regarding the adequacy of the proposed compensatory mitigation. In this case, because of the lack of information in the Draft CMP regarding the direct, secondary, and cumulative impacts of the proposed discharges on approximately 99 percent of the potentially affected wetland acreage discussed above, sufficient information does not exist to determine if additional compensation would be required to avoid causing or contributing to significant degradation. For the same reason, sufficient information does not exist to determine if there are appropriate and practicable compensation measures that would be required by the Guidelines to address some or all of the remaining approximately 8,802 acres of wetland impacts where compensation is not currently proposed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | AGDC has indicated that "the potential for indirect impacts to wetlands are noted in the Draft SEIS and in 'Analysis of Potential Indirect Impacts to Wetlands Related to Buried Pipeline Construction; ASAP-22-RTA-ENV-DOC-00002; March 10, 2017' (Appendix E of the Final SEIS). Degradation of permafrost (after 30 years) will not be uniform, but will not necessarily result in an impact to wetlands or wetlands function.<br><br>The adequacy of the proposed compensatory mitigation is under review by the Corps. Changes in the Project footprint, additional avoidance and minimization measures, watershed and wetland functions and a determination of the LEDEPA assist the Corps in assessing the need for compensatory mitigation and the types of habitat-specific functional loss which may occur. These variables result in changes to permanent and temporary impacts to streams and wetland acreages. Additional changes within the Project footprint have occurred since the Draft SEIS publication, as a result of public and agency comments. The USACE will evaluate the suitability of the Project proponent's proposed compensatory mitigation based upon the content of the Compensatory Mitigation Plan, as well as, consider incorporating additional General and Regional conditions appropriate for use when evaluating potential DA authorizations which establish standard best management practices and revegetation standards.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No change                                        |
| INA_14     | The negative impact of continual shade from 62 miles of aboveground large-diameter pipe and large diameter vertical support members (VSMs) on wetlands where long days occur is not adequately discussed or scored.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | This potential impact has been added to the Final SEIS Section 4.9.4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section 4.9.5                                    |
| INA_2      | The SEIS has almost no information on how the pipeline affects the communities it could cross through or the private property and homes the route proposes to clear a 125' wide swath of forest through. In effect the pipeline corridor with create a 125' wide snowmobile and ATV trail from the north end of Trapper Creek to the south end for over 20 miles and yet no mention of the impact of such a reality will have on the community and it's residents. This holds true for all the communities of the entire route. How will clearing this heavily forested community like Trapper Creek affect the residents and visitors of those communities. How will it change the wildlife movements, recreational uses, impacts of off road vehicles on wetlands and stream crossings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | USACE recognizes that construction of a new pipeline ROW and new access roads may allow new users to access previously inaccessible areas with ATVs and other vehicles. The impact of the new ROW to subsistence use is discussed in Section 4.20.4.2.1.3 of the SEIS. Impacts of the new ROW to wildlife is discussed in Section 4.10.4.1.4. Impacts of the new gravel access roads to wetland access is discussed in Section 4.9.4.1.1.1 and clearing of the new ROW is discussed in Section 4.9.4.1.1.2, additional text has been added here. Additional text has been added to the forestland portion of the land use section, Section 4.15.4.1.3. Additional text has been added to the operations and maintenance portion of the recreation section, Section 4.16.4.2 and Section 4.7.4.2.4, Surface Water Quality.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4.7.4.2.4, 4.9.4.1.1.2, 4.15.4.1.3, and 4.16.4.2 |
| INA_3      | The SEIS is lacking caribou migration studies and information on lichen, caribou's main food source. Studies need to be completed on these to show that there would be no impact when the Project development starts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Potential impacts to caribou migration are described in Section 4.10.4.1.4 of the Final SEIS. The potential impacts to vegetation associated with the pipeline are included in Section 4.8 and 4.9.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No change                                        |
| INA_4      | There needs to be more health assessment in specific communities (i.e. Nuiqsut) because the oil companies don't report the results of their health assessments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates the comment. Potentially affected communities are described in Section 3.17.5 and Section 4.21 of the SEIS. As described in the SEIS, incorporated cities and unincorporated places with boundaries that would be intersected by the proposed Project ROW were defined as the communities that might experience potential health effects. Communities that do not fit this description were not included in as potentially affected communities. The general assessment methodology is included in Section 3.17.4, Table 3.17-2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change                                        |
| INA_5      | Further study should involve the physical and quality of life impacts of the newly disclosed access roads and material sites. Specifically, the material sites in the Valley are immediately adjacent to the rivers and major recreational and wildlife opportunities in the Valley. Several of them immediately border navigable rivers utilized by tens of thousands of recreational and tourist related visitors each year. The major access road from Glitter Gulch to the McKinley Village area itself roughly doubles the affected area from MP 539 to MP 541, and terminates in a residential district in which commercial development is prohibited and the Denali Borough Subarea Use Plan has imposed the objective to minimize vehicular traffic on the roads within the subdivision in order to maintain a quiet and pedestrian-friendly neighborhood. The location and scope of this access was incomplete and misleading in the original FEIS process. Further, the discussion in Section 5.9 of the FEIS, on Land Use, was inadequate in that it misrepresented the land status and ignored the subarea plan for Village View Subdivision.                                                                                                                                                                                                                 | Potential impacts associated with access roads are presented for resources including land use, recreation, socioeconomics, and public health (Sections 4.15 - 4.18, and 4.21). Specifically, the effects on land use (Section 4.15) have been significantly revised since publication of the 2012 FEIS to which this comment refers. F80omment repeats specific comments on the 2012 FEIS which this comment refers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                                        |
| INA_6      | Engineering analyses and the technical environmental information associated with a buried pipeline, supplied by the Alaska Gasline Development Corporation (AGDC), was absent from the body, analysis, and conclusion of the Draft SEIS. This information should appear as major discussion points in the body of the document and should be reflected in the overall analysis, scoring, and conclusions. Also, the impact analysis and conclusion for the belowground pipeline mode appears subjective, as does the conclusion concerning wetland habitat fragmentation from belowground pipeline construction. Eliminate subjective statements/conclusions regarding the impacts of a belowground pipeline not based on technical analyses. Also, provide a more realistic discussion of impacts to habitat function using statements that address the magnitude of the direct impact acreage in relation to total acreage of similar habitat available; acknowledge disturbed and revegetated areas in the belowground mode would ultimately return to wetland; acknowledge all meaningful, long-term impacts to wildlife, wetlands, and watersheds during the different project phases for both modes; and state whether the proposed burial practices and methodology would be effective in mitigating impacts based on the technical information AGDC has provided. | The introduction to Chapter 2 of the Draft SEIS specifically lists technical documents provided by AGDC that present detailed information on the pipeline design, proposed mitigation measures and associated environmental impacts. Specific citations of these references are included throughout the Draft SEIS and many are included as appendices for readers to easily access and review. The Council on Environmental Quality's (CEQ) 1981 Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, (CEQ March 23, 1981, <a href="http://ceq.eh.doe.gov/nepa/regs/40/20-29.HTM">http://ceq.eh.doe.gov/nepa/regs/40/20-29.HTM</a> , #25) specifically state: "Lengthy technical discussions of modeling methodology, baseline studies, or other work are best reserved for the appendix. If only technically trained individuals are likely to understand a particular discussion, then it should go in the appendix, and a plain language summary of the analysis and conclusions of that technical discussion should go in the text of the EIS". Following this guidance, the Draft SEIS includes four technical appendices specifically related to engineering and technical environmental information including: Appendix A Part I Rationale for Strain-Based Design and Part II The ASAP Belowground Pipeline Mode: Selection, Construction, Operation, and Maintenance on Alaska's North Slope; G ASAP Identification and Evaluation of Time-Dependent Route Geohazards; H Part I Revegetation Plan and Part II Indirect Impacts to Wetlands Related to Buried Pipeline Construction, and; V Part I Applicant Proposed Design Features, Mitigation Measures and Best Management Practices and Part II Rationale for ASAP Pipeline Route Refinement. Each of these documents are referenced in Section 4.6, which presents an evaluation of potential impacts of the alternatives on soils and geology. Section 4.6.3 summarizes AGDC's proposed mitigation measures specific to soils and geology and explains how they were considered in the evaluation of impacts. Information and specific citations from these technical documents as well as the ASAP EED are cited throughout Section 4.6 as well as other sections of Chapter 4. Information provided by AGDC is considered along with other best available scientific literature to evaluate the potential impacts of the alternatives on resources within the Project Area. | No change                                        |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Section #s of Change           |
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| INA_7      | The potential impacts associated with the aboveground pipeline mode for the first 62 miles were not given proper weight in the impact analysis. Specifically, the Bureau of Land Management (BLM) concluded in the Alaska National Interest Lands Conservation Act Section 810 preliminary analysis that changes in caribou migration and behavior due to habitat fragmentation caused by an aboveground pipeline may have a significant impact to local subsistence users. The text, analysis, scoring, and conclusions of the Draft SEIS should take into account these statements from the BLM, as well as those of other cooperating agencies, such as the Alaska Department of Natural Resources State Pipeline Coordinator's Office. The Draft SEIS should weigh these comments accordingly and in fairness with statements from other agencies.                                                                                                                                      | The following sections have been added to Chapter 3: 3.17.6.3.2.3, Exposure to Hazardous Materials; Section 3.17.6.3.2.4, Water and Sanitation; and 3.17.6.3.2.5, Health Services Infrastructure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3.17.6.3.2                     |
| INA_8      | The SEIS evaluated the belowground pipeline mode on the Arctic Coastal Plain (note that the first seven miles of pipeline were in the aboveground mode for the 2012 evaluation). The 2011 U.S. Fish and Wildlife Service Biological Opinion, which was included as an attachment to the ASAP Final EIS in 2012, did not oppose the design and construction of a belowground pipeline on the North Slope to MP 62. The Alaska Gasline Development Corporation feels this issue was settled in 2012 and there is no new information that alters the original Biological Opinion. To summarize, three separate National Environmental Protection Act (NEPA) analyses over the last 3 decades have all concluded that belowground gas pipeline construction was the preferred mode or alternative. It is important that the NEPA precedent for a belowground natural gas pipeline on the North Slope is described and acknowledged in the Final SEIS. The Draft SEIS is silent on these issues. | While the Biological Opinion from 2011 may provide useful background information, the agencies (NMFS and USFWS) will develop new Biological Opinions with conclusions based on the updated Project design and the best available, recent scientific data since the 2012 Final EIS was published.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change                      |
| INA_9      | The Final SEIS should include an analysis of the change in the amount and type of wetlands impacted by the current design compared to the previous design published in the 2012 FEIS. The Draft SEIS does not include sufficient information to evaluate the full extent to which wetlands impacts have been avoided and minimized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Potential impacts to wetlands and Waters of the U.S. are discussed in detail in Sections 4.9.4 (Alternative 1 - Proposed Action), 4.9.5 (Alternative 2 - Denali Route Variation) and 4.9.6 (Alternative 3 - No Action). Impacts to wetlands are also summarized in Chapter 4 Table 4.9-11 and Table ES-1 of the Executive Summary. The discussions found in each of these sections include the following impacts: the number of acres impacted, percentage of impacts by wetland type, clearing, soil compaction and erosion, dust deposition and introduction of non-native plants. The 2012 Final EIS did not include an evaluation of ancillary facilities such as access roads, work camps, pads and staging areas. Therefore, to compare the 2012 Final EIS to the existing evaluation of impacts on wetlands based on the proposed Action and alternatives would not be meaningful. The 2016 Draft SEIS provides a more thorough, quantitative and qualitative assessment of potential impacts to wetlands sufficient to compare alternatives and provide decision-makers information for choosing a preferred alternative.                                                                                                                                                                                                                                                                                                                                                                                       | No change                      |
| LNG_1      | Comment opposing the LNG project because the State of Alaska cannot afford it and there would be no profit gained from the project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the comment. We believe your comment is targeted to the Alaska LNG Project, which is an LNG export project. The ASAP Project does not include an LNG component and is intended to provide stable and long-term supply of natural gas for in-state use at the lowest possible cost.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change                      |
| LNG_2      | The Project should move the alignment to the east side of the Parks Highway at MP 131 because the Alaska LNG project was able to move their alignment at this location.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the comment. The alignment for ASAP will be moved to the proposed AKLNG alignment approximately between ASAP MP 646 and MP 655.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change                      |
| LNG_3      | The State of Alaska is at this time also proposing a LNG gas pipeline along the same route as the ASAP pipeline that is also proposing a takeoff for the Fairbanks and Anchorage communities as well as possible take offs for other communities along the route. The State is wasting valuable resources in pursuing both pipelines simultaneously, which is directly harming the citizens and ultimately the environment of Alaska.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Comment acknowledged. The ASAP Project is being pursued at the direction of the Alaska Legislature. AGDC has a Board of Directors, appointed by the Governor, which is comprised of Alaskans that oversee the ASAP Project to ensure that the mandates of the Legislature are being fulfilled. AGDC indicates that the ASAP Project has been referred to as "Plan B" because, from an economic perspective, the larger Alaska LNG Project would deliver gas at a lower cost per unit due to the higher throughput volume. The Alaska LNG Project is preferred by the State, but if it is unable to move forward, ASAP provides a viable method to commercialize North Slope natural gas through in-state delivery. The costs to existing natural gas users in the Fairbanks area are expected to be less than the current LNG truck delivered price to encourage expanded distribution in the area. The costs to existing Southcentral users may be slightly higher than current costs, however, the ASAP pipeline would improve the long-term reliability of supply that Cook Inlet natural gas cannot provide. Additionally, AGDC indicates that the ASAP Project would be expected to provide a significant boost to the state economy and many of the communities along the corridor. The ASAP Project is solely funded by the State of Alaska. The Alaska Legislature controls the AGDC budget through the appropriation process and will make decisions concerning the Project in the best interest of the State. | No change                      |
| LNG_4      | Cumulative Effects: "If the Alaska LNG project progresses through the construction, the potential vessel traffic associated with delivery of equipment and modules to West Dock could be moderate given the number of barges required for the anticipated larger facility though the details associated with this aspect of the project are still being evaluated" It is not clear why this statement was included in an EIS document for the ASAP pipeline. If the Alaska LNG project comes to fruition, it has been noted that the ASAP project would not happen. Conversely if the ASAP project proceeds to the permitting stage, it would be obvious that the Alaska LNG project would not come to fruition.                                                                                                                                                                                                                                                                            | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.26.9.19                      |
| LNG_5      | Cumulative Effects: "Under Alternative 3, the cumulative impacts of increased vessel traffic associated with increased shipping or barge traffic associated with the Alaska LNG project as well as construction associated with the Seward Terminal Expansion project could result in negligible to moderate cumulative impacts on navigation although changes in specific details of proposed activities have to be re-evaluated once those details are available". It is not clear why this statement was included in an EIS document for the ASAP pipeline. If the Alaska LNG project comes to fruition, it has been noted that the ASAP project would not happen. Conversely if the ASAP project proceeds to the permitting stage, it would be obvious that the Alaska LNG project would not come to fruition.                                                                                                                                                                          | We agree that given the magnitude of both projects to deliver natural gas from the North Slope to Southcentral Alaska, it is unlikely both the AKLNG and ASAP Projects would be built. Section 4.26.9 of the Draft SEIS explains that under the No Action Alternative, it is recognized the AK LNG Project could proceed through the EIS and FERC permitting processes. Section 4.26.9.1.9 has been revised to clarify this assumption.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.26.9.19                      |
| MIT_1      | Parking and trail access will need to be replaced for the old gravel pit parking area and access points such as near MP 645.5 (there are two, one at Parks Highway mile 127 and one at mile 126.5). The Project needs to meet with local users to develop mitigating measures that are acceptable to the local users and are sufficient to protect the existing land and trail use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Comment acknowledged, please see response for comment ALT_9. The abandoned gravel pit at approximately ASAP MP 645 is a proposed camp location. AGDC intends to work with the landowner to arrive at a suitable agreement and stipulations for land access.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change                      |
| MIT_10     | To substantially reduce collision risk to migratory birds from lighting, communication towers, and power lines associated with the proposed project, we recommend including specific BMPs recommended by the agency (see Submission 053).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Comment noted. AGDC has reviewed the USFWS suggested BMPs and agree to include the following:<br>1) remove or turn off lights as they become spatially or temporally unnecessary;<br>2) minimize external lights, except as needed for safety;<br>3) where possible, avoid pointing downcast or down-shielded lights towards reflective surfaces, excluding snow and ice;<br>4) install blackout shades on outward-facing windows at night when migratory birds are present (e.g., May through October on the Arctic Coastal Plain);<br>5) when guy wires are necessary, mark each wire for its full length, using daytime markers that stand out against the wire and the environment. Not all markers are designed for use in extreme conditions, such as those encountered in the Arctic. Markers would be regularly maintained for the life of the Project.<br>AGDC also reviewed USFWS suggested changes to the existing BMPs and agree to the changes to BMP 12. While AGDC has not changed BMP 9, many of the USFWS suggestions can be accomplished by inclusion in the contractor execution plans.                                                                                                                                                                                                                                                                                                                                                                                                              | Final SEIS Appendix M and 4.10 |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Section #s of Change             |
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| MIT_11     | We suggest salvaging the uppermost portion of the organic layer in the soil profile containing seeds, plant propagules, roots, organic matter, and soil microbes.                                                                                                                                                                                                                                                                                                                                                                 | <p>Thank you for your comment. Although not currently proposed as a mitigation measures, stripping of the top layer of soil in wetland areas is required by the Corps. The SEIS has been revised to include Section 4.5.2 describing the proposed measures and the impact analysis has been updated to include a discussion of the associated impacts. The SEIS has also been updated to include an assessment of impacts to wetlands, vegetation, and soils under the assumption that the top layer of soil would be segregated and replaced on the top of the excavated trench, for comparison. The Corps requires the following Special Conditions of the 404 permit:</p> <ol style="list-style-type: none"> <li>1) To prevent erosion, disturbed areas shall be stabilized immediately after construction. Revegetation of the site shall begin as soon as site conditions allow and in the same growing season as the disturbance unless climatic conditions warrant additional time. Additional time must be approved by the Corps. Native vegetation and topsoil removed from Project construction shall be stockpiled separately and used for site rehabilitation. Topsoil is defined as the upper, outermost layer of soil, usually the top two to eight inches. When backfilling, topsoil shall be placed as the uppermost layer to provide a seed bed for native species. Within 30 days from the date of completing the work authorized, the Permittee is required to conduct restoration of temporary wetland impacts to pre-existing contours, elevations, vegetation, habitat type, and hydrology.</li> <li>2) Natural drainage patterns shall be maintained using appropriate ditching, culverts, storm drain systems, and other measures to ensure hydrology is not altered.</li> <li>3) Trenches cannot be constructed or backfilled in such a manner as to drain waters of the U.S. (e.g., backfilling with extensive gravel layers, creating a French drain effect). Ditch plugs or other methods shall be used to prevent this situation.</li> <li>4) Except for material placed as minor trench over-fill or surcharge necessary to offset subsidence or compaction, all excess materials shall be removed to a non-wetland location. The backfilled trench shall achieve the original surface condition, within a year of disturbance unless climatic conditions warrant additional time and is approved by the Corps.</li> <li>5) Excavated material temporarily sidecast into wetlands shall be underlain with geotextile, ice pads, or similar material, to allow for removal of the temporary material to the maximum extent practicable.</li> <li>6) Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures (e.g. ice roads, compacted snow, low psi ground bearing weight, etc) must be taken to prevent soil disturbance.</li> <li>7) Culverts in fish bearing waters must be installed in accordance with a valid Alaska Department of Fish and Game, Fish Habitat Permit.</li> </ol> | 4.5.2                            |
| MIT_12     | Revegetation, as proposed in this situation, likely will be an unreliable technique for aiding in long-term protection against thermal erosion and subsequent subsidence.                                                                                                                                                                                                                                                                                                                                                         | <p>Thank you for your comment. Although not currently proposed as a mitigation measures, stripping of the top layer of soil in wetland areas is required by the Corps. The SEIS has been revised to include Sections 4.5.2 describing proposed measures and the impact analysis has been updated to include a discussion of the associated impacts. The SEIS has also been updated to include an assessment of impacts to wetlands, vegetation, and soils under the assumption that the top layer of soil would be segregated and replaced on the top of the excavated trench, for comparison. The Corps requires the following Special Conditions of the 404 permit:</p> <ol style="list-style-type: none"> <li>1) To prevent erosion, disturbed areas shall be stabilized immediately after construction. Revegetation of the site shall begin as soon as site conditions allow and in the same growing season as the disturbance unless climatic conditions warrant additional time. Additional time must be approved by the Corps. Native vegetation and topsoil removed from Project construction shall be stockpiled separately and used for site rehabilitation. Topsoil is defined as the upper, outermost layer of soil, usually the top two to eight inches. When backfilling, topsoil shall be placed as the uppermost layer to provide a seed bed for native species. Within 30 days from the date of completing the work authorized, the Permittee is required to conduct restoration of temporary wetland impacts to pre-existing contours, elevations, vegetation, habitat type, and hydrology.</li> <li>2) Natural drainage patterns shall be maintained using appropriate ditching, culverts, storm drain systems, and other measures to ensure hydrology is not altered.</li> <li>3) Trenches cannot be constructed or backfilled in such a manner as to drain waters of the U.S. (e.g., backfilling with extensive gravel layers, creating a French drain effect). Ditch plugs or other methods shall be used to prevent this situation.</li> <li>4) Except for material placed as minor trench over-fill or surcharge necessary to offset subsidence or compaction, all excess materials shall be removed to a non-wetland location. The backfilled trench shall achieve the original surface condition, within a year of disturbance unless climatic conditions warrant additional time and is approved by the Corps.</li> <li>5) Excavated material temporarily sidecast into wetlands shall be underlain with geotextile, ice pads, or similar material, to allow for removal of the temporary material to the maximum extent practicable.</li> <li>6) Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures (e.g. ice roads, compacted snow, low psi ground bearing weight, etc) must be taken to prevent soil disturbance.</li> <li>7) Culverts in fish bearing waters must be installed in accordance with a valid Alaska Department of Fish and Game, Fish Habitat Permit.</li> </ol>    | 4.5.2                            |
| MIT_13     | We recommend using a generally accepted timeline of five years for achieving 70% coverage in the Intermontaine Boreal and Alaska Range Transition ecoregions. Because revegetation in the Arctic Tundra ecoregion can take a substantial amount of time, we recommend reconsidering the timeline performance standards for this ecoregion.                                                                                                                                                                                        | Comment acknowledged. AGDC indicates "AGDC will work with landowners to revegetate the appropriate or required amount of cover. The ADNRR Plant Materials Center suggests the reclamation standard of at least 30 percent vegetative cover over a three-year period would be an interim action level criterion, which would indicate to ASAP whether additional revegetation action would need to be taken to ensure that a viable vegetative cover is established and that natural succession of plant species would continue, unless documented adjacent reference site conditions show a lesser percent cover for the surrounding area. Remedial action could include seeding or reseeding an area, additional application of soil amendments, and/or incorporation of additional growth media on a particular site. ASAP would be responsible for determining the cause and resolution of the substandard revegetation cover, and if appropriate, to seek approval for an adaptive management solution. The cover standard should be achieved without the use of fertilizer or reseeding for the last two growing seasons in the 5-year period."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change                        |
| MIT_14     | We recommend considering fish and wildlife in all reclamation work, and providing new beneficial habitat in areas where the original habitat type cannot be fully restored.                                                                                                                                                                                                                                                                                                                                                       | Comment acknowledged. This information has been taken into consideration in finalizing the proposed mitigation measures appended to the SEIS. This recommendation is included in the list of regulatory agency recommendations appended to the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change                        |
| MIT_15     | The Service does not object to issuing a permit for proposed action provided specific conditions are met as specified in our comment letter (please refer to submission ID 053, Enclosure 2).                                                                                                                                                                                                                                                                                                                                     | Comment acknowledged. This information has been taken into consideration in finalizing the proposed mitigation measures appended to the SEIS. This recommendation is included in the list of regulatory agency recommendations appended to the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change                        |
| MIT_16     | The following mitigation measure should include the phase "in consultation with ADF&G". Avoid disturbance and sedimentation to fish spawning beds, rearing areas, and overwintering areas designated by State Pipeline Coordinator's Section/Bureau of Land Management (SPCS/BLM). However, where disturbances could not be avoided, proposed modifications and appropriate mitigation measures would be designed by the National Environmental Protection Act and approved by SPCS/BLM.                                          | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.11.3 and Final SEIS Appendix M |
| MIT_17     | In-stream pipeline construction would be completed in 1 to 3 days from initiation.                                                                                                                                                                                                                                                                                                                                                                                                                                                | Comment acknowledged. This is listed as a mitigation measure in the Draft SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change                        |
| MIT_18     | Since the terrorist attack of September 11, 2011 terrorism has become a safety and security concern for energy facilities and distribution lines. The possibility of foreign terrorism exists in Alaska but also at a higher risk is local terrorism, where a mentally unstable or radical resident could seriously disrupt the safety along various points throughout the 737-mile route. Incidental accidents by residents along the route will require much closer monitoring than what has been identified in the Draft SEIS. | Comment acknowledged. Section 4.25.5.1 does address potential terrorism and security issues relevant to the proposed Project in an appropriate level of detail without speculating an infinite number of scenarios that could threaten pipeline safety.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No change                        |
| MIT_19     | The Bureau of Land Management recommends that the authors of Appendix V clearly define which of these measures are Design Features, Mitigation Measures, and Best Management Practices (per subject, i.e. Wildlife, Vegetation). The only place where non-definitive language (should, may, etc.) can be used are for Best Management Practices.                                                                                                                                                                                  | Comment acknowledged. The measures included in the Draft SEIS Appendix V (Final SEIS Appendix M) are considered mitigation measures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change                        |
| MIT_2      | A possible mitigation for subsistence users in Nuiqsut are fuel vouchers to accommodate for needing to hunt at further distances. The Project could also subsidize community members' diets by providing a food package at least once a month.                                                                                                                                                                                                                                                                                    | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No change                        |
| MIT_20     | The language in Section 4.6.3 about retaining surface materials (including topsoil and vegetative materials) when crossing federally-managed lands needs to be repeated in the Vegetation Section of Part 1, perhaps in Measure 30 or as a stand-alone measure in this section.                                                                                                                                                                                                                                                   | USACE appreciates the editorial suggestion, however, the Project proponent does not intend to retain surface materials when crossing all federally-managed lands. The proposed Project would entail segregating the surface layer (approximately the top 3-4 inches comprised of loose surficial herbaceous material overlaying a thin layer of organics and weak, compressible mineral soils) and replacing it as the last layer of backfill in the trench only within designated areas as described in the AGDC planning document, Segregation of the Surface Layer [Final SEIS Appendix EIII], and in the Revegetation Plan [Final SEIS Appendix E1].                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                        |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Section #s of Change                                |
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| MIT_21     | Appendix V, Measure 8: The Bureau of Land Management (BLM) notes that topsoil is defined in Appendix H and recommends similarly defining 'surface materials.' BLM also recommends specifying the time frame of restoration rather than using open-ended language, such as "as soon as practicable."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the comment. The mitigation measure intends to communicate that when materials can be opportunistically stockpiled for use in stabilization of the ROW, stream bank restoration, erosion protection, etc., that material will be stockpiled and used in those efforts, based on where the material is located and what the needs are in a given location rather than bringing in materials over longer distances. Surface materials that might be stockpiled include logs, trees, vegetation, boulders, and soils. Surface materials are not equivalent to topsoils or the surface layer.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Final SEIS Appendix M                               |
| MIT_22     | In Appendix V, the retention of surface materials for BLM-managed lands is only mentioned in Mitigation Measure 8. BLM recommends adding similar language to Appendix H in Sections 3.1.2, 3.1.5, 3.1.6, and 3.1.7. For instance, in Appendix H, Section 3.1.6, it currently states, "The separation of topsoil will apply only to where the ROW [right-of-way] is graded and will be limited to agricultural areas." This should be modified universally throughout the document to say, "The separation of topsoil will apply only to where the ROW is graded and will be limited to agricultural areas and where the ROW crosses federal lands." Appendix H should also be universally modified to say that topsoil will be separated, retained, and replaced on the soil surface (discriminately, not indiscriminately) where the development crosses federal lands, regardless of seasonality and whether the activity is ditch digging, backfilling, or other. | USACE appreciates the comment. AGDC will work with BLM through land access agreements to ensure that the ROW is stabilized, revegetated, and impacts avoided and minimized to the extent practicable. Retention of surface material will be used in stabilizing the ROW, including ROW and stream bed restoration and erosion control. The mitigation measure does not intend to communicate that topsoil will be stripped or segregated, such as in removal of sod blocks, as this is not practicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No change                                           |
| MIT_23     | In Appendix V, Mitigation Measure 61 suggests that the Alaska Gasline Development Corporation (AGDC) plans to avoid sensitive periods in lifecycles. While that is appreciated, the following comment bears repeating: if clearing of vegetation occurs on Bureau of Land Management (BLM)-managed lands within the Central Yukon Field Office (CYFO) during the U.S. Fish and Wildlife Service's regional time periods for avoidance, standard BLM permit requirements necessitate a nest search within a few days prior to the clearing.                                                                                                                                                                                                                                                                                                                                                                                                                           | Comment acknowledged. AGDC intends to adhere to all requirements of permits it secures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No change                                           |
| MIT_24     | The Bureau of Land Management's (BLM) original comment on dust suppression does not appear to have been addressed. In Appendix V, Part I, BLM recommends including language about mitigating substantial water level changes during the breeding season for waterfowl and shorebirds. This issue is partially addressed in Measure 68.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | AGDC intends to secure required water use permits from ADNIR for collection and use of water in dust suppression on access roads. The stipulations of these permits will limit water use to ensure protection of fish and wildlife.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No change                                           |
| MIT_25     | In Chapter 4, Section 4.10.3 outlines various Design Features, Best Management Practices, and Project Management Plans. Some of these are repeated in Appendix V, but not all. BLM highly recommends incorporating all of these elements into Appendix V. Additionally in this section under Eagle and Migratory Bird Protection, much of the language is incorporated into Appendix V. However, there are various incorrect statements made regarding seasonality, timing, etc. The Bureau of Land Management recommends that the authors consult with the U.S. Fish and Wildlife Service, Division of Migratory Bird Management, for clarification on language.                                                                                                                                                                                                                                                                                                    | The measures listed in Section 4.10.3 been incorporated into Final SEIS Appendix M (Draft SEIS Appendix V). USACE and AGDC have consulted with the USFWS regarding proposed mitigation measures during and following a cooperating agency meeting. Clearing and grubbing would occur in accordance with the recommended times described in the USFWS' Timing Recommendations for Land Disturbance & Vegetation Clearing guidance and would avoid disturbance or destruction of migratory bird nests (USFWS, 2017b).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Section 4.10.3, Final SEIS Appendix M               |
| MIT_26     | 4.21.2: Document would flow better and be better understood by the reader if mitigations measures/BMPs and project management plans were discussed after the impact rating sections. Presenting the impact ratings before this section would put this section into better context.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Thank you for your suggestion. Section 4.5 explains that the environmental analyses presented in Chapter 4 considers the mitigation measures proposed by AGDC in the impact assessment. For this reason we feel that it is important for the reader to familiarize with the mitigation measures prior to describing the impacts and presenting the impact rating.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No change                                           |
| MIT_27     | 4.21.2: Suggest including an example of 'standard public health practices to minimize health impacts to PACs' that might be utilized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | AGDC indicates that examples of standard public health practices that would be utilized include education and outreach. The Final SEIS has been revised accordingly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.21.2                                              |
| MIT_28     | A surveillance and monitoring program should be required for health impacts, but it is too broad as presented in the SEIS and Appendix V. Suggested surveillance/monitoring parameters (i.e., which health outcomes, who monitors them, etc.) should be presented with proposed mitigations and BMPs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | AGDC plans to conduct internal audits to evaluate the HSSE program performance (ASAP Environmental Evaluation Document, Section 5.15.1.15). More specific health related requirements and related record keeping would likely fall under the Quality Assurance Plan rather than the Monitoring and Surveillance Plan. The SPCS provides Lessee Annual Reports so an example of what parameters would be included for monitoring can be found in Appendices B and C of this report: <a href="http://dog.dnr.alaska.gov/Documents/SPCS/Publications/LesseeAnnualReports/2013/2013AnnualReport-BP-Combined.pdf">http://dog.dnr.alaska.gov/Documents/SPCS/Publications/LesseeAnnualReports/2013/2013AnnualReport-BP-Combined.pdf</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change                                           |
| MIT_29     | 4.21.4.1 and 4.21.4.2: It would be much easier for the reader if the applicable mitigations/BMPs listed by number after rating each HEC were summarized. Not all of the listed mitigation numbers can be found in Appendix V, and for those that can be located, it is not always clear how they relate to the HEC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Sections 4.21.4.1 and 4.21.4.2 have been revised to summarize the mitigation measures referenced. All of the mitigation measures listed in Section 4.21.2.2 are listed in Final SEIS Appendix M; however, many of the mitigation measures apply to several resources. Section 4.21.2.2 has been modified so that their location in Appendix M can be more easily identified.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4.21.4.1, 4.21.4.2, 4.21.2.2, Final SEIS Appendix M |
| MIT_3      | How will the Project mitigate for subsistence impacts in our villages?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The proposed mitigation measures for impacts to subsistence species are discussed in the Subsistence section of Appendix K in the Final SEIS. Potential impacts to subsistence are also discussed in Section 4.20 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change                                           |
| MIT_30     | The proposed mitigation measures in the Draft SEIS do not appear to be as proactive as those proposed in the 2012 FEIS. The Revegetation Plan should be more robust and provide details to ensure revegetation. In 2012, the applicant had proposed separating the topsoil layer along the alignment and replacing it when possible to promote revegetation. The current Revegetation Plan only proposes separating topsoil in agricultural areas which is a small percentage of the project's footprint.                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Comment acknowledged. AGDC has stated that the Draft Revegetation Plan was developed by ADNIR Plant Materials Center staff. The Draft Revegetation Plan takes into account AGDC's Project design, in which separation of topsoil on a Project-wide basis is considered impracticable. Following construction and installation of the pipe, impacted lands will be stabilized through revegetation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change                                           |
| MIT_31     | The Final SEIS should include a complete compensatory wetland and stream mitigation package, including wetlands impacts characterized as temporary and the indirect impacts modeled from permafrost degradation. This should also include biological, chemical and physical success criteria of the stream channels and wetlands mitigation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Proposed mitigation measures are included in each resource section of Chapter 4 to indicate which measures may minimize potential effects of the alternatives. A complete list of mitigation measures is also provided as Appendix M to the Final SEIS. The Compensatory Mitigation Plan is subject to change during evaluations leading up to a permit decision and potentially post-authorization. Mitigation strategies will incorporate a range of options including mitigation banks and on-site or off-site permittee responsible mitigation in order to fulfill the provisions of the 404 (b)(1) Guidelines. Where appropriate, district engineers shall account for regional characteristics of aquatic resource types, functions and services by utilizing performance standards and monitoring requirements. Compensatory mitigation will include site specific performance measures and goals aligned to replace target functions lost as a result of a DA authorization. For permittee-responsible mitigation, the special permits within a DA authorization must clearly indicate the party or parties responsible for the implementation, performance, and long-term management of the compensatory mitigation Project. | No change                                           |
| MIT_32     | The proposed mitigation package should include monitoring and adaptive management containing corrective actions if the mitigation efforts are not meeting success criteria. If onsite mitigation is not practicable to fully replace the functions and values of the impacts, alternative site mitigation should be considered.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Since publication of the Draft SEIS, the language used in the proposed mitigation measures has been revised to include additional information regarding when and under what conditions specific measures may not be followed. Adaptive management techniques have been included as part of proposed mitigation measures to accommodate varying field conditions encountered during Project construction. This recommendation is included in the list of regulatory agency recommendations appended to the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No change                                           |
| MIT_33     | The applicant should mitigate for impacts to drinking water sources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | AGDC stated, "The pipeline will be buried at a shallow depth (generally 6.5 feet to bottom of trench) and no impact to drinking water is anticipated from pipe installation. Drinking water wells for camps and other facilities must be permitted by the Alaska Department of Environmental Conservation and the Alaska Department of Natural Resources. Part of the regulatory process will be evaluation and mitigation of impacts to adjacent users, if necessary. AGDC will comply with the regulatory requirements for well installation."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change                                           |
| MIT_34     | The Final SEIS should include mitigation measures to reduce air emissions. It is important that mitigation commitments include all controls that were applied in developing the emissions inventory. For example, the emissions calculations to date assumed 50 percent control of fugitive dust. The Final SEIS should list specific fugitive dust control measures, such as speed limits and frequency of watering during non-watering months, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Acknowledged. Additional mitigations for air quality would be provided through the Alaska Department of Environmental Conservation's regulatory/permits process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change                                           |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Section #s of Change                                          |
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| MIT_35     | A large number of applicant-proposed design features, mitigation measures, best management practices, and project management plans listed in the Draft SEIS contain the language, "In areas where a lease is required from the SPCS or a federal grant of ROW is required from BLM ..." These measures generally represent a best management approach that we recommend using to the maximum extent possible along the entire pipeline route, while acknowledging the outstanding need to complete coordination with private landowners.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the comment. AGDC indicates that they would develop specific plans, i.e. a quality management plan, that are applicable regardless of land ownership. The SPCS and BLM would review and approve the plans and AGDC would implement the plan requirements on a system-wide basis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change                                                     |
| MIT_36     | It is not clear that all appropriate and practicable steps have been taken to ensure that impacts to aquatic resources have been avoided, minimized, and compensated for, consistent with the CWA 404(b)(1) Guidelines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The USACE is continuing its evaluation of the Project for adherence to the CWA 404(b)(1) Guidelines. Through close coordination with Cooperating Agencies and the Project proponent, proposed measures to avoid, minimize and mitigate potential impacts to aquatic resources have been taken into account in the assessment of potential impacts associated with the proposed alternatives and a complete list of measures is appended to the SEIS. Additional permit stipulations and requirements may also be included in each agency's permit for this Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change                                                     |
| MIT_4      | There is no way to mitigate for the loss of land, loss of subsistence, or loss of life.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Comment acknowledged. Mitigation measures proposed by AGDC are described in Final SEIS Appendix M. Detailed analysis of potential impacts to subsistence, land use, and public safety are discussed in sections 4.15, 4.20, and 4.21 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change                                                     |
| MIT_5      | The oil and gas industry does not provide enough dedication (in the form of money) to the communities impacted by the industry.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No change                                                     |
| MIT_6      | The State of Alaska has provided no indication if/how they would provide assistance to communities or private property owners that are negatively affected once a pipeline is constructed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | USACE appreciates the comment. AGDC indicates "AGDC is managing the ASAP Project in compliance with Legislative direction (AS 31.25, Alaska Gasline Development Corporation and AS 38.34, In-State Natural Gas Pipeline). In an effort to work with local communities, AGDC has facilitated the formation of the Community Advisory Council (CAC). The CAC's mission statement is to bring stakeholders and project personnel together to discuss, collect, and distribute timely, factual, and reliable project information for the purpose of educating Alaskans about the ASAP Project while identifying and minimizing social and environmental impacts in an effort to deliver the greatest benefit to Alaskans. The CAC is composed of senior representatives from communities along the pipeline corridor (see <a href="http://asaggas.agdc.us/cac.html">http://asaggas.agdc.us/cac.html</a> for a list of the communities and representatives). AGDC meets with the CAC to inform the representatives of current project status and to discuss community concerns related to the ASAP Project. Although the details of community assistance are not yet finalized, the matter is a topic of discussion for the AGDC and the CAC." | No change                                                     |
| MIT_7      | If the proposed pipe storage yard 1 mile down the Willow Creek Parkway is constructed, it will need to be mitigated because it interferes with a multi-use trail.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Comment acknowledged. The trail is on the eastern side of the pipe storage yard; this pipe storage yard does not bisect the trail. The pipe storage yard has been moved 150' to the west of the north-south feeder to Lucky Shot Trail from Willow Creek Parkway. This will provide a 150' vegetative buffer from the eastern edge of the pipe storage yard and the feeder trail. The access road for the pipe storage yard will not move.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Appendix M, Part II: Rationale ASAP Pipeline Route Refinement |
| MIT_8      | Thus, the Borough will support this project if it is able to tax the infrastructure, or receive a payment in lieu of taxes, to help mitigate the impacts of the project on affected communities and to secure revenue to fund its services and operations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Comment acknowledged. AGDC will continue to work with the legislature and local municipalities/communities to mitigate Project related impacts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No change                                                     |
| MIT_9      | In the Denali Citizens Councils' minds, these impacts (to scenic resources and socio-economic landscapes) would not be mitigated by any promise of an increased local gas supply, since the local market is so small that costs are likely to be prohibitive.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Comment acknowledged. AGDC's purpose and need of the ASAP Project is to provide Alaskans with a stable, affordable, long-term supply of natural gas for heating and powering their homes and businesses. The NEPA process is intended to identify, communicate, and evaluate environmental impacts associated with the Project and identify the preferred alternative with appropriate impact mitigation. Providing local gas supply to small communities, such as in the Denali Borough, has not been proposed as mitigation of environmental impact associated with the Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change                                                     |
| NEPA_1     | Ahtna presumes that the U.S. Army Corps of Engineers (USACE) is undertaking this Draft SEIS effort with the recognition that the specific, unique statutory provisions enacted by Congress under the Alaska Native Claims Settlement Act, the Alaska National Interest Lands Conservation Act, and Executive Order 13175 will not apply to gas development activities. Ahtna urges the USACE to clarify that this is not the case in any proposed rulemaking and in the associated EIS process, and to clearly address the unique circumstances applicable to nonfederal activities in Alaska in defining the scope of the EIS and as otherwise appropriate in the EIS process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Section 1.10 of the SEIS describes the requirement to consult with Native American Tribal Governments (EO 13175) and explains that USACE invited 22 potentially affected, federal recognized tribes to consult on the SEIS. Specific government-to-government activities are also described in Section 1.10. USACE also recognizes that compliance with ANCSA and ANILCA are required as indicated in Table 1.10-1 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No change                                                     |
| NEPA_10    | The project area, with respect to ESA-listed and candidate species as well as designated critical habitat, is not limited to the Port of Seward and Prudhoe Bay; it also includes all routes of vessel transit through the Gulf of Alaska and the Bering, Chukchi, and Beaufort Seas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Following U.S. Environmental Protection Agency (EPA) Guidance (1999), "To avoid extending data and analytical requirements beyond those relevant to decision making, a practical delineation of the spatial and temporal scales" was determined. Project activities do include shipping modules by barge through portions of the Gulf of Alaska, Bering, Chukchi and Beaufort seas as described in Chapter 2. Barges would use established shipping lanes which is also described in Chapter 4. EPA guidance also states "The spatial scope should take into consideration the geographic areas that help sustain the resource (i.e., ecoregion, watershed or species range), with an emphasis on where the proposed Project may overlap with those boundaries." Following this guidance, the spatial scope of the Project Area is focused on where proposed activities result in meaningful impacts to resources. For this reason, the spatial extent of in-water activities (i.e., vessel traffic) includes the area around the Port of Seward as well as the Beaufort Sea west of Point Barrow where barges would bring modules to shore at West Dock (see Section 4.26.2 of the Draft SEIS).                                          | No change                                                     |
| NEPA_11    | Although Valdez supports the general purpose of the ASAP Project, which is to "provide Alaskans with a stable, affordable, long-term supply of natural gas," the presently proposed Project poses unnecessary environmental impacts, fails to satisfy the Project's stated purpose and need, fails to provide sufficient volumes of gas to meet demand in the Fairbanks area and fails to provide access to gas for Richardson Highway communities including Valdez. The Draft SEIS does not analyze any alternatives that remedy these defects with the proposed Project. Rather, the U.S. Army Corps of Engineers (USACE) has elected to only provide analysis of the "Denali National Park and Preserve Route Variation," which is a 7.2-mile route variation that traverses Denali National Park, and the "No Action alternative." The extremely limited scope of the alternative analysis contained in the Draft SEIS is wholly inadequate and renders the DSEIS deficient under the National Environmental Policy Act (NEPA) and the Clean Water Act (CWA). USACE is required to analyze reasonable and practicable alternatives to the proposed Project. In light of this fact and the numerous comparative advantages of the Valdez AKLNG Alternative, USACE must thoroughly analyze the Valdez AKLNG Alternative in order to comply with its mandate under NEPA and CWA. USACE has failed to comply with NEPA and CWA by neglecting the evaluation of alternatives to the ASAP Project that maximize project benefits while minimizing environmental impacts. In fact the DSEIS only provides substantive analysis of one alternative project design, which would re-route approximately seven miles of the pipeline through Denali National Park. This limited alternative analysis necessarily deprives the public and USACE of the ability to make a reasoned decision between alternatives. As a reasonable and practicable alternative with substantial comparative advantages over the proposed Project, the Valdez AKLNG Alternative must be thoroughly analyzed in the SEIS. | Section 2.6 of the Final SEIS describes how the alternatives described in the Final SEIS were selected for evaluation and how the process complies with CEQ requirements for screening and prioritizing potential alternatives in the SEIS process. As described in Section 2.1, any alternative that failed to meet the proposed purpose and need (Section 1.2) or federal environmental statutes and regulations, was carried forward for further consideration in the SEIS. Both alternative 1 and 2 would satisfy the Project purpose and need. Please see the response to comment ALT_3 regarding the Fairbanks lateral.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change                                                     |

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| NEPA_12    | USACE has failed to comply with CWA and NEPA by neglecting to evaluate alternatives to the Minto Flats Route. In doing so, USACE has eliminated any possibility that the ASAP Project will avoid significant impacts on subsistence, wildlife, fish, wetlands, and other resources within the Minto Flats Refuge. USACE's alternative analysis fails to thoroughly consider any alternatives that avoid construction of 53 miles of pipeline within the Minto Flats Refuge conservation area ("Minto Flats Route"). The environmentally sensitive nature of the Minto Flats Refuge, combined with the scale of environmental damage attributable to the Minto Flats Route, renders the Minto Flats Route one of the most environmentally damaging aspects of the ASAP Project. Under the present circumstances, USACE must thoroughly analyze practicable route alternatives that avoid the Minto Flats Refuge in order to comply with the requirements of the NEPA and CWA. A route variation avoiding the Minto Flats Refuge is required for USACE to comply with its obligation to permit only the least environmentally damaging practicable alternative.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The primary reason to modify the ASAP alignment in the Minto Flats area was to reduce construction and operation activities in wetlands and reduce the associated impact to wetlands. From version 6.1 milepost (MP) 413 to 435 the alignment shifted significantly to the east to access uplands. From MP 455 to 465 the alignment did move to the west although it was not a large shift. Overall, the biggest change in the Minto Flats area was an alignment shift to the east to reduce wetland impacts. The potential impacts to Minto Flats wetlands are discussed in Section 4.9.4 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change                   |
| NEPA_13    | Belowground gas pipeline is not a new concept. The history of proposed gas pipeline projects designed to deliver North Slope natural gas to market goes back to the late 1970s and early 1980s. Two major projects, the Alaska Natural Gas Transportation System and the Trans Alaska Gas System completed the NEPA process, and both were designed as belowground natural gas pipelines. There were several additional attempts to commercialize North Slope natural gas that did not complete the NEPA process but which were consistent in that they were designed as belowground pipelines. The Alaska Gasline Development Corporation has provided a design consistent with previously approved designs evaluated under the NEPA process. Belowground natural gas pipelines are not a new concept for areas underlain by permafrost. There are several buried cold-temperature natural gas pipelines operating in the Arctic today, including several miles of the Nuiqsut gasline in Alaska, local gas delivery infrastructure pipeline systems in Nuiqsut and Barrow, Alaska, the IKHIL gasline in Inuvik, Canada, and multiple larger diameter natural gas pipelines in Russia. Russia's state owned gas company, Gazprom, recently began operating a second buried 786 mile-long buried gas pipeline, Bovanenkovskoye-Ukhta-2, that was constructed parallel to an existing gas pipeline. The pipelines stretch from the frozen Bovanenkovskoye gas field of the Yamal Peninsula in the Russian Arctic to the Russian city of Ukhta, with the new pipeline doubling the capacity of gas flowing from Russia to Europe (Bennett 2017). Two additional newly constructed buried gas pipelines, known as Zapolyarye-Purpe and Kuyumba-Taishet, also began operating in arctic Russia in early 2017 (Bennett 2017). In addition to the operating cold temperature natural gas pipelines discussed above, there are several buried oil pipelines in arctic and subarctic regions that have operated for years at warmer temperatures, with crews working to implement mitigation to impacts and ensuring stability of the right-of-way (ROW). Several of these buried arctic or subarctic oil pipelines exist | The ASAP Project was assessed based on the details proposed in the Project documents. The comment cites at least 11 other pipelines or proposed versions of pipelines. Each was proposed differently, using different construction techniques and in different areas. For those built, each had different environmental impacts. If AGDC is aware of a pipeline that has been constructed using similar techniques to those proposed, in similar conditions (continuous and discontinuous permafrost), operated in a similar manner, and that had acceptable environmental impacts, such data would be incorporated into the analysis. Based on the Final EIS (March 1976), NEPA analysis of the proposed Alaska Natural Gas Transportation System raised the same substantive issues as have been laid out in the ASAP SEIS. The IKHIL gas line in Inuvik, Canada cited in the comment serves as an example of the types of issues expected. Note that it is much smaller than the ASAP pipeline, approximately 5.5 inches in diameter, so impacts are expected to be proportionally smaller. As constructed, a large mound was left over the pipeline. Upon summer thaw, the mound collapsed into the trench. Due to issues, Inuvik Gas Pipeline Lessons Learned were published <a href="https://apps.nib-one.gc.ca/REGDOCS/File/Download/408782">https://apps.nib-one.gc.ca/REGDOCS/File/Download/408782</a> . Figure 48 of the lessons learned document shows what would be expected for portions of the ASAP pipeline as currently proposed: thaw of the backfill material and a significant depression along the pipeline length. IKHIL used a more robust restoration method than has been proposed for ASAP; restoration was planned following the first summer thaw, requiring a second access period along the entire pipeline corridor. The comment also references the Norman Wells pipeline. As the SEIS documents, this pipeline experienced permafrost thaw and frost heave at various points along its length (Williams, 1986). Parts of the (12 inch diameter) pipeline sunk as much as 1 meter. As recently as 2016, portions of the pipeline had to be shut down to investigate and address slope instability. Concerning TAPS, it was designed and constructed with a flexible approach driven by site conditions that vary along its length. The pipeline was built on Vamps where needed, buried where appropriate, and chilled in some areas. If AGDC were to follow a similar flexible approach with a design driven by local conditions (and accounting for the difference in fluid being carried) similar environmental impacts would be expected. | 4.6.4                       |
| NEPA_14    | Why is it assumed an EIS is required for renewal of the proposed Project ROW? The decision will be made by the appropriate jurisdictional agency at the time of renewal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Section 4.1 of the SEIS does not state an EIS would be required. Rather, the language in the Draft SEIS states "Analysis beyond 2036 is considered speculative given the dynamic nature of the environment. In addition, future Project-related activities, such as permit renewals or decommissioning of the pipeline, would warrant a new evaluation under the National Environmental Policy Act (NEPA), providing an opportunity for agencies and the public to review and evaluate the proposed activities."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change                   |
| NEPA_2     | How does the SEIS process work, what is the Project history, and why are there alternatives?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section 1.1 of the SEIS provides a description of the Project background while Sections 1.2 and 1.3 provide information on the purpose of the Project and the SEIS process. Finally, Section 1.13 of the Draft SEIS summarized next steps in the NEPA process at the time the Draft document was published on June 30, 2017.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No change                   |
| NEPA_3     | The public meeting presentation was well done. It emphasized the importance of the human environment not only the natural environment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change                   |
| NEPA_4     | Commenter requested a question and answer session during the meeting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Comment acknowledged. Representatives from USACE and the Project proponent (AGDC) were available for questions during each of the public meetings on the Draft SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No change                   |
| NEPA_5     | The State of Alaska has no experience being in the pipe line building business, has incomplete data on this proposal and based on other failures of big project ideas, has no business building this or any other pipeline. The facilitators, engineers and other staff that have presented the information to the public up to this point, primarily in public meetings, have been unable to answer critical design questions regarding the construction, operation and decommissioning of this pipe line proposal. There have never been follow up meetings or documents to specific questions and concerns brought up by members of the public including our own questions and this SEIS does little to provide answers too.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Comment acknowledged. The ASAP Project is being pursued at the direction of the Alaska Legislature. AGDC has a Board of Directors, appointed by the Governor, and is comprised of Alaskans that oversee the ASAP Project to ensure the mandates of the Legislature are being fulfilled. The ASAP Project has been referred to as "Plan B" because, from an economic perspective, the larger Alaska LNG Project would deliver gas at a lower cost per unit due to the higher throughput volume. The Alaska LNG Project is preferred by the State, but if it is unable to move forward, ASAP provides a viable method to commercialize North Slope natural gas through in-state delivery. The costs to existing natural gas users in the Fairbanks area would be less than the current LNG truck delivered price and would encourage additional distribution in the area. The costs to existing Southcentral users may be slightly higher than current costs, however, the ASAP pipeline would ensure the long-term reliability of supply that Cook Inlet natural gas cannot provide. Additionally, the ASAP Project is a mega-Project in size and would provide a significant boost to the State economy as a whole and many of the communities along the corridor in particular. The ASAP Project is solely funded by the State of Alaska. The Alaska Legislature controls the AGDC budget through the appropriation process and will make decisions concerning the Project in the best interest of the State.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No change                   |
| NEPA_6     | The pipeline process should work more closely with the community of Trapper Creek in identifying the pipeline corridor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates your comment. As described in Section 1.11 of the SEIS, a public scoping meeting was held in Trapper Creek on September 15, 2014 to provide the community an opportunity to review the proposed Project route and view Project-specific aerial maps of the alignment. Route maps are also available on the Project website ( <a href="http://www.asapeis.com">www.asapeis.com</a> ). Any specific comments regarding the alignment have been provided to the Project proponent for their consideration in developing the alignment presented in the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change                   |
| NEPA_7     | Nuiqsut would like to get more feedback as the Project progresses rather than waiting until the next public meeting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The Project website ( <a href="http://www.asapeis.com">www.asapeis.com</a> ) has been continually updated with Project information is available throughout the SEIS process. The website provides detailed information on the Project as well as contact information for USACE for specific questions outside of the public comment period or meetings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change                   |
| NEPA_8     | There should be more public meetings before the Project is constructed. The community of Nuiqsut has stated our concerns in many meetings but our voices are not heard because of the EIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates your comment. Following NEPA guidelines, potentially affected communities were engaged during the scoping period August - October 2014 as well as during the public meetings held in 2017. In addition, as described in Section 1.10, potentially affected, federally recognized tribal governments were also consulted throughout the SEIS process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change                   |
| NEPA_9     | To the extent that the latest draft of the draft violates this principle as to including the Denali Park alternative with two wildly disparate alternatives. By bundling these various independent components together in its alternative analysis and comparing the operative 'alternatives' on the basis of the aggregate impacts, rather than comparing the effects of the various independent components, the comparison is misleading, and would it would violate NEPA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Alternative 2 includes different options for specific aspects of the proposed action than those presented in Alternative 1. The elements of Alternative 2 are not disparate. Rather, the various aspects of Alternative 2 provide options "that are practical or feasible from the technical and economic standpoint and using common sense constitute[s] a reasonable alternative", following CEQ regulations (40 CFR 1502.14).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change                   |
| NOI_1      | The Yukon Aerial Crossing would probably require piling to provide foundation support for the towers, main cable anchors and wind cable anchors. Driving of pile would produce more noise than the HDD drilling equipment, thus probably making the noise level higher than a moderate impact.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The SEIS has been revised to reflect the use of piles for the bridge foundation systems (Alternative 2), which produce higher noise than the HDD equipment (Alternative 1). The impact rating for the Yukon Aerial Crossing in Alternative 2 has also been revised.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4.23.5.1.3 and Table 4.23-7 |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Section #s of Change                                                                   |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| NOI_2      | Another component of Alternative 2 that warrants reconsideration is the noise impact analysis of the Yukon River crossing. The impact of Alternative 2 versus Alternative 1 with respect to noise seems incorrect. It appears an assumption was made that the duration of construction for HDD and the suspension bridge is the same. That assumption is incorrect; the suspension bridge will take significantly more time to construct than HDD (perhaps multiple years). There is also the issue of the hundreds of piles which would be required for the bridge foundation systems (two main cable anchors and four wind cable anchors, in addition to the foundations for the two cable towers, assuming the Yukon River suspension bridge would be similar to the TAPS crossing of the Tanana River). The construction of a suspension bridge will take considerably longer than HDD and will have a much greater impact to noise receptors because of the number of piles required for the foundations. | The SEIS has been revised to reflect the longer duration for the suspension bridge construction and increased noise magnitudes from piling. The impact rating for the Yukon Aerial Crossing in Alternative 2 has also been revised.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4.23.5.1.3 and Table 4.23-7                                                            |
| NOI_3      | Page: 4-660: The Dalton Highway does not experience rail traffic. Suggest rewording sentence.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4.21.4.1.2 and 4.23.5.2.3                                                              |
| NOI_4      | In Table 4.23-7, remove the receptor type and receptor sensitivity columns as they are not related to the comparison of alternatives. The information can be provided in the text discussion of the impact summary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The receptor type (residential vs recreational) shows the difference in impact ratings for the two receptor types. Similarly the sensitivity of the receptor types (low, medium or high) is also important as it provides a rationale for changes in impact ratings for the two receptor types (i.e. separate rows as the ratings sometimes vary by receptor type). No change made.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                                                                              |
| NOI_5      | Figure 4.23-1, like the other context figures, is an inaccurate generalization of the whole project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | The context figures were developed with input from AGDC and are intended to summarize the Project's overall impacts at a larger scale at a quick glance. The context figures are only a component of the complete description of potential impacts provided throughout Chapter 4. The intent of the context figures is clearly stated and references to more detailed discussion of potential impacts are included where context figures are referenced.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No change                                                                              |
| NOI_6      | Yukon river HDD is listed as moderate for noise impacts, which is overstated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggestion to modify the referenced impact rating; however, justification or references to support the modification have not been provided, so no changes have been made to the SEIS related to this comment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                                                                              |
| NOI_7      | Tanana river HDD is listed as moderate for noise impacts, which is overstated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | USACE appreciates the suggestion to modify the referenced impact rating; however, justification or references to support the modification have not been provided, so no changes have been made to the SEIS related to this comment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                                                                              |
| NOI_8      | Kashwitna river HDD is listed as moderate for noise impacts, which is overstated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | USACE appreciates the suggestion to modify the referenced impact rating; however, justification or references to support the modification have not been provided, so no changes have been made to the SEIS related to this comment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                                                                              |
| NOI_9      | This statement is untrue "Under Alternative 2, the elimination of the Yukon River HDD and use of an aerial bridge crossing would reduce noise impacts in the area from moderate to minor". Many piles will be required for the foundation systems for the suspension bridge. There would probably be more noise with Alternate 2 than with Alternate 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | That statement in the SEIS has been revised and the impact rating for residential receptors near the Yukon Aerial Crossing in Alternative 2 has been changed from minor to major.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.23.5.1.3 and Table 4.23-7                                                            |
| NOTE_1     | Commenter requests a public meeting to be held in Willow.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the suggestion for a public meeting in Willow. An additional public meeting was held at the Willow Community Center on August 18, 2017 to accommodate the request. A filer was provided to the community center representatives as well as the local post office to be distributed around the community.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Chapter 1                                                                              |
| PER_1      | Alyeska requests that the ASAP Right-of-Way Grant to be issued by U.S. BLM include a provision requiring ASAP to utilize the established processes for determining compatibility with TAPS operations. Alyeska will review each segment of ASAP or any related facility proposed to be built in the vicinity of TAPS ("Infringing Facility") and determine the conditions under which the infringing facility would be compatible with the rights held by the TAPS Owners. Further note that BLM has developed TAPS compatibility and coordination language for the rights-of-way of two other, former Alaska gas transmission pipeline projects known as ANGTS and TAGS.                                                                                                                                                                                                                                                                                                                                      | AGDC intends to comply with PHMSA pipeline locaiton requirements including proximity to other pipelines, pipeline crossings and highway crossings. The ASAP, TAPS and Dalton Highway alignments are all within a utility corridor with several pinch points that minimize alignment options. Landowners have commented that use of previously disturbed areas is preferred to consolidate infrastructure into a smaller footprint. The ASAP alignment considers all of these factors, including the requirement to minimize wetland impacts.<br><br>For most of the length that ASAP parallels TAPS, the land is managed by either the State of Alaska or BLM. The TAPS owners have a right-of-way agreement with both the State and Federal governments and although the agreements are not exclusive, ADNRR (State) and BLM (Federal) must consider or have a mechanism to consider existing authorized uses prior to issuing a right-of-way for ASAP. This would include existing water sources used by Alyeska. The air shed is regulated by the Alaska Department of Environmental Conservation and prior to construction, ASAP must undergo a rigorous permitting process to ensure air quality standards can be maintained. | No change                                                                              |
| PER_2      | The National Park Service wouldn't allow the pipeline through the National Park.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | This issue may be considered under an existing MOA between AGDC and Alyeska Pipeline Company.<br><br>Comment acknowledged. Agency participation is discussed in Chapter 1 and the National Parks Service's roles and responsibilities included in Section 1.9.2.3 of that chapter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No change                                                                              |
| PER_3      | Crossings of mapped Special Flood Hazard Areas (SFHA's) including floodways require permitting through the Mat-Su Borough for floodplain development in accordance with MSB 17.29. Additionally, Hydrology and Hydraulic analysis are required to show the impacts to the floodplain. In some areas, a Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) may be required at permitting. Please make sure you are using the latest data for your planning. For example, any development that includes fill, dredging, grading or excavation in the Special Flood Hazard Area or in the Regulatory Floodway requires a Floodplain Permit.                                                                                                                                                                                                                                                                                                                                             | Comment acknowledged. AGDC is aware of the requirement and will work with the Borough to obtain a Floodplain permit, if required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change                                                                              |
| PER_4      | Pursuant to Section 401 of the Clean Water Act, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S., until the state where the discharge originates has granted or waived a 401 Certification. This review and certification process is generally initiated as a part of the federal permitting process and results in conditions placed on the federal permit to satisfy Water Quality Standards. The Alaska Department of Environmental Conservation, Division of Water is the issuing authority.                                                                                                                                                                                                                                                                                                                                                                                                                                         | The USACE appreciates the comment. It is assumed that the author is referencing Table 3.3-1, Federal, State, and Local Water Regulations. The discussion of Section 401 Certification has been updated to reflect ADEC's comment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Table 3.3-1                                                                            |
| PER_5      | The SEIS does not provide a map comparing the project to FNSB zoning maps. It appears the majority of the land this pipeline will cross is zoned GU-1, and other zoning districts only as it nears the Fairbanks area. Public utility uses are conditional uses in many zoning districts, except where they are designated permitted uses (such as the SF zone, FNSBC 18.44.020(B)(8)). Larger substations or areas where natural gas is being stored in bulk may also require a conditional use, particularly if it involves the storage of hazardous substances (FNSBC 18.96.120). This project would involve installation of utility lines that would likely not require a conditional use, however; larger substations and the storage of hazardous materials may require conditional uses in certain zoning districts.                                                                                                                                                                                    | USACE appreciates the comment. The comment has been shared with AGDC and AGDC appreciates the helpful information from the FNSB Community Planning Office regarding the possibility that conditional uses may be required for certain ASAP Project infrastructure. AGDC also understands that this may need further review. AGDC is ready to work with the FNSB Community Planning Office to secure any and all necessary FNSB authorizations at the appropriate time.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change                                                                              |
| PER_6      | The proposed pipeline does not require strain-based design, thus a PHMSA Special Permit is not required. If the maximum strain is mitigated to below 0.5 percent (through utilizing heavier wall thickness pipe, or other means to prevent movement of the pipe) a PHMSA Special Permit is no longer required. The Alaska Gasline Development Corporation has elected to utilize this methodology.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Based on further geotechnical analysis and a decision by AGDC to use thicker wall pipe, AGDC has determined that there is no need for a SBD Special Permit. In a letter from PHMSA, dated 16 January, 2018, PHMSA is no longer considering the request for a special permit understanding that the pipeline would comply with Part 192, which requires the pipeline be able to "maintain the structural integrity of the pipeline under temperature and other environmental conditions that may be anticipated: and "withstand anticipated external pressures and loads that will be imposed on the pipe after installation" to include strains imposed by permafrost and discontinuous permafrost soils.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Executive Summary, Sections 2.2.5.3, 4.25.9.3, 4.25.12, 4.6.4.2, 4.7.4.2.5, and 4.25.2 |
| PER_7      | The University of Alaska and the State Mental Health Trust may issue land use permits for easements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Table 1.10-1 has been revised to include legal authority, authorization, and regulatory intent for University of Alaska and the State Mental Health Trust land use permits.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Table 1.10-1                                                                           |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section #s of Change                                                        |
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| PER_8      | The text should be changed to reflect that the General Permit was issued on June 14, 2017 and becomes effective January 1, 2018: "ADEC Division of Water, Wastewater Discharge Authorization Program has developed a General Permit (GP) AKG320000 - Statewide Pipelines GP, which authorizes which authorizes discharges to freshwaters and certain land disposals associated with the gas pipeline construction, operations, and maintenance. The GP combines several discharge authorizations to eliminate the need to apply for several GP authorizations or individual permits. The Statewide Pipeline GP does not apply to areas of Alaska where EPA maintains federal jurisdiction for Discharges to Waters of the US (e.g. Denali National Park, Metlakatla, Facilities with 301 (h) waivers, etc.). However, under Section 401 of the CWA, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the U.S. until the state where the discharge originates has granted or waived 401 certification. The central feature of Clean Water Act Section 401 is the state's ability to grant, grant with conditions, deny, or waive certification." | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Table 3.3-1                                                                 |
| PER_9      | All temporary and permanent crossings of fish bearing streams (including access roads, pipeline crossings, material sites, or any other project component) would require a Title 16 permit if anadromous fish are present or if passage of resident fish may be impacted. The Alaska Department of Fish and Game requires a Title 16 permit for water withdrawals in all fish-bearing waterways regardless of season or habitat type.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Comment acknowledged. AGDC understands that a Alaska Department of Fish and Game Fish Habitat Permit Application will be required for all proposed activities in fish bearing streams.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change                                                                   |
| PUR_1      | Why is natural gas being sought out as a source of energy in Alaska as opposed to other forms of energy?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the question. The Purpose and Need for the proposed Project is discussed in Chapter 1 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                                                                   |
| PUR_2      | The Cook Inlet region has ample natural gas deposits that are much better suited for development with less impact on the state as a whole and the environment in general.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The Purpose and Need of the ASAP Project is to provide Alaskans with a stable, affordable, long-term supply of natural gas for heating and powering their homes and businesses. Alaska's North Slope has more than 30 trillion cubic feet of conventional natural gas reserves. AGDC's proposed action meets the goal of providing a stable, long-term supply of clean, affordable energy to both developed and developing markets within Alaska, including Southcentral, Fairbanks, and the Railbelt. While the Cook Inlet Basin has historically been an important source of natural gas to Southcentral Alaska, Cook Inlet production has been on decline and is not generally considered stable as a long-term source of energy security for the State.                         | No change                                                                   |
| PUR_3      | The concern regarding gas shortages in southcentral Alaska has been reduced by gas discoveries in Cook Inlet, making the expense and impacts of building the entire ASAP pipeline unnecessary and unwarranted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The Purpose and Need of the ASAP Project is to provide Alaskans with a stable, affordable, long-term supply of natural gas for heating and powering their homes and businesses. Alaska's North Slope has more than 30 trillion cubic feet of conventional natural gas reserves. AGDC's proposed action meets the goal of providing a stable, long-term supply of clean, affordable energy to both developed and developing markets within Alaska, including Southcentral, Fairbanks, and the Railbelt. While the Cook Inlet Basin has historically been an important source of natural gas to Southcentral Alaska, Cook Inlet production has been on decline and is not generally considered stable as a long-term source of energy security for the State.                         | No change                                                                   |
| PUR_4      | The capacity of the Fairbanks Lateral is not capable of meeting the estimated future demand of the Fairbanks area which is 41-50 MMscfd for consumer use and 15-17 MMscfd for interior power generation. Thus, the proposed Project results in a supply shortfall to the Fairbanks area and interior power generation facilities up to 37 MMscfd. This supply shortfall renders the proposed Project in discord with the underlying purpose and need of the Project and fails to satisfy the Alaska Gasline Development Corporation's duty to maximize the benefit of the Project for Alaskans.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | As noted in Chapter 1 (Page 1-4), future natural gas demand is Projected as 41 to 50 MMscfd for the Fairbanks area, and 15 to 17 MMscfd for interior power generation. The Fairbanks Lateral is a 12-inch, 30-mile-long, 1,480-psig, lateral line connecting the Mainline to Fairbanks and is expected to support a throughput in excess of 67 MMscfd. The notation indicated in Chapter 2 (Page 2-21) that "The Fairbanks Lateral would transport up to 30 MMscfd" is intended to indicate the initial flow rate based on Projected demand at the time of ASAP startup, not a throughput limitation of the Fairbanks Lateral. Fairbanks Lateral throughput is expected to gradually increase over time to accommodate the future natural gas demand noted in Chapter 1 (Page 1-4). | No change                                                                   |
| REC_1      | Comment opposed to the proposed Facility Pad location at UAF at the corner of Miller Hill Rd and Yankovich Rd. This is an area of tremendous recreational value to thousands of interior Alaskans and there are many other areas much better suited for this kind of purpose.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the comment. AGDC has discussed this issue with UA Lands staff. The Fairbanks Operations and Maintenance Base that was originally proposed to be located on University of Alaska Fairbanks property at the corner of Yankovich Road and Miller Hill Road. The new proposed location is a University of Alaska property which is available for development at the corner of Geist Road and the George Parks Highway. This is a change only in the project footprint. The alignment for the pipeline has not been impacted by this change.                                                                                                                                                                                                                          | Section 2.2.9, Appendix M Part II: Rationale ASAP Pipeline Route Refinement |
| REC_10     | A mitigation measure states "Where requested by the landowner, restrict public access to the ROW for hunting, trapping, shooting, camping, and other recreation activities in areas where a lease is required from the SPCS [State Pipeline Coordinator's Section]." This statement should be rephrased and clarify that physical barriers would be placed along the ROW where requested by the landowner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Comment acknowledged. This phrase has been revised to state "Where requested by the landowner, restrict public access to the ROW for hunting, trapping, shooting, camping, and other recreational activities." The State right-of-way lease issued to AGDC describes the stipulation concerning public access as well as Project employees hunting and fishing activities while working on the Project. AGDC has agreed to restrict Project employees from hunting, fishing, trapping and camping within the leasehold. The proposed mitigation provided the landowner the option of restricting public access for specific land management and fish and wildlife management needs. AGDC is hopeful that the BLM grant of right-of-way will contain similar stipulations.           | Throughout Chapter 4, Appendix M                                            |
| REC_11     | In Section 4.16.4.1.1, the mitigation techniques should specify the time of day that materials are transported along the Dalton Corridor to minimize impacts to tourism (i.e. aurora tours) in the area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Comment acknowledged. AGDC does not intend to restrict travel on the Dalton Highway. The Dalton Highway is a public highway that is regulated by the SOA DOT&PF, not AGDC.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change                                                                   |
| REC_12     | Dust suppression practices, as identified in mitigation measure 36, would not only affect the health and safety of workers and travelers, but could have a significant impact on visitor experience quality.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | USACE appreciates the comment. As stated in the SEIS, only approved dust suppression techniques would be used during the Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No change                                                                   |
| REC_13     | The SEIS should include discussion on the effect of workers on the availability of campground facilities and potential displacement of lodging opportunities for tourists.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the comment. The Project intends to construct construction camps at periodic distances along the alignment. Causal use of commercial facilities may occur (agency monitors, Project visitors, etc.), however, the intent is to house construction staff in the Project camps.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | No change                                                                   |
| REC_2      | Troublesome Creek is a popular trailhead/rest stop, used by hikers and fishermen. The pipeline, therefore, should cross the Chulitna River upstream of its confluence with Troublesome Creek.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the comment. AGDC has worked with the Department of Natural Resources, Division of Parks and Recreation to identify a natural gas pipeline corridor through State Parks and Recreational areas, including Denali State Park. The proposed Project minimizes the footprint to the extent possible and crosses through Denali State Park for a distance of approximately 38 pipeline miles. The State Legislature approved this footprint and it is codified in AS 41.21 Park and Recreational Facilities and AS 38.35 the Right-of-Way Leasing Act. The referenced crossing is located within this legislatively approved right-of-way. The Project intends to cross the Chulitna River as proposed.                                                               | No change                                                                   |
| REC_3      | North of Trapper Creek, in Denali State Park, the pipeline corridor should also be designed to be a winter trail if completed, as this is in fact what it will become. The entire pipeline corridor, located on public lands should be designed to accommodate winter travel by recreational trail users where possible.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the comment. AGDC will comply with ROW Lease stipulations and the wishes of the individual land owners.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No change                                                                   |
| REC_4      | The man camp proposed at the Lucky Shot Connector Trail (near Willow) has been changed to a pipe storage yard in the current Draft SEIS. This pipe storage yard will still negatively impact recreation at this trail. The Junior Iditarod and lots of local races use this trail.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Comment acknowledged. The PSY in question does not actually bisect the trail, but the trail is on the eastern side of the PSY. The PSY will be moved 150' to the west of the north-south feeder to Lucky Shot Trail from Willow Creek Parkway. This will provide a 150' vegetative buffer from the eastern edge of the PSY and the feeder trail. The access road for the PSY will not move.                                                                                                                                                                                                                                                                                                                                                                                         | Appendix M, Part II: Rationale ASAP Pipeline Route Refinement               |
| REC_5      | Many Alaskans would disagree with the broad categorization that Wildland recreation is typically resource oriented and based on fishing and hunting. Hiking, camping, backcountry skiing, snow machining, ATV use, dog mushing, mountain biking, mountaineering, boating including canoeing, rafting and kayaking are also common wildland recreational activities enjoyed by many Alaskans. 3.12.4.3 correctly identifies many of these activities. Recommend editing 3.12.4.1 consistent with 3.12.4.3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.12.4.1                                                                    |
| REC_6      | The impact rating for Alternative 2 operations and maintenance provided in Table 4.16.3 should be moderate at a minimum due to the impact of the above-ground supports and pipeline from MP 0-62 that present access restrictions and impediments to recreational users.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the comment. Impacts to recreation from Alternative 2 were determined based on the criteria outlined in Table 4.16-1. A minor impact was determined due to the limited portion of the pipeline that would be present above-ground, the relative remoteness of this portion of the alternative, and the likelihood that recreation experience would be decreased or limited as a result of the Alternative. Additionally, increased accesses as a result of more infrastructure and added human presence ultimately may lead to increased recreational opportunity.                                                                                                                                                                                                | No change                                                                   |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Section #s of Change |
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| REC_7      | In regards to increased competition in locations with limited recreation facilities/resources, workers would have an imbalanced work to time off ratio, meaning they spend more weeks working than have time off. This would limit the impact to other recreational users.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change            |
| REC_8      | Depending upon the type of recreational user, management plans can have major negative impacts to recreation if they restrict or eliminate access to certain types of recreational uses (such as snowmobiles having restricted or denied access to lands because they are motorized).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change            |
| REC_9      | The map image on the document cover portrays the boundaries of many refuges and state and national parks. Given the proximity of the proposed project to the congressionally established White Mountains National Recreation Area, BLM recommends that it be also portrayed in the map.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The document cover map has been updated to include the White Mountains National Recreation Area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Cover map            |
| RFI_1      | Provide detailed maps around specific affected communities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | At the July 25, 2017 USACE public meeting in Evansville maps of the Project ROW were left with Naomi Costello and Noel Swanson. If additional maps are requested please contact lparker@agdc.us.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change            |
| RFI_2      | Provide details about how the existing pipeline corridor will be changed/widened.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the comment. The reference to the "corridor" for the northern segment of the pipeline (north of Livengood) is with respect to the area already designated as a utility corridor by the Bureau of Land Management (BLM). This does not imply that the ASAP Project is immediately adjacent to TAPS. For a number of reasons including access, topography, safety, etc., ASAP has not been placed adjacent to TAPS, but ASAP is within the general corridor of TAPS, the Dalton Highway, and other existing utilities. ASAP diverges from the BLM corridor south of Livengood, and does not reconnect with the highway transportation corridor until just north of Nenana, AK. The typical construction width of ASAP is 120-feet, plus any additional space required for construction. The permanent right of way (ROW) will be 53-feet. This 53-foot ROW will be kept clear of trees and high shrubs as is required by 49 CFR Part 192 (much like the area underneath a power transmission line is kept clear). | No change            |
| RFI_3      | The maps/figures and information in the appendices of the Application for Permit submitted to the US Army Corps of Engineers are not included in the pdf document.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | The referenced information is included in Appendix D.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change            |
| SPILL_1    | Comments expressing general concern about pipeline leaks/spills, spill response time, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the comment. The gas composition for the ASAP pipeline is considered lean gas, as described in Section 2.2.2 of the SEIS. There are no appreciable liquids at any point in the pipeline. As such, it will not have large volumes of liquids as described by the commenter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change            |
| SPILL_2    | The text, "Examples of allowable discharges related to mobile spill response include monitoring well purge water, drip pan water, hydrocarbons from shop melt water and equipment, and small spills on snow or ice during winter operations." Comment: Contaminated water is not an allowable discharge under AKG320000 - Statewide Pipelines GP. The listed discharges are either uncontaminated or they must be treated to remove hydrocarbons." should instead read, "Examples of allowable discharges related to mobile spill response include treated or uncontaminated: monitoring well purge water, drip pan water, shop melt water, and melted snow and ice collected in small drums due to small vehicle drips or spills while mobilized during winter operations."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3.3.3                |
| SUB_1      | Project construction/operations timing may impact the Cantwell area's customary and traditional use of resources. Please coordinate with local governments to time activities appropriately to avoid impacts to subsistence resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | As described in Appendix M (Mitigation Measures), AGDC would time activities to minimize impacts to subsistence activities, where possible. In accordance with ANILCA Section 810, a subsistence hearing was held in Cantwell during the public comment period on the Draft SEIS. Potential impacts to subsistence activities are described in detail in Section 4.20 as well as Appendix P to the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change            |
| SUB_10     | The potential impact to subsistence users of the elevated portion of the pipeline considered under Alternative 2 should be considered more than "slightly" greater than the belowground alternative. This is consistent with Mayor Ahmaogak's comment in 2002 (page 4-230). For Alternative 2, consider the potential for collision related impacts for flying birds (possible ESA species) that are unfamiliar with an obstruction on the landscape (page 4-230). Furthermore, the ANILCA Section 810 analysis echoes those same concerns as follows: The presence of an aboveground pipeline would cause greater impacts to wildlife (specifically caribou) than burial of the pipeline. Multiple studies, summarized by Lawhead et al. (2006), have demonstrated that linear infrastructure features impact caribou movement. The Effects and Impacts on subsistence for operations of the above-ground pipeline in Alternative 2 described in Section 4.20 is grossly understated in the ranking presented, and runs counter to the information provided from subsistence users summarized in Section 4.20.5.3. Higher ranking should be applied for Alternative 2. In Table 4.20-5, the Effects and Impacts on Subsistence for Operations of the above-ground pipeline in Alternative 2 is grossly understated in the ranking presented in the table, and runs counter to the information provided from subsistence users summarized in Section 4.20.5.3. Higher ranking should be applied for Alternative 2. | While a buried pipeline is more conducive to natural caribou movement than an elevated pipeline, the elevated pipeline is located on the periphery of Nuiqsut use areas near the Dalton Highway. The great distance of the elevated pipeline from Nuiqsut's core hunting areas lessens the certainty of the elevated pipelines effect on caribou by the time they travel closer to Nuiqsut. Resource availability impacts would be possible but not necessarily probable. The word "slightly" has been removed from the referenced sentence.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4.20.5.3             |
| SUB_11     | The subsistence sections of the Affected Environment chapter that deal with the Arctic and Interior regions are generally correct.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change            |
| SUB_12     | The flow of Section 3.17.6.2.3 is confusing. Specific data for the communities is available and should be discussed (maybe just presented in a table). Seems like a minimal amount of information considering the amount of community concern regarding subsistence resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The potential impacts of increased populations within study communities and associated increase in pressure to traditionally hunting activities are addressed in Section 4.20.4.1.1.4 "Competition, Costs and Time, and Culture"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change            |
| SUB_13     | In Section 3.17.6.2.3, in addition to the Alaska Traditional Diet Project (ATDP), Alaska Department of Fish and Game data from harvest surveys should be discussed for relevant PACs. Harvest data is well correlated with consumption of subsistence foods and this data may be more current and specific than the ATDP for most potentially affected communities (PACs).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Thank you for the comment. The ADF&G's Community Subsistence Information System (CSIS) was used, along with many other sources, to generate the subsistence resource section (3.16) of the SEIS. The subsistence patterns of 51 PACs are described in subsections 3.16.5 through 3.16.7 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change            |
| SUB_14     | Comments addressing grammar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Grammar suggestions have been reviewed and incorporated into the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change            |
| SUB_15     | The info from Alaska Traditional Diet Project (ATDP) discussed in Section 3.17.6.2.3 is too broad to be considered representative of the potentially affected communities (PACs) in this SEIS. It is not clear which communities are discussed in these finding.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Thank you for the comment. We agree with the commenter that some of the information is not representative of the PACs in the proposed Project area and this text has been removed from the SEIS. The remaining text has been revised to indicate that "Results reported by the Tanana Chiefs Conference (TCC) are applicable for several villages of Interior Alaska for which subsistence resources may be affected by the proposed Project including the PAC, Nenana." Information from the ATDP specific to the TCC remains in the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 3.17.6.2.3           |
| SUB_2      | An increase in people to the Cantwell area due to job opportunities from the natural gas pipeline will add pressure to traditional hunting activities in the area (Game Mgmt Unit 13E and 20A).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Thank you for your comment. Impacts to subsistence are discussed in Section 4.20 of the SEIS. Specifically, there is a subsection dedicated to the impacts from competition, costs and time, and culture during both the construction and the operation and maintenance phases of the Project. As stated in the SEIS, construction related impacts are expected to be temporary and in many areas would only occur during one season. AGDC is committed to notifying workers that subsistence activities are ongoing and direct them to avoid activities that may affect subsistence.                                                                                                                                                                                                                                                                                                                                                                                                                                             | No Change            |
| SUB_3      | Subsistence resources should be protected to the highest degree.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Long-term impacts from operation and maintenance activities for the region described by the commenter are discussed in subsection 40.20.7.1.4.2 of the SEIS. The impact analysis has taken into account the observation of the commenter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No Change            |
| SUB_4      | Nuiqsut's subsistence whaling may be impacted near Cross Island and Prudhoe Bay.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No Change            |
| SUB_5      | Activities related to studies, such as helicopter activity, impact the caribou that we depend on.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Section 4.20.3 Applicant-Proposed Design Features, Mitigation Measures, Best Management Practices, and Project Management Plans, includes applicant proposed mitigation measures to reduce potential impacts to whaling activities. Impacts from helicopters and fixed-wing aircraft are discussed in Sections 4.20.4.1.1.2 "Resource Availability" and 4.20.4.2.1.2 "Resource Availability"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No Change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Section #s of Change |
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| SUB_6      | Subsistence whaling will be impacted because Cross Island is just northeast of West Dock. There are many offshore vessels that don't sign the CIA with the Alaska Eskimo Whaling Commission and many vessels related to industry.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section 4.20.3 "4.20.3. Applicant-Proposed Design Features, Mitigation Measures, Best Management Practices, and Project Management Plans" includes applicant proposed mitigation measures to reduce potential impacts to whaling activities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No Change            |
| SUB_7      | More pipelines mean we have to be more careful when we hunt so that we don't shoot the pipeline. We have to hunt farther away to avoid pipelines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Avoidance of traditional use areas due to the presence of elevated pipelines is discussed in Section 4.20.5.3. "Use of Vertical and Horizontal Support Members."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | No Change            |
| SUB_8      | Which communities would receive the most impacts (e.g. why would Minto receive more than Cantwell)?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Table 4.20-4 "Subsistence Impact Criteria Assessment – Alternative 1" and Table 4.20-5 "Types of Effects and Impacts on Subsistence – Alternative 2" provide a breakdown of the assessment of impacts by community followed by an explanation of the types and levels of impacts for the various study communities. Long-term changes to user access and resource availability during operations due to the development of undisturbed habitat and new access to the Minto Flats is the rationale for a greater impact ranking for Minto than Cantwell. The Project is not creating new access to Cantwell.                                                                                                                                                                                                                                                                              | No Change            |
| SUB_9      | Section ES-18 implies that the pipeline alignment goes right through the communities listed. For Wiseman and Nenana, the alignment is on the opposite side of a significant river from each location. Minto is over 18 miles from the alignment. The subsistence impact during the operational phase should not be categorized as major.                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. The text has been revised to state, "concentrated in rural communities with subsistence use areas that lie directly along the proposed Project." The text indicates that Minto is major due to the development in large portions of undisturbed habitat and not that the community lies directly along the Project. Long-term changes to user access and resource availability are the rationale for major impacts during operations.                                                                                                                                                                                                                                                                                                                                           | 4.20.7.4, ES-18      |
| VIS_1      | The Project would negatively impact the viewshed in Denali State Park.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | USACE appreciates the comment. AGDC worked with the Department of Natural Resources, Division of Parks and Recreation to identify a natural gas pipeline corridor through State Parks and Recreational areas, including Denali State Park. The Project minimized the footprint to the extent possible and crosses through Denali State Park for a distance of approximately 38 pipeline miles. The Legislature approved this footprint and it is codified in AS 41.21 Park and Recreational Facilities and 38.35 the Right-of-Way Leasing Act. The referenced facilities are located outside of the DSP boundaries on public land within a utility corridor directly adjacent to the Parks Highway. The Project will retain these sites as proposed.                                                                                                                                     | No change            |
| VIS_2      | The discussion on 'visual resources' should include the major access road construction from the Glitter Gulch commercial area near milepost 539 going across the subsequent hillsides separate from the pipeline route, across the Yanert river, and then exiting the Mainline route through the residential Village View subdivision, near McKinley Village. The discussion should also include the visual effects of the entirely separate major access road, the extensive material sites on the banks of the Nenana (MP 535-536) and Yanert (MP538-539) Rivers, and the vantage point(s) of tens of thousands of Park and area visitors floating that section of the Nenana River system from the McKinley Village launching site. | USACE appreciates the comment. There is no access road from the proposed alignment when leaving Glitter Gulch to the south (approximately MP 535.8 for the current alignment). The Project proposes horizontal directional drilling (HDD) instead of open trenching at this location. There will be no visual impact for the distance HDD is used for pipe installation. The pipe will exit at about Lynx Creek, approximately MP 536.7. This will reduce the amount of visual impact identified in the 2012 FEIS. The access road from the south will generally parallel the pipeline right-of-way and, from a visual perspective blend into the right-of-way maintained for operations. The material site is located at about MP 538.2 on the current alignment and well outside of the zone where the FEIS indicated visual impacts were considered strongly affected by the Project. | No change            |
| VIS_3      | General concern regarding the scenic resources of the Denali area between Healy and Cantwell, upon the socio-economic landscape in this area, and on the lifestyles of residents.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section 4.17 describes the methodology for evaluating visual impacts. Visual impacts in the area near Healy are discussed in Section 4.17.4.2.3, while the area south of Healy, including Denali NPP and Cantwell, is discussed in section 4.17.4.2.4. Section 4.17.5.1.3 discusses the visual impacts of the Denali NPP Route Alternative. These analyses include AGDC simulations, discussion of the contrast between pre- and post-construction visual conditions, and analysis of resulting visual impacts.                                                                                                                                                                                                                                                                                                                                                                          | No change            |
| VIS_4      | The Impact Rating (Mainline Segment 1a) for Alternative 2 operations and maintenance described in Table 4.17.4 should be major due to the visual impact of above-ground supports and pipeline from MP 0-62.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | While the aboveground supports and pipeline would alter the scenery, this change does not meet the criteria for "major" impact, as defined in Table 4.17-2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No change            |
| VIS_5      | In Table 4.17-4, remove the scenic quality and viewer sensitivity columns as they are not related to the comparison of alternatives.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | These attributes, along with impact rating, provide the basis for overall visual impacts of each alternative, and are thus directly relevant to the comparison of alternatives.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Table 4.17-4         |
| VIS_6      | It appears that the summary statement of Alternative 2 [in the visual analysis] has incorrect MP values, please update with correct MP's.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The mileposts listed in this summary statement are correct per Table 4.17-4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No change            |
| VIS_7      | Viewing the history of fire activity in Alaska (see <a href="https://fire.ak.blm.gov/content/maps/aicc/Alaska_Fire_History.pdf">https://fire.ak.blm.gov/content/maps/aicc/Alaska_Fire_History.pdf</a> ), there have been numerous fires along the proposed route since 2000. Please expand on Section 4.6.9.12 to indicate how a conclusion of "unlikely" was reached.                                                                                                                                                                                                                                                                                                                                                                 | USACE appreciates the suggested changes regarding the presentation of information in the SEIS. Text has been added to address this suggestion: "Natural occurrences such as a forest fire in an area of high scenic quality could result in a major visual impact, with or without the presence of the Project. The Project's contributions to such major visual impacts would be incremental. In general, the geographic extent of the combined impact of the pipeline, RFFAs, and natural occurrences would affect site-specific locations along the pipeline."                                                                                                                                                                                                                                                                                                                        | 4.26.9.12            |
| WAS_1      | There must be appropriate facilities for construction workers' human waste. In the past construction crews did not have portable toilets and the pullouts and other easy access areas were full of human waste and toilet paper.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Comment acknowledged. AGDC intends to have contractors provide mobile sanitation facilities for the crews working on pipeline. It would be AGDC's intent that the contractors would require the workers to use the provided sanitation facilities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change            |
| WAS_2      | Open garbage pits should not be allowed. Construction workers leave garbage in open pits then bait animals then want only kill them when they come for food.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | USACE appreciates the comment. Waste management, its impacts to wildlife, and proposed mitigation measures are discussed in Section 4.10, Wildlife.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change            |
| WAS_3      | Where will wastes from conditioning the gas be disposed?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the comment. The GCF and connecting lines are discussed in Section 2.2.4. Natural gas would be transported from the Central Gas Facility from the Central Compression Plant in Prudhoe Bay to the GCF. Waste from the GCF would then be transported back to the GCF.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No change            |
| WAS_4      | Operations and maintenance activities will not exert stress on existing solid waste infrastructure since they are limited to an operational facility within the PBU industrial complex, a small facility located within Fairbanks, a small facility located within the Mat-Su Borough, and a corporate office located within Anchorage.                                                                                                                                                                                                                                                                                                                                                                                                | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change            |
| WAS_5      | 3.11.2.3 State ; Text: BULLET SECTION - "ADEC"; Comment: ADD: Wastewater Disposal Regulations in accordance with 18 AAC 72 and AS 46.03, AS 44.46.020, AS 44.46.025, AS 37.10.052                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the comment and the referenced regulations have been included in Section 3.11.2.3 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3.11.2.3             |
| WET_1      | Please make data sheets available for public review so that the data can be groundtruthed. Data available on the project website show that distances between data points are large (up to 75-100 miles).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The ASAP project data sheets have been made available on the project website. The wetlands impact areas included in the Final SEIS have been revised based on additional wetlands data collected for the AKLNG project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Project website      |
| WET_10     | The EPA believes that such extensive, unmitigated destruction and degradation of wetlands and aquatic resources, particularly in aquatic resources underlain by permafrost, may not comply with the Guidelines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The USACE appreciates the comment. Project changes related to construction techniques, the relocation or elimination of infrastructure, avoidance, minimization and additional mitigation measures have occurred as a result of public comment and discussions with the Project proponent. The USACE is continuing its evaluation of the Project for adherence to the CWA 404(b)(1) Guidelines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Chapter 4            |
| WET_11     | Does ES-11 indicate that the entire alignment is wetlands broken into segments by ecoregion (Beaufort Coastal Plain), or by type of permafrost predicted by other mapping (Other Ecoregions with Permafrost, or Ecoregions Lacking Permafrost)? Where on this map are the uplands located? The entire project is not to be constructed on wetlands as would be indicated by the map.                                                                                                                                                                                                                                                                                                                                                   | The context figures are intended to summarize the Project's overall impacts at a larger scale at a quick glance. The context figures are only a component of the complete description of potential impacts provided in Chapter 4. Additional context for this figure is provided in Section 4.9.7.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change            |
| WET_12     | The statement that the Nenana River watershed is entirely in the Denali Borough does not appear to be correct. Please revise statement. The northern boundary of the Denali Borough is just north of Anderson Alaska as indicated here: <a href="https://www.maptechnica.com/county-map/Denali/AK/02068">https://www.maptechnica.com/county-map/Denali/AK/02068</a> The boundary of the Nenana River watershed according to the EPA is between Anderson AK and Nenana AK as shown here: <a href="https://cfpub.epa.gov/surf/huc.cfm?huc_code=19040508">https://cfpub.epa.gov/surf/huc.cfm?huc_code=19040508</a>                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3.3.6.2.2            |
| WET_13     | ADNR makes navigability determinations for streambed ownership purposes. The USGC makes navigability determinations to establish jurisdiction and requires a permit for bridges crossing navigable rivers. The State Department of Transportation and Public Facilities has a bridge section that is responsible for the design and use of bridges under ADOT&PF jurisdiction.                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3.20.4               |
| WET_14     | The Alaska Gasline Development Corporation does not believe that it has stated it will locate any aboveground facilities within 100 feet of a stream bank.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Further discussion with AGDC resulted in the identification of one facility pad within 100 feet of USACE-defined riverine wetland/waterbody (Happy Creek).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No change            |
| WET_15     | The Alaska Gasline Development Corporation does not believe it has stated it will be storing sand and gravel materials within a floodplain during operations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Further discussion with AGDC determined that materials may be stored within a floodplain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change            |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Section #s of Change                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| WET_16     | In Table 4.7-2, under Proposed Action Causing Potential Impact for Operations and Maintenance for Surface Water Quality, the identified "Use of herbicides/pesticides near surface waters" is not a proposed action by the ASAP Project and should be removed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Table 4.7-2                                                                                     |
| WET_17     | Disturbance to ground cover in relation to streams would occur within the mainline 120-foot construction ROW.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.7.4.1.3                                                                                       |
| WET_18     | Cottonwood Creek is located near Wasilla in the Matanuska-Susitna Borough. Suggest giving additional information as to where it is located so the reader does not mistake this creek as being located near Fairbanks about 300 miles farther north.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.7.4.1.4.5                                                                                     |
| WET_19     | Pipeline construction is not expected to impact the fecal coliform content of Cottonwood Creek, which is listed as an impaired waterbody for fecal coliform.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Table 4.7-10                                                                                    |
| WET_2      | Concerns regarding the Project causing siltation in the Koyukuk River which would impact salmon runs and people downstream.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | USACE appreciates the comment. Excavation and resulting wastewater discharge within fish streams will require permits from ADEC and ADF&G. ADEC regulates water quality and the sediment content of the wastewater discharge and ADF&G issues site specific stipulations designed to protect fish and fish habitat. AGDC will work with these agencies to minimize impacts to water quality, fish, and fish habitat. In addition, AGDC has proposed mitigation measures to protect water quality (Draft SEIS Section 4.7.3) and fish (Draft SEIS Section 4.11.3).                                                                                                                                           | No change                                                                                       |
| WET_20     | Figures 4.7-1 and 4.8-1 and other context maps are an inaccurate generalization of the whole project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | The context figures were developed with input from AGDC and are intended to summarize the Project's overall impacts at a larger scale at a quick glance. The context figures are only a component of the complete description of potential impacts provided throughout Chapter 4. The intent of the context figures is clearly stated and references to more detailed discussion of potential impacts are included where context figures are referenced.                                                                                                                                                                                                                                                    | No change                                                                                       |
| WET_21     | The SEIS implies that there will not be proper design and installation of access roads during construction or maintenance of access roads during operations, which is not true.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE recognizes that the project Proponent does not intend to improperly design and install access roads. Corrections have been made to the sentence in question to clarify, "If roads were constructed without proper drainage (culverts) or without proper maintenance of culverts, the hydrology would be altered and could conceivably result in habitat fragmentation. BMPs for culvert placement are discussed in the Water and Fish sections of the SEIS (Sections 4.7.3 and 4.11.3, respectively)."                                                                                                                                                                                                | 4.8.4.2.1.2                                                                                     |
| WET_22     | Construction Impacts - avoidance are where the project has avoided an impact due to existing features, such as an existing road. These impacts should not be assessed against the project because they already exist.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Tables 4.8-3 and 4.8-4 have been updated to omit the impact category "Construction Impact - Avoidance."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Tables 4.8-3 and 4.8-4                                                                          |
| WET_23     | The project will use mats in the areas designated in the footprint as matted regions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the additional information. This list of "matted regions" will be included in the list of mitigation measures (Appendix M) of the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Appendix M                                                                                      |
| WET_24     | There will be no clearing, grubbing, or grading during operations. Clearing, grubbing and grading will have been completed during construction. Mowing will be the only maintenance of the ROW, and mowing will preclude any necessity for clearing. All references to clearing, grubbing, or grading need to be removed from the section. Mowing will not be required on the Beaufort Coastal Plain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Section 4.8.4.2.1.1 has been edited to remove discussion of clearing, grubbing, and grading during operations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.8.4.2.1.1                                                                                     |
| WET_25     | Transport and use of construction equipment and personnel from the continental U.S. where non-native, invasive, and noxious plants are common is a very unlikely scenario with respect to operations due to the high logistical cost of bringing in outside equipment or personnel.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.8.4.1.1.7,<br>4.8.4.1.2.3,<br>4.8.4.2.1.5,<br>4.8.4.2.2.2,<br>4.9.4.1.1.8, and<br>4.9.4.2.1.5 |
| WET_26     | Table 4.8-5 should be corrected to reflect both Alternatives 1 and 2 have the same impact on habitat fragmentation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Impacts to vegetation are different for habitat fragmentation in Alternatives 1 and 2 for the first 62 miles of the route. In Alternative 2, impacts to vegetation due to habitat fragmentation along the pipeline ROW mainline and Fairbanks lateral during construction are the same as those discussed in Alternative 1 for the pipeline route, except for the first 62 miles where the pipeline would be suspended on VSMs in this alternative. There would be substantially fewer impacts to wetland habitats, vegetation, and hydrology especially during breakup over these first 62 miles. | No change                                                                                       |
| WET_27     | The proposed discharges may result in substantial and unacceptable impacts to aquatic resources of national importance, including the wetlands and waters of the Yukon River basin. Notably, many of the aquatic resources along the proposed pipeline route are of outstanding natural resource value and occur in systems whose ecological functions are intact. In particular, the EPA concludes that the Yukon River basin, with its associated tributaries and wetlands, and adjacent wetland systems, is an aquatic resource of national importance according to the criteria identified in the Section 404(g) MOA. Aquatic resources that are underlain by permafrost are of particular concern, since these resources provide unique functions in addition to the general functions that wetlands provide. They are fragile, easily damaged, and do not recover from damage in less than one generation, if at all. Furthermore, the wetlands and streams of the Yukon basin provide important functions that help to maintain the basin's ability to support and maintain anadromous fish, particularly salmonids, which are of both commercial and subsistence importance. | Comment acknowledged. AGDC has indicated that they have avoided wetlands wherever possible and where wetlands cannot be avoided, the Project has been designed to minimize wetlands impacts. The project proponent has committed to minimizing impacts to watersheds according to the mitigation measures proposed in Appendix M. In addition, the discussion of wetlands impacts in Chapter 4 has been revised to compare how impacts to the resource would differ if the Corps' permit conditions were implemented.                                                                                                                                                                                       | Appendix M,<br>4.9.3, 4.9.8                                                                     |
| WET_28     | The Alaska Gasline Development Corporation reviewed the entire alignment and made site specific changes to avoid and minimize impacts to wetlands, including stream crossings. The changes are reflected in alignment version 6.1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 4.9.3                                                                                           |
| WET_29     | Page 4-16 states that "fragmentation of wetlands would be major in the Beaufort Coastal Plain and moderate elsewhere" while section 4.8.5.2.1.2 states that "habitat fragmentation is the same for all areas."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The document context indicates that the first statement states that the occurrence of wetland habitat fragmentation in the Beaufort Coastal plain is expected to be greater than in other areas of the throughout the project footprint, while the latter statement communicates that the habitat fragmentation due to vegetation impacts overall are expected to be the same Alternative 1 and Alternative 2 for all areas.                                                                                                                                                                                                                                                                                | No change                                                                                       |
| WET_3      | An aboveground pipeline would have less impact on vegetation than a buried pipeline.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Impacts to vegetation by the proposed Project are discussed in Section 4.8 of the SEIS. Section 4.8.7 compares Alternative 1 and Alternative 2 impacts to vegetation. The VSMs for the first 62 miles of the proposed Mainline in Alternative 2 would be constructed within the operations ROW. These VSMs would be a permanent physical feature on the tundra; however, the impacts of their very small footprints (0.46 acres total) would be substantially less than the potential issues involved with trenching and backfilling in permafrost soils.                                                                                                                                                   | No change                                                                                       |
| WET_30     | Listing Habitat and Wetland Fragmentation as a major impact for the Beaufort Coastal Plain is overstated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the suggestion to modify the referenced impact rating. Sufficient justification in support of this statement is needed in order to consider revisions to the impact rating.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No change                                                                                       |
| WET_31     | The Alaska Gasline Development Corporation has proposed scarifying work pads and revegetating, but has not defined a depth or specifics regarding "de-compaction".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Further discussion with AGDC identified that the text in question (Section 4.8.3, Proposed Measure 6) was generated based on the ASAP Revegetation Plan. The plan describes site de-compaction activities and states that identified areas will "be ripped to a minimum depth of 8-20in (20-50cm) prior to surface soil replacement."                                                                                                                                                                                                                                                                                                                                                                       | No change                                                                                       |
| WET_32     | The U.S. Environmental Protection Agency's attachment 1 "The Wetlands and Streams of the Yukon River Basin are an Aquatic Resource of National Importance" may be used as a reference for the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested additional reference provided in EPA's comment. A discussion has been added in Section 4.9.4.1.1.3 regarding the Yukon River Basin as an Aquatic Resource of National Importance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4.9.4.1.1.3                                                                                     |
| WET_33     | Several active USGS stream gages are near the proposed pipeline alignment as shown on Draft SEIS Figure ES-2. The Department recommends that the Final SEIS list USGS structures as sites to be safeguarded. The USGS Alaska Science Center (ASC) should be contacted before construction near active USGS stream gages. Efforts should be made to both preserve the stream gages and minimize impacts to the data integrity collected at those sites.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The USACE appreciates the comment. The ASAP footprint does not intersect any USGS stream gauge locations based on the following dataset: <a href="https://water.usgs.gov/GIS/metadata/usgswrd/XML/gagesll_Sept2011.xml#stddorder">https://water.usgs.gov/GIS/metadata/usgswrd/XML/gagesll_Sept2011.xml#stddorder</a>                                                                                                                                                                                                                                                                                                                                                                                        | No change                                                                                       |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Section #s of Change                                               |
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| WET_34     | The Department has concerns regarding the proposed project's potential impacts on reclamation revegetation, invasive species, and cumulative impacts. The USFWS and BLM offer recommendations on reclamation measures, including salvaging and stockpiling organic soils (particularly the active layer) and vegetative materials to facilitate effective revegetation and minimize the threats of erosion and invasive species introduction, thereby reducing impacts to fish and wildlife habitat.           | AGDC worked with the DNR Plant Materials Center to develop reclamation procedures and mile-by-mile seed mixtures designed to utilize native seed and limit introduction of invasive species. AGDC indicates that the DNR Plant Materials Center has participated in reclamation and revegetation of large resource development Projects in Alaska, including the Red Dog and Uisubelli Coal mines, and North Slope oil and gas Projects. AGDC indicates that while every effort will be made to segregate and reuse the topsoil and active layer, this will not be possible in all locations, especially if winter construction is required. With the help of the DNR Plant Materials Center, appropriate procedures will be utilized to ensure proper revegetation in these areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Appendix E, Part I                                                 |
| WET_35     | The USFWS raises important issues regarding the net effect of other projects planned in the vicinity of the action area, cumulative impacts to wetlands, and the adequacy of the cumulative impact assessment.                                                                                                                                                                                                                                                                                                 | The cumulative impact assessment presented in Section 4.26 follows Council on Environmental Quality (CEQ) guidelines as described on pages 4-717 and 4-718. Specific data gaps for the analysis are acknowledged in Section 4.26.5 and assumptions are provided in Section 4.26.5.1 including specific limitations of the analysis due to the variability of external Projects and natural events. The analysis begins with a summary of potential direct and indirect effects of the proposed alternatives (Table 4.26-2) which is the basis for the cumulative effects analysis. In compliance with NEPA regulations, Table 4.26-3 provides a detailed list of past, present, and reasonably foreseeable future actions and natural events considered in the assessment and is accompanied by a series of maps that demonstrate the proximity of many existing and future activities described in Table 4.26-3. Descriptive information on major activities and natural events are provided beginning in Section 4.26.7. Each resource section provides a subset of past, present and future actions and events that support the assessment of that specific resource which includes information on the specific types of cumulative effects that could occur and whether cumulative effects could be adverse or beneficial. In conclusion, the cumulative effects assessment follows CEQ guidelines, provides a discussion of what information may be lacking or limiting, discusses past, present and future actions and events that may contribute to a cumulative effect and provides a conclusion for each resource on whether the proposed action could also contribute to potential cumulative effects. | No change                                                          |
| WET_36     | Vegetation loss or disturbance in permafrost areas typically has a significant impact on the ground thermal regime. In discontinuous warm permafrost areas, studies have shown that the deepening of the active layer may continue several years after clearing or stripping the vegetation. Therefore, the Department recommends minimizing vegetation loss or disturbance to reduce the risk of permafrost degradation along the pipeline alignment.                                                         | USACE appreciates the comment. AGDC indicates that "Project engineering aims to avoid and minimize impacts to permafrost to the extent practicable. AGDC's intended revegetation efforts will be characterized in their Revegetation Plan, developed by the ADNR Plant Materials Center. Mitigation measures intended to limit or reduce impacts to permafrost are described in Appendix M of the SEIS and in the ASAP Belowground Pipeline Mode: Selection, Construction, Operation, and Maintenance on Alaska's North Slope (Appendix A)." Additionally, Sections 4.8.3.2 and 4.8.8 have been added to consider how impacts to vegetation would differ if the Corps' permit conditions were to be implemented.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4.8.3.2, 4.8.8                                                     |
| WET_37     | Construction in winter will typically minimize the disturbance of the vegetation cover and subsequently the underlying natural ground thermal regime (Table 2.2.6).                                                                                                                                                                                                                                                                                                                                            | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change                                                          |
| WET_38     | In Section 4.11.3, BLM suggests defining the parameters to be used for determining "wherever possible" as they pertain to restoration with native plant species.                                                                                                                                                                                                                                                                                                                                               | AGDC indicates that "Revegetation of riparian habitat with native plant species is the Project's preferred method, assuming a reasonable possibility of success. For example, high gradient floodplains and areas where sufficient water might not be available have a low chance of success and in these instances alternative revegetation methods needs to be considered for functional reasons such as erosion control." Section 4.11.3.1 has been revised accordingly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4.11.3.1                                                           |
| WET_39     | In Section 4.11.3, BLM suggests delineating the locations where material sites would occur in floodplains or presenting the criteria to be used for determining when sites would need to be located in the floodplain.                                                                                                                                                                                                                                                                                         | USACE appreciates the comment. Outside of the North Slope, the Project does not propose to create material sites within the active channel of a river or within the riparian zone. However, material sites may be developed within a river floodplain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | No change                                                          |
| WET_4      | The pipeline will cause irreversible damage to clean water and fish habitat.                                                                                                                                                                                                                                                                                                                                                                                                                                   | USACE recognizes that the proposed Project may impact water resources and fish habitat. These are discussed in Sections 4.7 and 4.11 in the SEIS, respectively. Alternative 1 and 2 are compared for water resources and fish habitat in Sections 4.7.7 and 4.11.7, respectively.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                                                          |
| WET_40     | Some non-committal language remains, for example "to the extent practicable," and "where conditions allow." From a terrestrial biology/ecology standpoint, BLM suggests revisiting the following measures: VEGETATION 37 - remove or clarify the language "to the extent practicable," and VEGETATION 43 - remove the language or clarify "where conditions allow."                                                                                                                                            | Examples have been added to the text to describe the instances of "to the extent practicable" and "where conditions allow" mentioned in the comment.<br><br>Mitigation measure number 37 in Appendix M has been updated to state "Re-contouring would be done in a way to emphasize the use of existing drainage patterns and landform types to blend with and be compatible with the surrounding landscape to the extent practicable (e.g., where vertical cuts or other features cannot be physically re-contoured to the original contours due to factors such as blasting or the natural angle of repose of the native fill material after it has been excavated). Re-contouring disturbed areas would be done with site complexity in mind. Generally, revegetation of disturbed areas is planned for long-term stabilization."<br><br>Mitigation measure number 43 in Appendix M has been updated to "For riparian vegetation clearing, vegetation would be cut off at ground level to leave the existing root systems in place to provide streambank stability. In riparian areas, the pulling of tree stumps and rooting for grading activities would be limited to the area directly over the trench line. Riparian vegetation would be restored with native plant species where conditions allow (e.g., riparian species planting is only successful where enough water is present)."                                                                                                                                                                                                                                                                                                                  | Appendix M, Section 4.8.3                                          |
| WET_41     | BLM notes the lack of a definitive Invasive Plant Management Plan. The species identified in Appendix O is a good start, but it appears to simply list potential species in the project area. There is only cursory mention of how this project will be designed to mitigate the potential for introduction and spread of invasive plants. It is important to note that the applicant will be required to provide an Invasive Plant Management Plan to the BLM prior to project approval on BLM-managed lands. | This comment has been shared with the Project proponent. AGDC understands that BLM and the Alaska Department of Natural Resources (ADNR) will require an invasive species management plan as a condition of the State right-of-way lease and the federal grant of right-of-way. Both BLM and ADNR have developed guidelines for invasive plants and the Alaska Department of Fish and Game has provided important information regarding invasive aquatic species. As stated, AGDC will develop a comprehensive invasive species plan for approval by State and Federal agencies prior to receipt of the construction notice-to-proceed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No change                                                          |
| WET_42     | The applicant should be aware that a Treatment Plan for each application of chemicals will be reviewed separately by the BLM (which currently does not allow herbicide treatment in floodplains on CYFO lands); the plan must be approved prior to treatment implementation on federally-managed lands.                                                                                                                                                                                                        | Comment acknowledged. If chemical application is proposed by AGDC on BLM managed land, BLM will require a Treatment Plan as mandated by regulation. AGDC intends comply with the requirement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change                                                          |
| WET_43     | Since the last column of the table in Appendix K defines the crossing as either a stream crossing or HPOI, there does not seem to be a need to have the table provided in Appendix I (StreamCrossings-noHPOIs)                                                                                                                                                                                                                                                                                                 | Thank you for your comment. The table shown in Draft SEIS Appendix I (Final SEIS Appendix J) includes additional information specific to stream crossings for waterbodies that meet the Corps' definition of a stream. The additional information includes: NHD stream type, whether the stream is anadromous, and the anticipated impact volume.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No change                                                          |
| WET_44     | There are a few rows (access road crossings) that are blank in Appendix K.                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the comment. The following was provided by AGDC to address the comment: "Stream ID/Access Road MP, Stream Name, Crossing Mode, Type, Longitude, Latitude, Stream Type" 0466-01/MP181.8, Unnamed, Bridge, Temp., -149.5326, 68.1153, Xing 1321-05/MP540.7, Unnamed, Culvert Perm., -148.7773, 63.6949, Xing 1695-09/MP721.7, Little Susitna River, Bridge, Perm., -150.0977, 61.5642, Xing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change, Draft SEIS Appendix K is not included in the Final SEIS |
| WET_45     | Many large rivers are listed as Artificial Path; why are these listed as such?                                                                                                                                                                                                                                                                                                                                                                                                                                 | This comment has been shared with the Project proponent. AGDC indicates that "Artificial Path" is a metadata designator within the National Hydrography Dataset in the GIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No change                                                          |
| WET_46     | Regarding Section 3.3.5.4 Surface Water Quality, ADEC cooperates with other agencies to maintain a significant collection of water quality data using the Water Quality Portal. Water Quality Portal access can be found at <a href="https://www.waterqualitydata.us/">https://www.waterqualitydata.us/</a> . In addition, EPA has not yet approved the report, however ADEC has published "Alaska's Final 2012 Integrated Water Quality Monitoring and Assessment Report."                                    | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3.3.5.4                                                            |
| WET_47     | The Service recommends the cumulative impacts analysis for wetlands include an assessment of the difference between baseline and post-impact wetland function, based on a defined length of recovery and considering any temporary loss in wetland function after three full growing seasons a permanent loss, as suggested for in lieu fee providers in 33 CFR § 332.8(n)(4).                                                                                                                                 | For the ASAP Project Final SEIS, USACE describes wetland impacts based on wetland loss through fill, wetland fragmentation, and the general change in function, value, or water type code rather than by comparing the specific functions and values ratings (i.e., using the wetland functional categories rating system) before and after Project construction. Based on CEQ guidance, the impact criteria should be based on regulatory guidelines and/or best available scientific information. The criteria must be measurable and comparable along a scale. The impact criteria for wetlands has been reviewed and revised as necessary based on new literature provided by AGDC on recovery of wetlands using their proposed restoration measures. The SEIS reflects best scientific information and reasonable regulatory guidelines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 4.8                                                                |
| WET_48     | Based on the climate change impacts described in the SEIS, we believe the cumulative impacts to habitat associated with changes in permafrost and vegetation are more than minor.                                                                                                                                                                                                                                                                                                                              | Since publication of the Draft SEIS, the conclusions presented on potential cumulative effects have been reviewed and the Final SEIS reflects revisions to these conclusions as necessary based on the best available science as required under NEPA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4.26.9.5                                                           |

| Issue Code | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Final Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Section #s of Change                   |
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| WET_49     | The modeling of permafrost thaw is not currently included in the calculation of total wetlands impacts. This could potentially result in hundreds of miles of frost-heave displacement and soil subsidence associated with the pipeline, leading to hydrologic impacts in drainages crossed by the proposed project, altering of hydrologic regimes of the wetland complexes along the route, and changes to the functions and type of wetlands. Impacts from permafrost thaw should be included in the quantification of total wetlands impacts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the comment. USACE's authority under CWA 404 regulates the direct discharge of dredged or fill material into waters of the United States, including wetlands. Under NEPA this SEIS discloses the reasonable extent of wetland impacts that could occur as a result of the Project and identifies potential reduced functions of adjacent, fragmented or isolated wetlands due to secondary or cumulative impacts. Measures to avoid and minimize these secondary impacts are included in BMPs and mitigation measures for maintaining surface hydrologic regimes, stabilize vegetation type and diversity based upon reference conditions, etc. | No change                              |
| WET_5      | The "Jigsaw Puzzle Lakes" between MP 641.5 and 642, just south of the potential Material Source Site (4B-G) are fragile wetlands, a biologically rich and sensitive area, which could be quickly transformed into mud bogs by ATVs, causing wetland destruction and sedimentation of our streams. During construction, care should be taken to not disturb the lakes. Develop and implement restrictions and construction guidance to ensure that the equipment and the workers stay away from the lakes and that no sediment gets to the lakes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Comment acknowledged. AGDC indicates that Material Site 4B-G is an expansion of an existing site located roughly between MP 645 and 646. Federal, State, and Borough permits, and other land manager agreements would be required for developing new or existing material extraction sites. Additional authorizations may be necessary for associated activities, such as the construction of temporary access roads. AGDC indicates that prior to permitting the Project, individual sites would be reviewed on a case-by-case basis to identify the site-specific authorizations required for each location.                                                    | No change                              |
| WET_50     | We recommend that the Final SEIS include a revised revegetation plan to restore disturbed wetlands as well as a compensatory mitigation plan to compensate for unavoidable loss of wetlands.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | AGDC has developed a revised revegetation plan in cooperation with ADNR's Plant Materials Center. The plan is included in the Final SEIS Appendix E, along with additional literature provided by AGDC that describes soil segregation plans and a discussion of wetlands revegetation compared to existing projects.                                                                                                                                                                                                                                                                                                                                             | Appendix E                             |
| WET_51     | Text: "Excavated materials would not be stockpiled in rivers, streams, floodplains, or wetlands unless approved by the SPCS/BLM regulatory agencies and designated as an appropriate storage or disposal location by the terms of the lease."; Comment: Suggest adding the word "active" to describe "floodplains" to avoid confusion. Floodplains can also be classified as abandoned or inactive, and the modified wording would help clarify the meaning. ----> "active floodplains"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | USACE will evaluate the suitability of the Project proponent's proposed compensatory mitigation based upon the content of the Compensatory Mitigation Plan, as well as, consider incorporating additional General and Reginal conditions appropriate for use when evaluating potential DA authorizations which establish standard best management practices and revegetation standards.                                                                                                                                                                                                                                                                           | 4.6.3                                  |
| WET_6      | The current Denali alternative under consideration is inadequate and doesn't satisfy the agency's 404 obligations because it leaves the highway right of way too soon to rejoin the original route. The agency should consider an alternative that follows the highway further through the Yanert Valley, avoiding wetlands and other impacts of the currently proposed route.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE appreciates the suggested changes regarding the presentation of information in the SEIS. The word 'active' has been added as per the suggestion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change                              |
| WET_7      | For a project of this scale, the proposed compensation for wetland losses (104.97 acres) is inadequate for 7,573.17 acres of permanent wetland losses. As a cooperating agency, the Service requests that the U.S. Army Corps of Engineers and the Alaska Gasline Development Corporation work with us to develop more appropriate compensation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE requires additional information to identify the location in question.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change                              |
| WET_8      | Are Figures ES-9, -10, and -11 for Alternate 1 or Alternate 2? Should there be 2 figures on Vegetation Impacts, one for each alternative, as the impacts are different between the two Alternatives?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | USACE appreciates the comment. USACE will evaluate the suitability of AGDC's proposed compensatory mitigation based upon the content of the Compensatory Mitigation Plan, as well as, consider incorporating additional General and Reginal conditions appropriate for use when evaluating potential DA authorizations which establish standard best management practices and revegetation standards. AGDC is continuing to work with the USACE to discuss appropriate and practicable mitigation for the ASAP Project.                                                                                                                                           | Figures ES-10, ES-11, ES-12, and ES-13 |
| WET_9      | Although the project would adversely impact wetlands, streams, and other aquatic resources in all 60 watersheds, the Draft CMP uses a novel approach to summarily dismiss potential impacts on the aquatic ecosystem in all but two of these watersheds as "insignificant." This conclusion is particularly remarkable since the Draft SEIS assigns some of these same wetland impacts (e.g. wetland loss and fragmentation) a "major" or "moderate" negative effects rating. The Draft CMP argues that the only ecologically significant impacts to wetlands would be those that occur in watersheds that have experienced greater than 7.5 percent anthropogenic disturbance. Thus, of the approximately 8,907 acres of potential direct wetland impacts estimated for ASAP, the Draft CMP identifies only 104.97 acres as ecologically significant, and does not consider the indirect losses from permafrost degradation at all. All of the impacts to the remaining 8,802 acres of wetlands are dismissed as insignificant regardless of the existing quality of these wetlands, the functions they provide in the landscape, the degree to which those functions would be impacted, the duration of those impacts, or the likely ecological consequences. | Figure ES-9 for Water, shows impacts for both Alternative 1 and Alternative 2, because the impacts are not expected to differ significantly between the two alternatives. An additional figure has been added for both Vegetation and Wetlands context to show the differences between the two alternatives, particularly the differences in impacts to the Beaufort Coastal Plain ecoregion. Vegetation context figures are now ES-10 and ES-11 and Wetlands context figures are now ES-12 and ES-13.                                                                                                                                                            | No change                              |
| WLD_1      | Comments concerned with Project construction workers using their free time to carelessly hunt wildlife. Construction workers should be excluded from hunting and fishing opportunities along the pipeline.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the comment. USACE will evaluate the suitability of AGDC's proposed compensatory mitigation based upon the content of the Compensatory Mitigation Plan, as well as, consider incorporating additional General and Reginal conditions appropriate for use when evaluating potential DA authorizations which establish standard best management practices and revegetation standards. AGDC is continuing to work with the USACE to discuss appropriate and practicable mitigation for the ASAP Project.                                                                                                                                           | No change                              |
| WLD_10     | It is highly unlikely there will be changes to distribution at the species level from the project. It is more reasonable to assume a possible individual animal behavioral change if management of food waste is not consistent with the proposed mitigation measures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Appendix M of the Final SEIS indicates that in areas where a lease is required from SPCS or a federal grant of ROW is required from BLM, with respect to AGDC's agent, employees, contractors, and the contractors' employees, AGDC would prohibit hunting, trapping, shooting, and camping within the leased area. The agents, employees, contractors of AGDC would not use project equipment, including transportation to and from the job site, for the purpose of hunting, fishing, shooting, and trapping.                                                                                                                                                   | No change                              |
| WLD_11     | Is there an assumption that no hunting occurs in areas without road access?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | USACE appreciates the suggested changes regarding the presentation of information in the SEIS. The SEIS Section in reference, 4.10.2.1.4, also discusses changes in predator distribution and their impacts on prey populations in relationship to anthropogenic practices.                                                                                                                                                                                                                                                                                                                                                                                       | 4.10.2.1.5                             |
| WLD_12     | The Alaska Department of Fish and Game (ADF&G) typically manages take of wildlife based on a sustained yield principle. The take in any given game management area (or sub-area) is usually managed based on the take of a specific number of animals and closed when the maximum take has been achieved. If this is true, the hunting mortality associated with increased access from the Project still will be within the approved number of animals as determined by ADF&G. The geographic area of harvest may change, however, the impact to the population should not be negative if properly managed by ADF&G.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | There is no assumption that hunting only occurs in areas with roads. The sentence in question was slightly misleading and has been edited to say, "Construction and maintenance of access roads provide easier access to hunters and other recreational users. Due to the lack of experience with previous hunting pressure, game species in newly opened geographical areas are more susceptible to disturbance as well as greater mortality as a result of harvesting."                                                                                                                                                                                         | 4.10.2.1.5                             |
| WLD_13     | Remove subjective statements. The number of acres in Alaska disturbed vs undisturbed is more appropriate.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the suggested changes regarding the presentation of information in the SEIS. Text has been added to address this suggestion: "However, ADF&G manages take of wildlife on a sustained yield principle. The take in any given Game Management Unit (GMU) is managed based on the take of a specific number of animals and closed when the maximum take has been achieved. Hunting mortality associated with increased access from the Project will be sufficiently managed by ADF&G."                                                                                                                                                             | 4.10.4                                 |
| WLD_14     | It is possible that the elevated pipeline will cause shifts in migration that, while not necessarily causing impact to caribou, impact subsistence users in the area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | This statement has been revised to "Although Alaska is a very large state and there is available habitat for many species, the continued development and activity in the state contributes to habitat reduction and fragmentation. Cumulative impacts from both anthropogenic and natural loss of habitat, due to development, fire, and climate change should be considered."                                                                                                                                                                                                                                                                                    | No change                              |
| WLD_15     | The text regarding collision risk to eider species should be changed to reflect a higher potential for impacts with Alternative 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | USACE recognizes that the aboveground pipeline segment in Alternative 2 may affect caribou migration and subsistence harvest of the caribou. This is discussed in Section 4.10.5.2.3 of the SEIS. Recognizing the influence of compounding factors, such as proximity to roads, it is possible for the aboveground section of pipeline to negatively impact caribou movement and migration patterns, particularly if snow is drifted under the elevated pipeline, reducing pipeline height above the snow surface.                                                                                                                                                | No change                              |
| WLD_16     | It is highly unlikely that there will be changes to distribution at the species' population level from the project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | The impact to eider species regarding collision risk in Alternative 2 is already rated at moderate adverse, which is also discussed in text as higher than Alternative 1. The potential direct and indirect effects of Alternative 2 during operations would likely be greater than Alternative 1 given that an aboveground pipeline may alter wildlife movement through the area or could be a collision hazard for certain bird species. However, the overall direct and indirect effect of Alternative 2 are still considered moderate adverse.                                                                                                                | No change                              |

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| WLD_17     | The Alaska Gasline Development Corporation does not recall proposing escape ramps for wildlife.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | This mitigation measure has been revised and the following text has been removed, "(e.g., escape ramps).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4.10.3 and Appendix V          |
| WLD_18     | We strongly recommend that the Final SEIS include the entire route of the sealift in the project area, which is an integral part of this project, and could potentially impact species managed by the U.S. Fish and Wildlife Service.                                                                                                                                                                                                                                                                                                                                                                                  | Please see the response to comment NEPA_10.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | No change                      |
| WLD_19     | The Department recommends that the Alaska Gasline Development Corporation develop, in coordination with the U.S. Fish and Wildlife Service, a comprehensive Migratory Bird Conservation Plan (MBCP), which should be incorporated into the Final SEIS.                                                                                                                                                                                                                                                                                                                                                                 | AGDC will follow measures outlined in a Migratory Bird Mitigation Plan that will be prepared with input from USFWS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No change                      |
| WLD_2      | Construction of a natural gas line through the Cantwell community area would negatively affect the seasonal migratory patterns and behavior of caribou.                                                                                                                                                                                                                                                                                                                                                                                                                                                                | In Sections 4.10.4.1.4.1, 4.10.4.2.1, 4.10.4.2.2, and 4.20.4.1.1.2 of the SEIS, USACE recognizes that the proposed Project construction and facilities may affect migratory patterns or behavior of caribou. However, construction impacts to caribou would be considered minor, as construction would cause periodic, temporary, or short-term changes to individuals or groups, which are reversed over one reproductive season (1 year).                                                                                                                                                                                                                                                                                                                            | No change                      |
| WLD_20     | Some non-committal language remains. For example "as soon as possible" and "where possible."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Comment acknowledged. AGDC has reviewed the language for both referenced mitigation measures and has concluded no change is necessary, as site-specific conditions could be variable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change                      |
| WLD_21     | Provide a Sensitive Species List for BLM-managed lands and the required spatial buffers and timing restrictions for sensitive species.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A Sensitive Species List for BLM-managed lands and the required spatial buffers and timing restrictions for sensitive species have not been provided by the Project proponent to date. The Project proponent would develop these buffers and restrictions as part of the BLM lease stipulations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change                      |
| WLD_22     | When new access roads/airstrips are created on public land, the Alaska Gasline Development Corporation will consult with the Alaska Department of Fish and Game when considering whether to allow for public access for hunting.                                                                                                                                                                                                                                                                                                                                                                                       | USACE appreciates the comment. AGDC would like to consult with ADF&G on access related issues for state and federal land. AGDC requests that ADF&G provide the AGDC Environmental, Regulatory and Land Manager a single point of contact for these discussions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | No change                      |
| WLD_23     | The SEIS should address impacts to migratory birds associated with marine vessel traffic, as well as collision risks to migratory birds associated with elevated transmission structures.                                                                                                                                                                                                                                                                                                                                                                                                                              | The SEIS has been updated to include the potential mortality and/or injury effects on both T&E birds and other migratory birds associated with collision with vessels or proposed infrastructure associated with the Project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4.10.4.1 and 4.10.4.1.4.7      |
| WLD_24     | The SEIS (Section 4.10.4.3, page 4-226) should acknowledge impacts to populations or species could rise to moderate or greater under some circumstances. Examples include: a) loss or degradation of limited, important habitats; b) poor placement or design of aerial/elevated lines or towers resulting in a significant, continuous collision hazard; c) marine vessel-associated fuel spills affecting a significant proportion of a population or species or a particularly important habitat; and/or d) populations of rats or other non-native species becoming established following accidental introduction. | USACE appreciates the suggested changes regarding the presentation of information in the SEIS. Text has been added to address this suggestion: "Under some specific circumstances, impacts to populations or species could increase to moderate or greater. Examples include:<br>• Loss or degradation of limited, important habitats;<br>• Poor placement or design of aerial/elevated lines or towers resulting in a significant, continuous collision hazard;<br>• Marine vessel-associated fuel spills affecting a significant proportion of a population or species or a particularly important habitat; and/or<br>• Populations of non-native species becoming established following accidental introduction."                                                   | 4.10.2, 4.10.4.1, and 4.10.4.3 |
| WLD_25     | The visual impacts of the aboveground pipe to wildlife may deter their use of the area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USACE recognizes that the proposed Project and past, present, and reasonably foreseeable future actions may affect wildlife. These cumulative impacts of the proposed Project, existing development, and other proposed Projects are discussed in Section 4.26 of the SEIS. The aboveground pipeline segment in Alternative 2 and its potential affects to wildlife, caribou specifically, are discussed in Section 4.10.5.2.3 of the SEIS.                                                                                                                                                                                                                                                                                                                            | No change                      |
| WLD_26     | The Draft SEIS does not emphasize bird strikes related to 62 miles of aboveground pipeline and vertical support members (VSMs). Predatory birds are likely to use the VSMs and pipeline for perching.                                                                                                                                                                                                                                                                                                                                                                                                                  | USACE recognizes that the SEIS was lacking information regarding the new perching sites for predatory birds. Discussion has been added throughout Section 4.10 to address this topic.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.10                           |
| WLD_27     | The negative impacts of a 10+ ft. tall perch for 62 miles should be discussed in terms of impacts to populations of small mammals, such as brown and collared lemmings, which have volatile and changing population cycles. Reductions in small mammal populations contribute to higher levels of predation on secondary food sources, such as duck and eider eggs by other North Slope predators.                                                                                                                                                                                                                     | USACE recognizes that the SEIS was lacking information regarding the new perching sites for predatory birds. Discussion has been added throughout Section 4.10 to address this topic.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.10                           |
| WLD_28     | The 2011 Biological Opinion cannot be ignored and should be emphasized.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | While the Biological Opinion from 2011 may provide useful background information, the agencies (NMFS and USFWS) will develop new Biological Opinions with conclusions based on the updated Project design and the best available, recent scientific data since the 2012 Final EIS was published.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No change                      |
| WLD_3      | Above ground sections of the pipeline must be high enough so that it does not impede movement of wildlife and hunters. A minimum of seven feet of clearance from the bottom of the vertical support members is required to allow free passage to hunters and wildlife.                                                                                                                                                                                                                                                                                                                                                 | Additional information on the proposed height of the pipeline elevated on VSMs under Alternative 2 has been added to Section 2.4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2.4                            |
| WLD_4      | Comments expressing concern about the Project negatively affecting caribou migration. Caribou will stay away if there is project activity during their migration.                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates these comments. Potential impacts to caribou migration are discussed in Section 4.10.4 of the SEIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change                      |
| WLD_5      | Collision risk to birds from an aboveground pipeline is low given the size and visibility of such a pipeline compared to risks associated with habitat modifications expected from burying the pipeline in thaw-unstable permafrost in the Arctic Coastal Plain.                                                                                                                                                                                                                                                                                                                                                       | Comment acknowledged.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No change                      |
| WLD_6      | Aboveground linear features, such as pipelines and roads, are impacting the distribution of caribou and their ability to successfully hunt caribou.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | USACE recognizes that the proposed Project and past, present, and reasonably foreseeable future actions may affect wildlife resources and subsistence hunting. These cumulative impacts of the proposed Project, existing development, and other proposed Projects are discussed in Section 4.26 of the SEIS. The aboveground pipeline segment in Alternative 2 and its potential affects to caribou are discussed in Section 4.10.5.2.3 of the SEIS. Recognizing the influence of compounding factors, such as proximity to roads, it is possible for the aboveground section of pipeline to negatively impact caribou movement and migration patterns, particularly if snow is drifted under the elevated pipeline, reducing pipeline height above the snow surface. | No change                      |
| WLD_7      | As there are no regulatory requirements associated with Audubon listed species, they should be removed from Table 3.6-2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | USACE appreciates the suggested editorial changes regarding the presentation of information in the SEIS. Where USACE agrees with the suggestions, your comments have been incorporated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Table 3.6-2                    |
| WLD_8      | Recommend that the sensitive calving periods be described as seasonal life phases and not sensitive periods. A good example to follow is in Section 3.6.5, Birds.                                                                                                                                                                                                                                                                                                                                                                                                                                                      | USACE appreciates the suggested changes regarding the presentation of information in the SEIS. Text has been added to address this suggestion: "The most sensitive of these periods are calving (May to June) and rutting (September to October)."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3.6.4.2                        |
| WLD_9      | I would recommend that the language from the polar bear section be used when describing construction activities in the threatened and endangered species section: As winter activities have the potential to disturb denning polar bears or ice seals, the Alaska Gasline Development Corporation would consult with the U.S. Fish and Wildlife Services to mitigate impacts appropriately and would obtain the needed permits and authorizations.                                                                                                                                                                     | USACE appreciates the suggested changes regarding the presentation of information in the SEIS. Text has been added to address this suggestion: "As winter activities at West Dock have the potential to disturb denning polar bears or ice seals, AGDC would consult with NMFS and USFWS to mitigate impacts appropriately and would obtain the needed permits and authorizations."                                                                                                                                                                                                                                                                                                                                                                                    | 3.10.4.1                       |

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## **ATTACHMENT E**

### **Meeting Transcripts**

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ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Anchorage, Alaska  
August 1, 2017

## P R O C E E D I N G S

(Anchorage, Alaska - 8/1/2017)

(On record)

MS. JOHNSON: Hello, everybody. Good evening. Welcome to the public meeting for the Alaska Stand Alone Pipeline project. My name is Kate and I work for the company Environmental Resources Management. We are responsible for preparing the supplemental environmental impact statement on behalf of the Army Corps of Engineers.

The purpose of our meeting tonight is to tell you a little bit about what is included in this document and then also to provide you an opportunity to comment on the document and on the project itself.

So we're going to start out by introducing some of the people involved in the project. We're going to talk to you about the steps that are involved in the National Environmental Policy Act or NEPA process, which is the process that requires that the EIS be written. We're also going to talk about the project and background.

I do want to point out that this meeting is about the Alaska Stand Alone Pipeline project, which is the State's instate gas pipeline option. It's different than the AK LNG pipeline project, which would bring natural gas to international markets.

We're going to talk about the contents of the draft SEIS. I'll refer to the supplemental environmental impact statement as the SEIS. And then we're going to talk about the different ways that you can provide comment. I know that some of you might have questions. If you wouldn't mind holding those questions until after the presentation and comment period are finished, we'll stick around and we can use some of the materials that we've brought to answer your questions at that time.

With that I'd like to introduce Sandy Gibson with the Army Corps of Engineers and she's going to tell you a little bit about their role in the project.

1 MS. GIBSON: Thanks, Kate. Good  
2 evening. The U.S. Army Corps of Engineers is the lead  
3 Federal agency for development of the Alaska Stand  
4 Alone Pipeline project supplemental EIS. The  
5 responsibility of the lead agency is to ensure  
6 compliance with applicable environmental review  
7 processes.

8  
9 USACE is responsible for managing the  
10 EIS process and the final content of the EIS,  
11 identifying and selecting cooperating agencies, and  
12 involving the public in the environmental review  
13 process. These tasks are accomplished at the direction  
14 of the Corps of Engineers and prepared using an  
15 independent third-party contractor. The third-party  
16 contractor selected by the Corps for this undertaking  
17 is Environmental Resources Management.

18  
19 Thanks again for everyone coming. At  
20 this time ERM will provide a brief overview of where we  
21 are in the current EIS development process. Afterwards  
22 we'd welcome all comments from the public.

23  
24 Thank you.

25  
26 MS. JOHNSON: Thank you, Sandy. So  
27 here we have the steps in the NEPA process. As you can  
28 see, we are currently conducting the public meeting on  
29 the draft EIS. I've highlighted in orange here the  
30 opportunities that the public has to comment on the EIS  
31 or on the project. The first one was in 2014 during  
32 the scoping period and the comments that were received  
33 during that period have been summarized in a comment  
34 analysis report, which can be viewed online at  
35 asapeis.com.

36  
37 We are currently in the 45-day public  
38 review period for the SEIS that began on June 30th and  
39 it will continue until August 14th. Finally, once the  
40 final EIS is published, there will be a third  
41 opportunity for the public to comment at that time.

42  
43 So many of you may be aware that there  
44 was a final EIS written for this project in 2012 and  
45 since then there have been some project changes and  
46 refinements that have required a supplemental EIS to be  
47 written. As a result of those changes, some of the  
48 environmental impacts have changed a bit, which is the  
49 reason that this new document is required.

50

1                   This slide shows five of the main  
2 differences between 2012 and now. The first difference  
3 is that the pipeline is now designed to carry utility  
4 grade natural gas. As a result, fewer support  
5 facilities will be required along the pipeline. Only  
6 one compressor station will be required at Prudhoe Bay.

7  
8                   Another change is that both the  
9 mainline and the Fairbanks Lateral pipelines have been  
10 rerouted in some locations. For the most part those  
11 changes have been made to decrease the environmental  
12 impacts. If you want to see exactly where those are,  
13 you can look either in the appendix of the SEIS, which  
14 is online at our project website, or you can also look  
15 actually online. The maps are just posted under the  
16 maps tab there so they're easy to find.

17  
18                   And then finally plans for the gas  
19 conditioning facility have been refined. The modules  
20 to construct that facility would be imported. Some  
21 modifications would be required at Dock Head 3 up on  
22 the North Slope in order for those barges to bring in  
23 those materials. It would also require some dredging  
24 and then disposal of those dredged materials around  
25 that area.

26  
27                   Here we have the four main chapters of  
28 the SEIS. Chapter 1, the project purpose and need.  
29 Chapter 2 is the proposed action and the alternatives.  
30 The NEPA process that I mentioned earlier requires us  
31 to analyze the environmental impacts of alternatives to  
32 the proposed action. Chapter 3 is the affected  
33 environment, so it describes the existing conditions  
34 within and around the project area. Then Chapter 4 is  
35 environmental consequences, so what could the potential  
36 environmental impacts of the project be.

37  
38                   Here we have the Alaska Gasline  
39 Development Corporation, who is the project proponent,  
40 also known as the project applicant. Their proposed  
41 purpose and need for the project is to make North Slope  
42 natural gas available to residents in Fairbanks, the  
43 Southcentral region and other communities in the state  
44 as directed by the Alaska State Legislature. It's also  
45 to provide access to a stable, affordable and long-term  
46 supply of natural gas for heating and powering homes  
47 and businesses.

48  
49                   Here we have a map showing the proposed  
50

1 pipeline route. It would begin at Prudhoe Bay at  
2 Milepost 0. It would then follow the Trans-Alaska  
3 Pipeline System down to right around Livengood. At  
4 that point it would continue south. It would stay on  
5 the west side of Fairbanks and Nenana and then on the  
6 east side of Denali National Park before connecting to  
7 ENSTAR's existing distribution system just southwest of  
8 Big Lake.

9  
10 So this is the proposed Fairbanks  
11 Lateral that would connect to the mainline at Milepost  
12 440. It would continue along Murphy Dome and Old  
13 Murphy Dome Roads and then southeast into Fairbanks.

14  
15 This figure shows an example of what  
16 the project construction right-of-way might look like.  
17 As you can see, the pipeline would be buried with the  
18 exception of fault crossings and some stream crossings.  
19 The construction right-of-way would be used to store  
20 trench spoils as well as for construction equipment to  
21 install the pipeline.

22  
23 This would be anywhere between 120 feet  
24 wide to 350 feet wide and then there would be some  
25 additional temporary work spaces within an 800-foot  
26 corridor used to store equipment and materials. During  
27 pipeline operations, that pipeline right-of-way would  
28 be reduced to a minimum of 53 feet and in places it  
29 would still be as wide as 350 feet.

30  
31 In addition to that buried pipeline,  
32 there would be some above ground facilities. Those  
33 would include mobile camps. Here's a picture of some  
34 mobile camps, permanent camps, pipe storage yards as  
35 well as gravel material sites.

36  
37 As I mentioned earlier, a gas  
38 conditioning facility would be constructed near Prudhoe  
39 Bay. This figure here shows the existing central gas  
40 facility at Prudhoe Bay. The gas conditioning facility  
41 is proposed to be constructed about a mile west of that  
42 central gas facility.

43  
44 Also, as I mentioned earlier, there  
45 would be some modifications to Dock Head 3 at West Dock  
46 in order for those 23 barges to access the dock head  
47 and import those modules to construct this gas  
48 conditioning facility. In order for those barges to  
49 access the dock, a channel would be dredged. It would

50

1 be about 500 feet wide by about a mile long. Those  
2 sediments would be disposed of at a nearshore location  
3 within Prudhoe Bay. I'll show you an image of that  
4 location in the next few slides here.

5  
6 So as I mentioned the NEPA process  
7 requires that we analyze alternatives. This slide  
8 shows the main differences between Alternative 1, which  
9 is the proposed action that I just went over, and  
10 Alternative 2. Alternative 3 is the no action  
11 alternative, so what would the impacts of the pipeline  
12 not being constructed be.

13  
14 So under Alternative 2 the route -- I  
15 mentioned that the proposed action stays to the east of  
16 Denali National Park. Under Alternative 2 the route  
17 would enter the Park, it would cross the Nenana River  
18 at a pedestrian footbridge, it would go seven miles  
19 through the Park, it would cross the Nenana River again  
20 and then it would resume along the mainline pipeline.  
21 I didn't point out that this pink line is the proposed  
22 pipeline route, green is Denali National Park and then  
23 this blue line is the Alternative 2 consideration.

24  
25 Another difference would be that in the  
26 EIS we consider the impacts of offloading at Dock Head  
27 2 rather than Dock Head 3. We consider disposing of  
28 those dredged materials that I mentioned earlier at a  
29 different location. So this is the proposed location  
30 in Prudhoe Bay at Milepost 0 and this is the  
31 Alternative 2 proposed location further out in the  
32 Beaufort Sea.

33  
34 Additionally under Alternative 2 we  
35 consider the impacts of an above ground pipeline from  
36 Milepost 0 to 62, so in the Beaufort Coastal Plain  
37 area. Just to give you a frame of reference the  
38 pipeline would be 733 miles long, so that's a little  
39 less than 10 percent of the pipeline route. Finally we  
40 consider using an aerial suspension bridge at the Yukon  
41 River rather horizontal directional drilling.

42  
43 Chapter 3, as I mentioned, goes over  
44 the existing environment in terms of these 21  
45 resources. We're not going to talk about that in  
46 detail today because we don't have time, but if you're  
47 interested in existing environment, we brought a copy  
48 of the EIS out there on the table for you to reference.  
49 It's also available online at [asapeis.com](http://asapeis.com).

50

1 We are going to talk in a little bit  
2 more detail about Chapter 4 or the environmental  
3 impacts. So we're going to focus on these seven  
4 resources that I have listed here. We've chosen to  
5 talk about these today because these are resources  
6 either that are expected to see greater impacts or have  
7 received additional attention from stakeholders.

8  
9 If you're interested in impacts to the  
10 other resources that were on the last slide, we've  
11 brought some figures that are laminated 11x17 out on  
12 the back table. There's one figure for each resource  
13 and it gives a nice overview of where the minor,  
14 moderate and major impacts would be expected to occur.  
15 You can also look in the executive summary for a nice  
16 summary or you can look in the EIS Chapter 4 for a  
17 detail assessment.

18  
19 The impact analysis in Chapter 4 does  
20 take into account AGDC's proposed mitigation measures.  
21 It also discusses cumulative effects, so what the  
22 effects would be of other potential projects in the  
23 area occurring and impacting the same resources that  
24 this project could impact.

25  
26 So I'm going to start by talking about  
27 three of these resources all together and I put them on  
28 the same slide because the greatest potential impacts  
29 to these resources would be related to the potential  
30 for permafrost thaw. These resources are soils and  
31 geology, water and wetlands.

32  
33 There is some potential for permafrost  
34 thaw from vegetation removal along that construction  
35 right-of-way as well as from pipeline operation itself.  
36 If that did occur, there is potential for soil  
37 subsidence, which could result in altered water  
38 drainage as well as altered wetland hydrology.

39  
40 So where could that occur. First of  
41 all it would be limited to areas of continuous or  
42 discontinuous permafrost. This figure generally shows  
43 where those types of permafrost occur. So blue is  
44 where continuous could occur and green is where  
45 discontinuous generally occurs. Within those areas it  
46 would be limited to areas where the soil is less  
47 stable. So like a clay or peat rather than a gravel.  
48 Gravel would be more stable and less likely to subside.

49  
50

1 AGDC has proposed some mitigation to  
2 help minimize these impacts. The first thing is that  
3 they would construct an ambient temperature pipeline.  
4 So the pipeline would acclimate to the surrounding  
5 temperature as it travels through the soil. So that  
6 would further limit the impacts to locations where the  
7 pipeline may be traveling from a warmer soil into a  
8 colder soil where it takes a little bit of time to  
9 acclimate. AGDC would also consider revegetation and  
10 consider replacing those unstable soils that I  
11 mentioned earlier.

12  
13 So for socioeconomics there could be  
14 both positive and negative impacts. Some of the  
15 positive impacts that we could see are employment  
16 opportunities, increased natural gas supply, as well as  
17 local and state tax revenues. Negative impact could be  
18 the upfront local and state expenditures associated  
19 with infrastructure or construction as well as  
20 increased pressure on government services.

21  
22 For cultural resources there is  
23 potential at some sites for physical destruction or  
24 damage or changes in character, setting or access.  
25 These impacts could occur specifically at 26 of the 72  
26 sites that have been identified within the area of  
27 direct effects and that's based on the currently  
28 available survey results.

29  
30 I do want to point out that mitigation  
31 measures have not been finalized yet. They would be  
32 finalized in the programmatic agreement. If additional  
33 mitigation measures are identified in the programmatic  
34 agreement, these impacts at these 26 sites could be  
35 reduced to moderate or if in the programmatic agreement  
36 it's decided that they'll be avoided, they could be  
37 reduced to minor or negligible.

38  
39 For subsistence resources there's  
40 potential for displacement of subsistence resources as  
41 well as changes to access to subsistence resources.  
42 Where this would occur at the greatest extent are  
43 communities located directly along the pipeline route  
44 or communities with increased use of subsistence areas  
45 that intersect the pipeline. This figure shows the  
46 communities in pink which would be most greatly  
47 affected, which are Wiseman, Coldfoot, Minto and  
48 Nenana.

1                   Finally, there could be some impacts  
2 due to noise. The greatest impacts expected to occur  
3 would be associated with horizontal directional  
4 drilling locations. Of those locations, the greatest  
5 impacts are limited to areas where receptors are  
6 located within a tenth of a mile of that activity. So  
7 the horizontal directional drilling could occur over a  
8 24-hour period. It would occur intermittently and  
9 probably for about a third of that time. It would also  
10 occur for 10 to 25 weeks at each location.

11  
12                   So the two locations that are near to  
13 proposed drilling sites are at the Kashwitna River HDD  
14 just north of Willow. There are a few residences  
15 located within a tenth of a mile and then at the Denali  
16 National Park commercial area, so by McKinley Park the  
17 Denali Cabins are located within a tenth of a mile.  
18 However, AGDC would minimize activity in tourist areas  
19 during the tourist season.

20  
21                   So if you're interested in providing a  
22 comment, there are many ways that you can do that. The  
23 first is that you can provide a comment tonight  
24 verbally. Just make sure that you've signed in on the  
25 sign-in forms. If you haven't, if you could do that as  
26 you leave that would be great. You can use one of  
27 those written comment forms that we've got out front or  
28 you can also mail your comments to Sandy at the Army  
29 Corps of Engineers. Make sure that your comments are  
30 postmarked by August 14th. You can also send an email  
31 to asapeiscomments@erm.com and I'll put up the project  
32 website at the end of the presentation here.

33  
34                   When we start our comment period, we'll  
35 start out by allowing each person five minutes to  
36 comment. We just want to make sure that everyone has  
37 an opportunity to comment. If you've got more to say,  
38 you're welcome to come back up again and comment more.

39  
40  
41                   We do have a court reporter present  
42 here today, so if you'd like to comment, please do come  
43 up to the podium and speak into the microphone. Also  
44 please state your name, first and last, before you  
45 speak.

46  
47                   We won't be making any decisions about  
48 the project today. I mentioned earlier if you've got  
49 questions, you're welcome to state the questions during  
50

1 the public comment period, but we won't be responding  
2 to those or making any decisions during the public  
3 comment period or today. Your comments will be  
4 reviewed and incorporated into the final EIS as well as  
5 a public comment analysis report, which will also be  
6 made publicly available.

7  
8 So, with that, is Earl doing his  
9 subsistence hearing tonight? No subsistence hearing  
10 tonight, okay.

11  
12 All right. So with that if anyone  
13 would like to make a comment we would love to hear  
14 from you today. Please go ahead and come up to the  
15 podium and we'll turn it around for you.

16  
17 (No comments)

18  
19 MS. JOHNSON: I'll just give it a  
20 minute to see if anyone wants to come up and comment.  
21 We'd love to hear from you. Any commentators tonight?

22  
23 (No comments)

24  
25 MS. JOHNSON: Nobody. Okay. Well,  
26 then we will close the public comment period and we  
27 will stick around out in the hallway here and we're  
28 happy to show you the materials that we've brought and  
29 help answer any questions that you might have. Thanks  
30 for joining us tonight.

31  
32 (Off record)

33  
34 (END OF PROCEEDINGS)

## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 11 are a true, accurate, and complete transcript of Anchorage Scoping Meeting on August 1, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Barrow, Alaska  
July 17, 2017

## P R O C E E D I N G S

(Barrow, Alaska - 7/17/2017)

(On record)

MS. JOHNSON: Thank you for coming. My name is Kate and I work for the company Environmental Resources Management. We are responsible for writing the draft supplemental environmental impact statement for the Alaska Stand Alone Pipeline Project. The purpose of this public meeting is to tell you a little bit about the supplemental environmental impact statement, which we'll call the SEIS for short. Then also to provide you an opportunity to comment on the document or on the project.

So this slide is an overview of what we'll be talking about tonight. We're going to start out with welcome and introductions to some of the people that are involved in the project. We are going to talk about the steps in the National Environmental Policy Act process or the NEPA process. We'll also talk about the project description and background.

I want to just say that this is the Alaska Stand Alone Pipeline. It's an instate natural gas pipeline. It's different than the AK LNG pipeline that you might have heard of. That pipeline is intended for exporting natural gas, international market, so that's a different project.

We're going to talk about the contents of the draft EIS and we're going to talk about different ways that you can provide comment on the document as well.

With that I'll introduce Sandy Gibson with Army Corps of Engineers and she's going to tell you a little bit about the people involved in the project.

MS. GIBSON: Thanks, Kate. Good evening. My name is Sandy Gibson. I'm with the Army Corps of Engineers. The Army Corps of Engineers is the lead Federal agency for development of the Alaska Stand Alone Pipeline project supplement EIS. The responsibility of the lead agency is to ensure compliance with applicable environmental review

1 processes.

2  
3 The Army Corps of Engineers is  
4 responsible for managing the EIS process and the final  
5 content of the EIS, identifying and selecting  
6 cooperating agencies, which you see here listed, and  
7 involving the public in the environmental review  
8 process. These tasks are accomplished at the direction  
9 of the Corps and prepared using an independent third-  
10 party contractor. The third-party contractor selected  
11 for this undertaking is Environmental Resources  
12 Management. This is who Kate works with.

13  
14 Thank you everyone for coming. At this  
15 time ERM will provide a brief overview of where we are  
16 in the EIS development. Afterwards we'll welcome all  
17 comments from the public. Thank you.

18  
19 MS. JOHNSON: All right. So this slide  
20 shows some of the steps that are in the NEPA process.  
21 As you can see in blue, we are conducting public  
22 meetings for the draft SEIS. We're in the middle of a  
23 45-day public comment period that began June 30th and  
24 it will be open until August 14th.

25  
26 MR. HUGO: Is that gas or oil?

27  
28 MS. JOHNSON: Natural gas.

29  
30 MR. HUGO: Natural gas?

31  
32 MS. JOHNSON: Uh-huh (affirmative).

33  
34 MR. HUGO: Where at?

35  
36 MS. JOHNSON: I'll show you a map in  
37 the next few slides here of exactly where it will go.  
38 So there was an opportunity in 2014 to provide comments  
39 during the scoping period and there will be another  
40 opportunity in the winter of 2017 to provide comments  
41 on the final document.

42  
43 MR. HUGO: Is this gas at the pump?

44  
45 MS. JOHNSON: Sorry?

46  
47 MR. HUGO: Is it in the land or where  
48 or where there's gas?

49  
50

1 MS. JOHNSON: So the pipeline will  
2 start in Prudhoe Bay and it will extend down just north  
3 of Anchorage and it will connect into the existing  
4 natural gas system down there.

5  
6 MR. HUGO: Oh, the natural gas  
7 pipeline?

8  
9 MS. JOHNSON: Yeah. So this slide  
10 shows the differences between the 2012 design and the  
11 current design. So why do we need a supplemental EIS.  
12 There was an EIS written in 2012 and since then there  
13 have been some project changes and refinements. As a  
14 result the environmental impact changed a bit.

15  
16 This slide shows the main differences  
17 between then and now. The first item on the list is  
18 that the pipeline will now carry utility-grade natural  
19 gas, so there will be less support facilities, fewer  
20 compressor stations. Only one single compressor  
21 station involved and you'll be able to access that gas  
22 directly from the pipeline. It won't require  
23 additional refinement.

24  
25 MR. HUGO: What is the gas going to be  
26 used for?

27  
28 MS. JOHNSON: You will have an  
29 opportunity to talk with us after the presentation, so  
30 I'm just going to go through the slides and then  
31 afterwards we're all going to stay here and you can  
32 look at the materials and we can answer any questions  
33 that you might have.

34  
35 Okay. Another difference is the  
36 mainline pipeline and the Fairbanks Lateral Pipeline  
37 have both changed their alignment a little bit. If  
38 you're interested in what those changes are, you can  
39 look online at the website. It's asapeis.com and you  
40 can see where those are.

41  
42 Finally the plans for constructing the  
43 gas conditioning facility have been refined. AGDC  
44 would be importing modules to construct that facility  
45 and that would result in some modifications to the Dock  
46 Head 3 at Prudhoe Bay. It would also involve some  
47 dredging and then disposal of that dredged material.

48  
49 This slide shows the contents of the  
50

1 EIS. This is the main four chapters of the SEIS. The  
2 first chapter describes the project purpose and need.  
3 Just so you know, the SEIS document that describes the  
4 project and all the environmental impacts is on the  
5 back table here. So if you want to take a look at  
6 that, that's what we're describing here.  
7

8 Chapter 1 is the project purpose and  
9 need. Chapter 2 is the proposed action and  
10 alternatives. The NEPA process that I mentioned  
11 earlier requires us to analyze some alternatives to the  
12 project. Chapter 3 describes the existing conditions  
13 within the project area. Chapter 4 talks about the  
14 potential environmental impacts.  
15

16 So the project purpose and need is to  
17 make North Slope natural gas available to residents in  
18 Fairbanks, the Southcentral region and other  
19 communities in the state as directed by the Alaska  
20 State Legislature. It's also to provide access to a  
21 stable, affordable and long-term supply of natural gas  
22 for heating and powering homes and businesses.  
23

24 Here's the slide I was talking about  
25 that shows you exactly where the pipeline route will  
26 start and end. This shows Milepost 0 up at Prudhoe Bay  
27 and the line would then extend south, paralleling the  
28 Trans-Alaska Pipeline System until just northwest of  
29 Fairbanks and then it would continue south while the  
30 TAPS pipeline continues east. It would stay to the  
31 east side of Denali National Park. It wouldn't enter  
32 the Park. Then it would continue along the Parks  
33 Highway down to just southwest of Big Lake where it  
34 would connect into the existing natural gas system.  
35

36 MR. HUGO: Is there infrastructure to  
37 make it available for a heating basis?  
38

39 MS. JOHNSON: Is there infrastructure  
40 to make the natural gas available for heating. So it  
41 would tie into the existing natural gas pipelines in  
42 Southcentral Alaska.  
43

44 So this slide just shows that there is  
45 a Fairbanks Lateral that's going to extend from  
46 Milepost 440 of the pipeline over to Fairbanks.  
47

48 This slide shows an example of what the  
49 construction right-of-way might look like. As you can  
50

1 see, the pipeline would be a buried pipeline. One side  
2 of the right-of-way or part of the right-of-way would  
3 be used to store that soil that comes out of the trench  
4 and then the right-of-way would also be used for  
5 equipment to access.

6  
7 The right-of-way would be anywhere  
8 between 120-350 feet wide during construction and then  
9 additionally there would be some temporary work spaces  
10 within a 800-foot corridor. During operations the  
11 right-of-way would be maintained at 53 feet and in some  
12 areas out to 350 feet.

13  
14 MR. HUGO: Do you know how much longer  
15 natural gas is going to happen and drilled out?

16  
17 MS. JOHNSON: That I don't know. I  
18 don't know the answer to that. So this slide shows the  
19 above-ground facilities that would be constructed in  
20 addition to the pipeline. They would include temporary  
21 camps that might look something like this picture.  
22 Stationary camps that might look like this picture. It  
23 would include pipe storage yards and then material  
24 sites that would provide gravel.

25  
26 Some additional above-ground facilities  
27 would be the gas conditioning facility, which would be  
28 constructed. This figure shows the outline of where  
29 the pad would be constructed. It would be in Prudhoe  
30 Bay and it's about a mile west of the existing central  
31 gas facility.

32  
33 Then, as I mentioned earlier, there  
34 would be some modifications to Dock Head 3 at West Dock  
35 so that 23 barges could offload the materials to  
36 construct the gas conditioning facility. That would  
37 also require dredging of a channel so that those  
38 projects could reach the dock head. It would be about  
39 a mile long and about 500 feet wide.

40  
41 MR. HUGO: Can we send the gas to Mars?  
42 Do you know that?

43  
44 MS. JOHNSON: No, no. Okay. So this  
45 slide talks about the difference between Alternative 1  
46 and 2. So I mentioned earlier that we're required to  
47 address some alternatives. So the first one is that  
48 the route would actually enter Denali National Park for  
49 about seven miles. I'm just going to go to the next  
50

1 slide and show you where. So this is the Alternative 1  
2 proposed action.

3  
4 Under Alternative 2 the line would  
5 follow this blue line. It would enter Denali National  
6 Park crossing the Nenana on a pedestrian bridge, it  
7 would go through the Park and then cross the river  
8 again before connecting to the main route.

9  
10 Secondly, modules would be offloaded at  
11 Dock Head 2 rather than Dock Head 3. It would also  
12 include under Alternative 2 ocean disposal of the  
13 dredge materials. So the proposed action is to dispose  
14 of the dredge materials nearshore in Prudhoe Bay and  
15 under Alternative 2 they would be disposed out in the  
16 Beaufort Sea a few miles offshore.

17  
18 Another difference between Alternatives  
19 1 and 2 is that Alternative 2 would be constructed  
20 above ground within the Beaufort Coastal Plain area.  
21 The pipeline would be 733 miles long, so that would be  
22 less than 10 percent of the pipeline length.

23  
24 Finally, at the crossing of the Yukon  
25 River we consider in SEIS the impacts of an aerial  
26 suspension bridge rather than a horizontal drilling  
27 crossing at the Yukon River.

28  
29 Finally, Alternative 3 is the no action  
30 alternative. So what would the impacts be if the  
31 pipeline wasn't constructed.

32  
33 This slide just shows a list of all the  
34 resources that are described in the document. We won't  
35 go through all of them today, but if you're interested  
36 in reading about any of these existing environment, you  
37 can look in the EIS. It's also available online at  
38 asapeis.com.

39  
40 Chapter 4 we'll spend a little bit of  
41 time on. We've selected these seven resources to talk  
42 about today because they've either been of particular  
43 interest to stakeholders or they're likely to see some  
44 greater impacts than the other resources.

45  
46 If you're interested in the impacts on  
47 the other resources that we saw in the last slide,  
48 we've got a bunch of maps on the back table there and  
49 those show the pipeline route and then which areas

50

1 might see major effects and which areas might see minor  
2 effects. You can also look in the executive summary,  
3 which is in the beginning of the document and then you  
4 can also read in the EIS if you want more detail.

5  
6 The analysis of the impacts also  
7 consider AGDC's proposed mitigation measures and  
8 there's also a section that talks about cumulative  
9 effects. So what would the effects be of other projects  
10 that could happen in the area when combined with this  
11 project.

12  
13 There's a lot on this slide. I've  
14 combined a few resources together because the greatest  
15 impacts to these resources would be similar. Soils and  
16 geology, water and wetlands could all potentially see  
17 impacts as a result of permafrost thaw. Permafrost  
18 thaw could occur from stripping of vegetation and then  
19 also during pipeline operation.

20  
21 If permafrost thaw occurs, then in some  
22 locations where the soil is less stable, the soil could  
23 see some collapsing, which could alter the surface and  
24 groundwater hydrology as well as the wetland hydrology.  
25 So those are considered indirect effects.

26  
27 So where would this occur. This could  
28 occur in areas of continuous or discontinuous  
29 permafrost. So this blue area is just generally where  
30 you might see continuous permafrost and this sort of  
31 peach color is where you might be discontinuous  
32 permafrost. Then within those areas the impacts would  
33 be limited to, as I mentioned before, unstable soil.  
34 If you had like an organic soil, it could collapse,  
35 whereas if it were a gravel soil, then you wouldn't see  
36 these impacts.

37  
38 So AGDC has proposed some mitigation  
39 related to this impact. The pipeline would be an  
40 ambient temperature pipeline so it would acclimate to  
41 the surrounding ground temperature. There could be  
42 sometimes when the pipeline is going from a warmer area  
43 to a colder area that it may take some time to adjust  
44 and that's where we might see these impacts. AGDC will  
45 also consider revegetation and then also replacing some  
46 of those unstable soils with more stable soils.

47  
48 For socioeconomic, some of the impacts  
49 could be -- the impacts could be positive or negative.  
50

1 Some of the positive impacts that we might see are  
2 increased employment opportunities during both  
3 construction and operations, increased natural gas  
4 supply during operations and then local and state tax  
5 revenues. On the opposite side, the negative impacts  
6 could be some up-front local and state expenditures  
7 related to infrastructure and government services.  
8 Might experience an increased demand during  
9 construction.

10

11 Cultural resources. Some impacts that  
12 could occur include physical destruction or damage as  
13 well as changes in character or setting. Where could  
14 this occur? The EIS identifies 26 sites of the known  
15 72 sites within the area of direct effects and this is  
16 based on the survey results that are available to us  
17 now.

18

19 The mitigation measures will be further  
20 developed in the programmatic agreement. So when those  
21 are developed those impacts could be reduced to  
22 moderate with certain mitigation measures or they could  
23 be reduced to minor or negligible if it's determined  
24 that they'll be avoided.

25

26 A couple more slides about impacts.  
27 Subsistence resources. There could be displacement of  
28 subsistence resources or changes to access to  
29 subsistence resources and this would occur to the  
30 greatest extent in these communities that would be  
31 located right along the pipeline such as Wiseman and  
32 Coldfoot as well as Nenana and also communities that  
33 use subsistence areas that are intersected by the  
34 pipeline such as Minto. This map is also on the back  
35 table if you want to check out Barrow.

36

37 Finally, there could be some  
38 significant noise in some locations. This could occur  
39 over a 24-hour period, but it would occur  
40 intermittently, so about a third of the time over the  
41 24 hours and then that could occur for 10 to 25 weeks.

42

43

44 We've identified locations where this  
45 would be a greater impact and those are locations where  
46 there's a receptor within a 10th of a mile. So at the  
47 Kashwitna River HDD, which is shown just north of Big  
48 Lake, there are some residences that are close to the  
49 horizontal directional drilling location and then near

50

1 McKinley Park, the Denali Cabins are pretty close to  
2 the drilling location. AGDC has proposed some  
3 mitigation measures. They would minimize activities  
4 near tourist-related facilities such as the Denali  
5 Cabins during high-use periods.  
6

7 So if you're interested in providing a  
8 comment on the EIS, you can provide one tonight during  
9 the comment period. Make sure that you sign in. I  
10 think everyone has done that. You can fill out a  
11 comment form, which are on the back table. You can  
12 send an email to asapeiscomments@erm.com or you can  
13 send a note to Sandy at the Army Corps of Engineers.  
14 Just make sure that those are postmarked by August  
15 14th.  
16

17 We've got a court reporter here  
18 tonight, so if you make a comment on the record, please  
19 make sure that you state your name and spell it for  
20 her. We won't be making any decisions about the  
21 project today and we won't be responding to any  
22 comments or questions during the formal comment period,  
23 but your comments will be recorded and they'll be  
24 considered when we're writing the final EIS.  
25

26 If you have questions about the project  
27 that you want answered tonight, we will stay and we've  
28 got lots of project materials. We can point you to  
29 where you might find that information. So please focus  
30 your comments on the ASAP EIS project. With that, Earl  
31 will make a statement about the subsistence hearing.  
32

33 MR. WILLIAMS: Thank you, Kate. Good  
34 evening. My name is Earl Williams and I am a project  
35 manager with the Bureau of Land Management. I am  
36 reading this statement into the record to let you know  
37 that this public meeting is also a subsistence hearing.  
38

39 Section 810 of the Alaska National  
40 Interest Lands Conservation Act, or ANILCA, requires  
41 the BLM to evaluate the effects of its actions on  
42 subsistence uses and to hold public hearings if it  
43 finds that subsistence use may be significantly  
44 restricted.  
45

46 The Alaska Stand Alone Pipeline project  
47 is seeking a right-of-way from the BLM to allow for the  
48 construction and operation of a buried pipeline across  
49 public lands. In reviewing this application, the BLM  
50

1 must consider the potential effects to the environment  
2 and the potential impacts to subsistence resources and  
3 uses on public lands. The ANILCA 810 evaluation done  
4 for this project assessed the potential effects of the  
5 proposed alternatives and the cumulative case on  
6 subsistence use, and is included as an appendix in the  
7 Draft SEIS.

8  
9 In the evaluation, the BLM finds that  
10 the proposed project and its alternatives may result in  
11 a significant impact to subsistence uses. These  
12 potential impacts may include reductions in the  
13 availability or abundance of caribou, moose, and other  
14 wildlife. Additionally, there could be reductions in  
15 the availability of berries and other plants in some  
16 traditional harvest areas.

17  
18 This hearing is being held to provide  
19 you an opportunity to make comments on the preliminary  
20 subsistence analysis for the Alaska Stand Alone  
21 Pipeline. All comments are welcome, but we especially  
22 would like to hear your thoughts regarding mitigation  
23 measures that could be applied to minimize impacts to  
24 your subsistence use.

25  
26 The comments you provide will be  
27 considered in the preparation of the Final SEIS and the  
28 BLM's Record of Decision. You may provide your  
29 comments here tonight or submit them in writing.  
30 Please submit any written comments to the Corps of  
31 Engineers by the close of the comment period.

32  
33 Thank you.

34  
35 MS. JOHNSON: Thanks, Earl. So if you  
36 would like to make a comment, you can go ahead at this  
37 time. Just step up to the podium and don't forget to  
38 state and spell your name. We'd love to hear from you.  
39 Would anyone like to comment?

40  
41 MS. STACKHOUSE: I'm Martha Stackhouse,  
42 M A-R-T-H-A S-T-A-C-K-H-O-U-S-E. I was noticing that  
43 along the pipeline there's villages like Rampart that  
44 are not directly there but are close to the pipeline.  
45 Are they going to be able to get the natural gas as  
46 well? Any of those villages that are close to the  
47 pipeline?

48  
49 The other one I was wondering about is  
50

1 the disposal areas in Beaufort Sea. What are they  
2 disposing? Those are the two questions that I had.

3  
4 MS. JOHNSON: I can answer those  
5 briefly. So they are disposing of the dredged  
6 materials from dredging a channel to access Dock Head  
7 3. And then regarding community access to the main  
8 pipeline, they would need to construct a line to off-  
9 take off of the main pipeline. If you've got more  
10 questions about that, we can share our project  
11 materials with you after.

12  
13 Anything else?

14  
15 MS. ROMERO: So I was going to say,  
16 Martha, if you think that, you know, gas should be  
17 provided to Rampart, then that's the kind of comments  
18 that we need to hear or was it just a general question?

19  
20 MS. STACKHOUSE: Yeah. Well, yeah. I  
21 was just wondering -- actually the whole state, you  
22 know, they're always bringing in lots of heat, stove  
23 oils in small villages all throughout the state.

24  
25 MS. ROMERO: Tina, can you hear her?

26  
27 REPORTER: I can, but why don't you  
28 come on up so everybody will be able to hear you.

29  
30 MS. ROMERO: Those are exactly the  
31 comments we need.

32  
33 MS. STACKHOUSE: Yeah, I was just  
34 wondering if it's possible to even bring natural gas to  
35 the whole state, like in Bethel area, you know.  
36 There's so much need. Even in our areas like even  
37 Atkasuk. They don't have natural gas. Wainwright,  
38 those places, but also in other regions throughout the  
39 state. Bethel area, down Southcentral area and those.

40  
41 So I was just wondering if it's  
42 possible because I'm not sure where this gas is going.  
43 I know it's somewhere down south, but there is so much  
44 need here in Alaska. That was my point.

45  
46 MS. JOHNSON: Thank you. Go ahead.

47  
48 MR. HUGO: I am Christopher Hugo. Is  
49 there going to have a need for a waste site for  
50

1 conditioning the gas?

2

3 MS. JOHNSON: I guess I don't have an  
4 answer to that today, but we've got your comment on the  
5 record and we'll consider that.

6

7 MR. HUGO: Okay. Thank you.

8

9 MS. JOHNSON: Anything else?

10

11 (No comments)

12

13 MS. JOHNSON: Okay. I suppose we'll  
14 close the comment period and we'll stick around for a  
15 few minutes.

16

17 We really appreciate you coming tonight  
18 and listening to the presentation and commenting.

19

20 Thanks so much.

21

22 (Off record)

23

24 (END OF PROCEEDINGS)

25

26

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## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 14 are a true, accurate, and complete transcript of Barrow Scoping Meeting on July 17, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Bettles, Alaska  
July 25, 2017

## P R O C E E D I N G S

(Bettles, Alaska - 7/25/2017)

(On record)

MS. JOHNSON: Hello, everybody. I think we're going to get started here so if you wouldn't mind taking a seat. Okay. My name is Kate and I'm with the company Environmental Resources Management. We are responsible for writing the draft supplemental environmental impact statement for the Alaska Stand Alone Pipeline project. We are the third-party contractor on behalf of the Army Corps of Engineers.

The purpose of the meeting tonight is just to tell you a little bit about the findings of the -- I'm going to call it the SEIS so I don't have to repeat Supplemental Environmental Impact Statement. We're going to tell you about the findings and then we're going to provide an opportunity for you to provide a public comment and then we'll stick around a little bit afterwards if you guys want to look a little more at these materials and talk to us. We'll be here.

So we're going to start out with introductions and then I'm going to talk to you a little bit about the steps that are involved in the National Environmental Policy Act process, which I'll call the NEPA process. We're also going to talk about the project description.

I do want to make it clear that this project is the Alaska Stand Alone Pipeline Project, so it's the instate gas option. It's different than the AK LNG pipeline. That is the pipeline that would distribute natural gas to international markets. This pipeline is only for instate markets.

We're going to talk a little bit about the contents of the SEIS and then we're going to talk about your opportunities to provide comments outside of tonight. I do ask that if you have questions, if you could just hold them during the presentation and public comment period and then after that we'll stick around and we're happy to help you find the information you're looking for.

1 With that I'd like to introduce Sandy  
2 Gibson with the Army Corps of Engineers and she's going  
3 to tell you a little bit about their role in the  
4 project.

5  
6 MS. GIBSON: Thanks, Kate. Thanks  
7 again for everyone coming. The Army Corps of Engineers  
8 is the lead Federal agency for development of the  
9 Alaska Stand Alone Pipeline project supplemental EIS.  
10 The responsibility of the lead agency is to ensure  
11 compliance with applicable environmental review  
12 processes.

13  
14 USACE is responsible for managing the  
15 EIS process and the final content of the EIS,  
16 identifying and selecting the cooperating agencies,  
17 which are listed here below, and involving the public  
18 in the environmental review process. These tasks are  
19 accomplished at the direction of the Corps and prepared  
20 using an independent third-party contractor. The  
21 third-party contractor selected for this undertaking is  
22 Environmental Resources Management.

23  
24 At this time ERM will provide a brief  
25 overview of where we are in the EIS development  
26 processes and we welcome all comments from the public.  
27 Thank you, guys.

28  
29 MS. JOHNSON: Thanks, Sandy. So here  
30 we have the steps in the NEPA process. As you can see  
31 in blue, we are at the public meeting phase. We are  
32 also currently in the public comment period for the  
33 draft SEIS. It's a 45-day comment period. It began  
34 June 30th and it will be open until August 14th.

35  
36 What you see highlighted in orange here  
37 are opportunities to comment on the document. One was  
38 held during the scoping period in August of 2014. You  
39 can see the results of that period on the website  
40 asapeis.com. There's a comment analysis report that  
41 describes the comments that were received and how  
42 they're incorporated. And then finally the final EIS,  
43 when that's distributed, you'll have another  
44 opportunity to comment at that time.

45  
46 So why do we need a supplemental EIS.  
47 As many of you know, there was an EIS for this project  
48 prepared in 2012 and since then there have been several  
49 project changes. With those project changes are some  
50

1 differences in environmental impacts, which is what  
2 requires a supplemental EIS.

3  
4 This slide summarizes the main changes  
5 between 2012 and now. The first one is that the gas  
6 composition is now proposed to be utility grade natural  
7 gas, so that would require fewer support facilities and  
8 would include only one compressor station at Prudhoe  
9 Bay rather than multiple compressor stations.

10  
11 Both the mainline pipeline and the  
12 Fairbanks Lateral have been rerouted in several  
13 locations. For the most part those are to minimize  
14 environmental impacts. If you're interested in where  
15 those route changes are, you can look on the website.  
16 There's a map that shows the 2012 route and the current  
17 route compared.

18  
19 Finally, plans for the gas conditioning  
20 facility have been refined, so modules to construct  
21 that gas conditioning facility would be imported and  
22 they would use Dock Head 3 at West Dock on the North  
23 Slope to import those modules. So some modifications  
24 would be required there as well as some dredging and  
25 then disposal of those dredged materials.

26  
27 So there's four main chapters of the  
28 SEIS. The first chapter is the project purpose and  
29 need. We're going to talk a little bit about each of  
30 these tonight. Chapter two is the proposed action and  
31 alternatives. The NEPA process requires that we  
32 analyze the environmental impacts of alternatives in  
33 addition to the proposed action. Chapter three  
34 describes the existing conditions within and around the  
35 project area. Then chapter four describes what the  
36 potential environmental consequences might be on those  
37 resources.

38  
39 The Alaska Gasline Development  
40 Corporation's proposed purpose and need for the project  
41 is to make North Slope natural gas available to  
42 residents in Fairbanks, the Southcentral region and  
43 other communities in the state as directed by the  
44 Alaska State Legislature and to provide access to a  
45 stable, affordable and long-term supply of natural gas  
46 for heating and powering homes and businesses.

47  
48 This slide shows the proposed pipeline  
49 route. As you can see, it would begin at Prudhoe Bay,  
50

1 Milepost 0. It would then follow basically the  
2 Trans-Alaska Pipeline System route down to Livengood,  
3 this is TAPS in green, where it would continue south.  
4 It would stay west of Fairbanks and Nenana and then  
5 under the proposed action Alternative 1 it would stay  
6 on the east side of Denali National Park. It would  
7 then continue down the Parks Highway and connect with  
8 ENSTAR's existing distribution system down there.

9  
10 The project also includes the Fairbanks  
11 Lateral, so it would tie into the main line at Milepost  
12 440 and then it will follow Murphy Dome and Old Murphy  
13 Dome Roads and then it would extend southeast into  
14 Fairbanks.

15  
16 This slide shows an example of what the  
17 construction right-of-way might look like. As you can  
18 see, it would be a buried pipeline. The construction  
19 right-of-way would be used to store trench spoil as  
20 well as for equipment to access that trench and install  
21 the pipeline.

22  
23 This would be between 120 and 350 feet  
24 wide during construction. In addition, there would be  
25 some temporary work spaces for storing materials and  
26 equipment that would be within an 800-foot corridor of  
27 the pipeline route. So that's during construction.  
28 During operations the right-of-way would be slightly  
29 narrower down to 53 feet wide in many locations, but  
30 still could be out to 350 feet in some places.

31  
32 In addition to the pipeline itself,  
33 there would be some above-ground facilities. Those  
34 would include both mobile and stationary camps. These  
35 are just some pictures of what those might look like.  
36 It would include pipe storage yards as well as gravel  
37 material sites.

38  
39 As I mentioned earlier, a gas  
40 conditioning facility would be constructed up on the  
41 Slope near Prudhoe Bay. This shows the existing  
42 central gas facility. That gas conditioning facility  
43 would be constructed about a mile west of there.

44  
45 In order to construct that, as I  
46 mentioned, barges would import some modules and there  
47 would be some modifications to Dock Head 3 at West  
48 Dock. In order for those barges to access the dock,  
49 there would be dredging of a channel which would be  
50

1 approximate 500 feet wide by about a mile long.

2

3 So I mentioned that there were  
4 alternatives analyzed in the EIS and this shows the  
5 differences between Alternative 1 and Alternative 2.  
6 Alternative 3 is the no action alternative. So there's  
7 five main differences between 1 and 2. The first one  
8 is that Alternative 2 considers a route that enters  
9 Denali National Park and it would go through the Park  
10 for about seven miles. Here we have the proposed  
11 action in pink.

12

13 Denali National Park is in green and  
14 then the Alternative 2 route is shown in blue. It  
15 would cross the Nenana River on a pedestrian  
16 footbridge, go seven miles through the Park and then it  
17 would cross the Nenana River again before reaching the  
18 proposed action route.

19

20 Under this alternatives the modules for  
21 constructing the DCF would be offloaded at Dock Head 2  
22 rather than Dock Head 3. The dredge materials would be  
23 disposed of in a different location. So in Alternative  
24 1 we consider the impacts of disposing those materials,  
25 those sediments, nearshore in Prudhoe Bay. Under  
26 Alternative 2 we consider the impacts of disposing  
27 those in the Beaufort Sea.

28

29 Under Alternative 2 the pipeline would  
30 be constructed above ground for the first 62 miles, so  
31 that's the area of it that's within the Beaufort  
32 Coastal Plain. To give you a frame of reference, the  
33 pipeline would be 733 miles long, so that's a little  
34 less than 10 percent of the route. Finally, under  
35 Alternative 2 we consider the impacts of an aerial  
36 suspension bridge crossing the Yukon River rather than  
37 horizontal directional drilling.

38

39 Chapter 3, as I mentioned earlier,  
40 talks about the affected environment. We don't have  
41 time to talk about all these resources today, but the  
42 existing environment in terms of these resources are  
43 described in detail. We've got a copy of the EIS on  
44 the table here if you want to take a look at it.  
45 There's six booklets and they all make up one EIS, so  
46 it's just for reference tonight.

47

48 Chapter 4, environmental consequences,  
49 we're going to talk in detail about a few of the

50

1 resources. The reason we selected these resources is  
2 because these are the ones that have received the most  
3 attention from stakeholders or they're the ones that  
4 are expected to see the greater impacts.

5  
6 If you're interested in impacts to the  
7 other resources that I just showed on that last slide,  
8 we've got some laminated maps here on the table.  
9 There's one map for each resource and it shows you  
10 where impacts are expected to be minor, moderate and  
11 major along the pipeline route. So you can look up  
12 Bettles and see which ones could be impacted the most  
13 in the area.

14  
15 There's also an executive summary at  
16 the beginning of the EIS that's got a quick bulleted  
17 summary of the impacts to each resource. And then the  
18 Chapter 4 environmental consequences does take into  
19 account AGDC's proposed mitigation measures. Then  
20 finally there is a chapter that talks about cumulative  
21 effects, which is the effects of other proposed or  
22 potential projects in the area that could have impacts  
23 on the same resources as this project.

24  
25 So here I've combined together three  
26 resources, soils and geology, water and wetlands, and  
27 that is because the greatest potential impacts to these  
28 resources would be similar as they're all related to a  
29 potential for permafrost thaw. So permafrost thaw  
30 could occur due to removal of the vegetation along the  
31 project right-of-way. It could also occur during  
32 pipeline operation due to the fluctuating temperature  
33 of the pipeline.

34  
35 If there is permafrost thaws, I'm sure  
36 you know there is potential for soil collapse in those  
37 areas which could result in indirect effects to  
38 groundwater surface water flow and then wetland  
39 hydrology function.

40  
41 So the potential for these impacts are  
42 mostly limited to some specific areas. Those are  
43 obviously areas of continuous permafrost. This map  
44 shows generally where those are. Discontinuous  
45 permafrost is shown generally in green. Within those  
46 areas this effect would be more likely to occur in  
47 unstable soils, like organic soils or clay soils,  
48 rather than more stable soils like a gravel.

49  
50

1                   Additionally, AGDC proposes to  
2 construct the pipeline as an ambient temperature  
3 pipeline. So it wouldn't be heated and the pipeline  
4 would be designed to acclimate to the surrounding  
5 temperature. There would be some situations where the  
6 pipeline goes through a warmer soil into permafrost and  
7 that's where there is that potential for it to take a  
8 little bit of time to acclimate. So that's another  
9 situation where you might see that effect. AGDC will  
10 also consider revegetation as well as replacing those  
11 thaw unstable soils that I mentioned earlier.

12  
13                   MR. THORNE: Is there going to be a --  
14 when you compress the gas to get that pressure, it's  
15 going to increase the temperature. Are they going to  
16 have a way to cool it down before it enters the pipe?

17  
18                   MS. JOHNSON: That would be a good  
19 question for Lisa after the presentation. We can talk  
20 to you a little bit more about that.

21  
22                   MR. THORNE: Okay. Sorry.

23  
24                   MS. JOHNSON: Okay. So on this slide  
25 we've got the greatest impacts to socioeconomics, which  
26 would be both positive and negative. There could be  
27 employment opportunities during both construction and  
28 operations of the pipeline. There could be an  
29 increased gas supply during operations, as well as  
30 local and state tax revenues. On the negative side  
31 there could be high upfront local and state  
32 expenditures associated with the infrastructure  
33 construction as well as increased demand on government  
34 services.

35  
36                   For cultural resources there is some  
37 potential at some locations, specifically 26 sites of  
38 the 72 non-sites in the area of direct effects, for  
39 physical damage or destruction or changes in character,  
40 setting or access to these sites. These are based on  
41 current survey results.

42  
43                   As we can see, the mitigation measures  
44 have not been finalized for the cultural resources.  
45 They will be finalized in the programmatic agreement.  
46 Once those are finalized, the impacts to these 26 sites  
47 could be reduced to moderate or if they're avoided, and  
48 this programmatic agreement requires that they're  
49 avoided, they could be reduced to minor or negligible.

50

1 MR. BOND: What are some examples of  
2 the cultural resources?

3  
4 MS. JOHNSON: So we've got -- I could  
5 show you an EIS after the public comment period. The  
6 EIS describes all the different types of cultural  
7 resources along the pipeline route.

8  
9 So impacts to subsistence could include  
10 displacement of subsistence resources and changes to  
11 access. These would occur to the greatest extent in  
12 communities that are located directly along the  
13 pipeline route as well as communities that have an  
14 increased use of the areas that intersect the pipeline  
15 route. As you can see, in this figure is an example of  
16 one of the figures that's on the table here that color  
17 codes the greatest impacts would potentially be in  
18 Wiseman, Coldfoot, Minto and Nenana.

19  
20 Finally, there's a potential impact of  
21 noise during horizontal directional drilling  
22 activities. The HDD could occur for over 24-hour  
23 periods. However, it would be intermittent and the  
24 noise would occur for about a third of that time, but  
25 any time during that period. It would occur for 10 to  
26 25 weeks for each horizontal directional drill.

27  
28 There are two locations that we've  
29 identified in the SEIS where this could be a major  
30 impact and those are areas where the HDD, the drill, is  
31 located near a receptor. So the first one is at the  
32 Kashwitna River crossing just north of Willow where  
33 there are some houses located within a tenth of a mile  
34 of that location. Then, secondly, at the Denali  
35 National Park commercial area where that drill is  
36 within a tenth of a mile of the Denali Cabins. So AGDC  
37 has proposed to minimize activities near tourist-  
38 related facilities during those high use tourist  
39 periods.

40  
41 So submitting comments on the EIS.  
42 We'd love to hear from you tonight during the public  
43 comment period. If you do make a comment, I think I  
44 got everyone that's here, but just make sure that you  
45 write your name on this comment form for us, please or  
46 on the sign-in sheet rather. You can also fill out a  
47 written comment form if you prefer to make your comment  
48 privately. You can also email to  
49 asapeiscomments@erm.com. There's a link to that email  
50

1 on our website. You can also mail your comments to  
2 Sandy at the Army Corps of Engineers. Just make sure  
3 that your comments are received by August 14th.

4  
5 So we'll start out providing each  
6 commentor with about five minutes. We just want to  
7 make sure that everyone has an opportunity to comment.  
8 If you would like to comment for a longer period of  
9 time after everyone has had an opportunity, that's fine  
10 as well. We do have a court reporter here tonight, so  
11 if you could make sure that you make your comment into  
12 the microphone and she'll pass it around while you're  
13 making comments. Before you make your comment if you  
14 could also state your first and last name that would be  
15 helpful.

16  
17 We won't be making any decisions about  
18 the project and we won't be responding to any comments  
19 or questions. You're welcome to ask a question. We  
20 won't be responding to those during the public comment  
21 period. Those will be considered and they'll be  
22 addressed in the final EIS. There will also be a  
23 public comment analysis report released that will talk  
24 about how those were addressed.

25  
26 As I said before, we will hang out  
27 after the public comment period if you have specific  
28 questions. So we would love to hear from you today.  
29 Oh, before we get started, sorry, this also serves as  
30 the subsistence hearing, so Earl with the BLM is going  
31 to open the subsistence hearing.

32  
33 MR. WILLIAMS: Thank you, Kate. I'd  
34 like to thank the community for providing us the  
35 opportunity to come here tonight and present our  
36 environmental impact statement and hear your concerns  
37 regarding the project. I apologize for making this  
38 sound so official, but it's an official document, so  
39 I've got to be a government official.

40  
41 My name is Earl Williams. I'm a  
42 project manager with the Bureau of Land Management. I  
43 am reading this statement into the record to let you  
44 know that this public meeting is also a subsistence  
45 hearing. Section 810 of the Alaska National Interest  
46 Lands Conservation Act, or ANILCA, requires the BLM to  
47 evaluate the effects of its actions on subsistence uses  
48 and to hold public hearings if it finds that  
49 subsistence use may be significantly restricted.

50

1                   The Alaska Stand Alone Pipeline project  
2 is seeking a right-of-way from the BLM to allow for the  
3 construction and operation of a buried pipeline across  
4 public lands. In reviewing this application, the BLM  
5 must consider the potential effects to the environment  
6 and the potential impacts to subsistence resources and  
7 uses on public lands. The ANILCA 810 evaluation done  
8 for this project assessed the potential effects of the  
9 proposed alternatives and the cumulative case on  
10 subsistence use, and is included as an appendix in the  
11 Draft SEIS.

12  
13                   In the evaluation, the BLM finds that  
14 the proposed project and its alternatives may result in  
15 a significant impact to subsistence uses. These  
16 potential impacts may include reductions in the  
17 availability or abundance of caribou, moose, and other  
18 wildlife. Additionally, there could be reductions in  
19 the availability of berries and other plants in some  
20 traditional harvest areas.

21  
22                   This hearing is being held to provide  
23 you an opportunity to make comments on the preliminary  
24 subsistence analysis for the Alaska Stand Alone  
25 Pipeline. All comments are welcome, but we especially  
26 would like to hear your thoughts regarding mitigation  
27 measures that could be applied to minimize impacts to  
28 your subsistence use.

29  
30                   The comments you provide will be  
31 considered in the preparation of the Final Supplemental  
32 EIS and the BLM's Record of Decision for the  
33 right-of-way. You may provide your comments here  
34 tonight or submit them in writing. Please submit any  
35 written comments to the Corps of Engineers by the close  
36 of the comment period.

37  
38                   Thank you.

39  
40                   MS. JOHNSON: Thanks, Earl. So with  
41 that we will open up the public comment period. If  
42 anyone would like to comment, just motion to Tina and  
43 she'll bring you the microphone. We would love to hear  
44 your comments tonight.

45  
46                   MS. JOHNSON: The question is these are  
47 just comments, not questions. You can ask a question  
48 on the public record if you want it to be addressed in  
49 the SEIS and then we can talk a little bit more  
50

1 afterwards.

2

3

MR. THOMPSON: (Away from microphone)

4

5

6

MS. JOHNSON: That's a good comment actually. We'd love to hear that in the microphone and get it on the record. You can use this one or that one.

7

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MR. THOMPSON: Frank Thompson, First Chief Evansville Tribal Council. I'm just requesting that more detailed maps around affected communities that you're going to be impacting or that have the closest impact that there's more of a scale of a map for the area, whatever alignment.

MS. JOHNSON: Thank you.

MR. THORNE: I've got a big mouth. You don't have to worry about me. I'm the guy you hear on the other side of the football stadium with a whole crowd yelling.

REPORTER: Okay. And your name.

MR. THORNE: I'm Rich Thorne. I'm a 27-year resident. I happen to be a city council member currently. Bettles City Council. I have a question. You say it's going to come down the oil pipeline. If you're coming through Atigun pass, you're coming down the headwaters of the Koyukuk River and there's a great potential for siltation and disturbing the salmon runs that we have. What's going to be done to mitigate these further siltation problems in the Koyukuk valley? Because that's going to impact not just us but people all the way down the river.

MS. JOHNSON: Thank you.

MR. BOND: Hello. I'm Noel Bond. I'm just a seasonal resident here in Bettles. I have a couple questions. What cultural resources are being impacted by the pipeline? What's the science behind burying the natural gas pipeline instead of having it above ground. To me it seems like maybe it would be less impact on vegetation if you didn't bury it. You know, I do want to comment that I think it's really important that you all are having these community meetings because there's that classic Dr. Seuss story

1 about the Lorax and how we're the voice for the  
2 environment and we want to make smart decisions. So  
3 hopefully some smart decisions are made. All right.

4

5 MS. JOHNSON: Thank you.

6

7 MS. BRONOWSKI: My name is Anya  
8 Bronowski. I'm a seasonal Park Service employee out of  
9 Bettles. I have quite a few questions because I'm not  
10 familiar with this project. I guess, number one, how  
11 long has this proposal been going on and why are there  
12 alternative drafts being made, what's the history?

13

14 I guess, secondly, why is there a need  
15 for natural gas as opposed to other forms of energy  
16 within the state of Alaska and what those alternatives  
17 are and why this is being sought out would be another  
18 question.

19

20 And I guess after working in Denali  
21 National Park for the last three seasons, knowing that  
22 there's a park on the eastern side of the highway  
23 there, it looks like that's a proposed Alternative 2  
24 route. I'm curious how that's going to work running  
25 that through the National Park Service land. How  
26 that's being dealt with with that land use management  
27 agency.

28

29 And I guess what communities is the  
30 natural gas being provided for? Is it primarily down  
31 in Anchorage and Fairbanks? I think that's it for now.

32

33 MR. THORNE: I'll take it again. This  
34 is Rich Thorne again. I might as well ask the rest of  
35 my comments and questions. You're proposing to  
36 compress this gas at Prudhoe Bay and the process of  
37 compression creates heat. Is the gas in the pipeline  
38 by the time you get it underground is it going to be  
39 ambient temperature or is it still going to be warm?

40

41 The next comment/question is what are  
42 going to be the economic benefits for the folks in the  
43 Bush after construction? This is a wonderful thing for  
44 Anchorage and Fairbanks and I'm in favor of building  
45 it, but you need to ask about what you're going to do  
46 for the rest of the state. They keep trying to whack  
47 off the state subsidy in the Bush electric or Power  
48 Cost Equalization Program. Sorry, I momentarily forgot  
49 the name of it. What's going to be done? You're going

50

1 to be cutting the costs in Anchorage and Fairbanks.  
2 What about the Bush?

3  
4 MR. SWANSON: My name is Noel Swanson.  
5 I'm the tribal council environmental coordinator coming  
6 up on two years of doing this job. Of course the  
7 concerns that I have are environmental impact  
8 especially when it comes to subsistence and the pathway  
9 going through. I'm curious to know how fast they're  
10 planning on laying the pipe.

11  
12 I'm curious about the cost of burying  
13 it versus above ground. To me it seems like above  
14 ground would be something that would be easier to get  
15 to for repairs as opposed to it being below ground and  
16 having to dig it up and fix the problem and going back  
17 and impacting the environment again after you guys have  
18 already done the work on it. So I'm kind of curious  
19 about what's going on there with that. Have they  
20 thought about that.

21  
22 My other question is how fast they're  
23 going to be able to lay the pipe so they don't impact  
24 the environment and chase off all the wildlife that  
25 normally have their route through here. Yeah, pretty  
26 much that's it. I want to know how quickly it's going  
27 to be done. It sounds like this is going to go  
28 through.

29  
30 And I'm just curious if they could come  
31 up with -- when I worked on the North Slope, they had a  
32 permit to drill and they had an estimated time of how  
33 long it should take us to drill that particular hole  
34 and do what they needed to do. We always come really  
35 close to meeting their requirements only we'd get that  
36 done ahead of time because time is money when it comes  
37 to doing a big project like this.

38  
39 So that's a question that I have is  
40 like how fast is it going to be going by here. Let us  
41 know when it's coming by, you know. The other question  
42 is above ground versus below ground. I'd be real  
43 curious about what they want to do there.

44  
45 MS. COSTELLO: My name is Naomi  
46 Costello and I'm the Evansville tribal administrator.  
47 My comment on this project initially is -- well, I saw  
48 what happened during the '70s with the building of the  
49 oil pipeline and I've seen that there was absolutely no

50

1 benefit to the rural communities entirely along that  
2 oil pipeline. So for the socioeconomic -- my comment  
3 is, you know, like what would this project do for the  
4 rural communities of Alaska.

5  
6 We lucked out with the winter trail  
7 that's been going on, which is like hit and miss for  
8 opportunity to utilize the Dalton Highway to access  
9 over a winter trail for some of our supplies and  
10 materials. It's just there hasn't been any benefit  
11 from the oil pipeline in 40 years and what kind of  
12 benefit over the long term is expected for rural  
13 communities.

14  
15 I'm just kind of like, well, are we  
16 going to see it happen with our resources, you know,  
17 traveling, zooming by us and here we are struggling  
18 with our energy costs here. I'm pretty sure that  
19 comment can resonate throughout most of the native  
20 villages that are along the oil pipeline that exists  
21 already.

22  
23 MR. BOND: This is Noel Bond again. So  
24 my question is -- it was kind of explained, but I'd be  
25 interested in finding out some more information. So  
26 the pipeline is following the same corridor that the  
27 existing pipeline is and then it splits off. What I'm  
28 curious about is how much will that corridor be  
29 expanded upon, you know, widened with that second  
30 pipeline in that corridor. I'm curious on what will be  
31 changed.

32  
33 Thanks.

34  
35 MS. JOHNSON: Would anybody else like  
36 to make a comment or a follow-up comment.

37  
38 (No comments)

39  
40 MS. JOHNSON: Okay. So, with that,  
41 we'll close the public comment period. I really  
42 appreciate you all coming today and commenting.

43  
44 Like I said, we'll stick around and  
45 help answer your questions after.

46  
47 Thanks.

48  
49 (Off record)

50

(END OF PROCEEDINGS)

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## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 16 are a true, accurate, and complete transcript of Bettles Scoping Meeting on July 25, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Cantwell, Alaska  
August 3, 2017

## 1 P R O C E E D I N G S

2  
3 (Cantwell, Alaska - 8/3/2017)4  
5 (On record)6  
7 MS. JOHNSON: Good evening, everyone.  
8 Welcome to the public meeting for the Alaska Stand  
9 Alone Pipeline project. My name is Kate and I work for  
10 the company Environmental Resources Management. We are  
11 responsible for writing the draft environmental impact  
12 statement on behalf of the Army Corps of Engineers.13  
14 The purpose of this meeting tonight is  
15 to tell you a little bit about the draft supplemental  
16 EIS, environmental impact statement, which I'll refer  
17 to as the SEIS tonight. Then we'll also hold an  
18 opportunity for everyone to provide a public comment on  
19 the EIS or on the project if you'd like tonight.20  
21 So we're going to start out by  
22 introducing some of the people involved in the project.  
23 We're going to go over the steps in the National  
24 Environmental Policy Act or the NEPA process. That's  
25 the process that requires the SEIS to be written.  
26 We're also going to talk about the project description  
27 and the project background.28  
29 I do want to point out that this  
30 meeting is about the Alaska Stand Alone Pipeline  
31 project, which is the State's instate natural gas  
32 pipeline option. It's different than the AK LNG  
33 pipeline project, which would bring natural gas to  
34 international markets.35  
36 We're going to talk about the contents  
37 of the draft SEIS. I'll refer to the supplemental  
38 environmental impact statement as the SEIS. And then  
39 we're going to talk about the different ways that you  
40 can provide comment. I know that some of you might  
41 have questions. If you wouldn't mind holding those  
42 questions until after the presentation and comment  
43 period are finished, we'll stick around and we can use  
44 some of the materials that we've brought to answer your  
45 questions at that time.46  
47 With that I'd like to introduce Sandy  
48 Gibson with the Army Corps of Engineers and she's going  
49 to tell you a little bit about their role in the  
50

1 project.

2

3 MS. GIBSON: Thanks, Kate. Good  
4 evening. The U.S. Army Corps of Engineers is the lead  
5 Federal agency for development of the Alaska Stand  
6 Alone Pipeline project supplemental EIS. The  
7 responsibility of the lead agency is to ensure  
8 compliance with applicable environmental review  
9 processes.

10

11 USACE is responsible for managing the  
12 EIS process and the final content of the EIS,  
13 identifying and selecting cooperating agencies, and  
14 involving the public in the environmental review  
15 process. These tasks are accomplished at the direction  
16 of the Corps of Engineers and prepared using an  
17 independent third-party contractor. The third-party  
18 contractor selected by the Corps for this undertaking  
19 is Environmental Resources Management.

20

21 Thanks again for everyone coming. At  
22 this time ERM will provide a brief overview of where we  
23 are in the current EIS development process. Afterwards  
24 we'd welcome all comments from the public.

25

26 Thank you.

27

28 MS. JOHNSON: Thank you, Sandy. So  
29 here we have the steps in the NEPA process. As you can  
30 see, we are currently conducting the public meeting on  
31 the draft EIS. I've highlighted in orange here the  
32 opportunities that the public has to comment on the EIS  
33 or on the project. The first one was in 2014 during  
34 the scoping period and the comments that were received  
35 during that period have been summarized in a comment  
36 analysis report, which can be viewed online at  
37 asapeis.com.

38

39 We are currently in the 45-day public  
40 review period for the SEIS that began on June 30th and  
41 it will continue until August 14th. There was an  
42 opportunity to provide comment during the scoping  
43 period in 2014 and there will be another opportunity  
44 once the final SEIS is issued for you to provide  
45 comment on that document as well.

46

47 So why do we need a supplemental EIS.  
48 Many of you are probably aware that there was an EIS  
49 for this project written in 2012. Since that time the

50

1 Alaska Gasline Development Corporation has identified  
2 some project changes and refinements. As a result the  
3 environmental impacts may look a little bit different  
4 and that's what requires the EIS to be written.

5  
6 This slide here highlights five of the  
7 main differences between 2012 and now. The first one  
8 is that the pipeline is now designed to transport  
9 utility grade natural gas. As a result, fewer support  
10 facilities will be required. Rather than multiple  
11 compressor stations only a single compressor station is  
12 going to be required and that would be at Prudhoe Bay.

13  
14 Additionally, both the mainline and the  
15 Fairbanks Lateral routes have been rerouted in some  
16 locations. This is for the most part to minimize  
17 environmental impacts. If you want to see exactly  
18 where those changes are, they're in an appendix to the  
19 SEIS, which is online. We've also got one copy here  
20 tonight. If you're looking for a specific location,  
21 we've got lots of maps and then there's also maps  
22 online.

23  
24 And then finally plans for the gas  
25 conditioning facility up at Prudhoe Bay have been  
26 modified and refined and would require importing some  
27 prefabricated modules to construct. This would require  
28 some modifications at Dock Head 3 at West Dock in order  
29 to accommodate the 23 barges that would bring in those  
30 modules. It would also require some dredging in that  
31 area of the sea floor as well as disposal of those  
32 dredged materials.

33  
34 The four main chapters of the SEIS that  
35 we're going to talk about tonight are the project  
36 purpose and need, the proposed action and alternatives.  
37 So the NEPA process requires that in our EIS we analyze  
38 alternatives to the proposed action. So we'll talk  
39 about those. Chapter 3 is the affected environment, so  
40 what do the existing conditions look like within the  
41 project area and around the project area. Then Chapter  
42 4 is environmental consequences, so what are the  
43 potential environmental impacts of the project.

44  
45 Here we have the Alaska Gasline  
46 Development Corporation, also known as the project  
47 proponent or as the project applicant, we might refer  
48 to them in both of those ways in the EIS. Their  
49 proposed purpose and need for the project is to make  
50

1 North Slope natural gas available to residents in  
2 Fairbanks, the Southcentral region and other  
3 communities in the state as directed by the Alaska  
4 State Legislature. It's also to provide access to a  
5 stable, affordable and long-term supply of natural gas  
6 for heating and powering homes and businesses.

7  
8 This slide shows generally where the  
9 pipeline is proposed to be routed. It would begin at  
10 Prudhoe Bay at Milepost 0. It would then generally  
11 follow the Trans-Alaska Pipeline System until just  
12 south of Livengood. TAPS would continue southeast and  
13 then ASAP pipeline would continue south. It would  
14 remain on the west side of Fairbanks and Nenana and  
15 then it would remain on the east side of Denali  
16 National Park. It would continue south along the Parks  
17 Highway and connect into ENSTAR's existing distribution  
18 system just southwest of Big Lake.

19  
20 It would also include the Fairbanks  
21 Lateral that would connect at Milepost 440 and then it  
22 would continue on Murphy Dome and Old Murphy Dome Roads  
23 before extending southeast into Fairbanks.

24  
25 This figure shows an example of what  
26 the project construction right-of-way might look like.  
27 As you can see, it would be a buried pipeline except  
28 for at fault crossings as well as at some elevated  
29 stream crossings. This right-of-way would be used to  
30 house the trench spoils as well as for construction  
31 equipment to access the pipeline for installation.

32  
33 This would be during construction  
34 between 120 and 350 feet wide. There would be some  
35 additional temporary work spaces within an 800-foot  
36 corridor during construction. Those would be used to  
37 store equipment and materials. During pipeline  
38 operations that 120-foot-wide right-of-way would be  
39 reduced to a minimum of 53 feet in many locations and  
40 some locations it would still extend out to 350 feet.

41  
42 In addition to the below ground  
43 pipeline, there would be a number of above ground  
44 facilities. Those would include both mobile camps and  
45 stationary camps. It would include 26 pipe storage  
46 yards as well as gravel material sites.

47  
48 As I mentioned earlier, a gas  
49 conditioning facility would be constructed on the North  
50

1 Slope. This figure here shows the existing central gas  
2 facility right here. The gas conditioning facility  
3 would be constructed about a mile west of that central  
4 gas facility.

5  
6 In order to construct that, as I  
7 mentioned earlier, the modules would be offloaded at  
8 Dock Head 3, so some improvements would be required  
9 there. A channel would be dredged that would be  
10 approximately 500 feet wide by about a mile long. The  
11 sediments that were dredged from that channel would  
12 then be disposed at a nearshore location in Prudhoe  
13 Bay. I've got a map of that coming up in just a few  
14 slides.

15  
16 So that project description is a  
17 description of the proposed project action, which we  
18 also call Alternative 1. Alternative 3 is the no  
19 action alternative, so what would the impacts be if the  
20 pipeline was not constructed. Then Alternative 2  
21 incorporates these five main differences from  
22 Alternative 1. I'll go over those briefly.

23  
24 The first differences between  
25 Alternative 2 and 1 is that the route would actually  
26 enter Denali National Park from pipeline Milepost 536  
27 to Milepost 543. There's a map of this in the SEIS  
28 that we brought here tonight as well as up here. Here  
29 this pink line is the proposed action or Alternative 1,  
30 green is Denali National Park and then this blue line  
31 is the Alternative 2 route that's being considered and  
32 analyzed in the SEIS.

33  
34 It would cross the Nenana River on a  
35 pedestrian footbridge, it would then travel seven miles  
36 through the Park, it would cross the Nenana River again  
37 and then it would connect back up to the proposed  
38 action route.

39  
40 Some other differences being considered  
41 under Alternative 2 are offloading the modules at Dock  
42 Head 2 rather than Dock Head 3. Also disposing of  
43 those dredged materials at a different location. So  
44 under the proposed project under the proposed action  
45 this is the disposal location with Prudhoe Bay. Under  
46 Alternative 2 we consider disposing of those out in the  
47 Beaufort Sea.

48  
49 The fourth difference between  
50

1 Alternative 1 and 2 is that we consider an impacts of  
2 an above ground pipeline from Milepost 0 to 62 within  
3 the area that's the Beaufort Coastal Plain. Just to  
4 give you an idea of how far that is, the entire  
5 pipeline would be 733 miles long, so that's a little  
6 bit less than 10 percent of the pipeline route.  
7 Finally we consider the impacts of an aerial suspension  
8 bridge crossing the Yukon River rather horizontal  
9 directional drilling.

10

11 Chapter 3, as I mentioned, discusses  
12 the existing conditions in terms of these 21 resources.  
13 We don't have time to go over these existing conditions  
14 today, but if you are interested, please take a look in  
15 the SEIS either here or online.

16

17 We are going to spend a little time  
18 over the next few slides discussing the potential  
19 environmental consequences to a few select resources.  
20 There are seven resources listed that we're going to  
21 talk about and the reason these have been selected is  
22 because either they have received additional attention  
23 from project stakeholders or they are expected to  
24 potentially have greater impacts than the other  
25 resources. So we'll talk about those.

26

27 If you're interested in the impacts to  
28 the other resources that were on the last slide, we've  
29 brought some figures along with us. There's laminated  
30 figures on the table, one for each resource, that give  
31 a good overview of where the impacts might occur. The  
32 executive summary has a nice bulleted list of potential  
33 impacts associated with each resource. That's a quick  
34 way to get a good overview. Of course, in Chapter 4  
35 there's an in-depth description of why those impacts  
36 are expected to occur to the extent that's described in  
37 the EIS.

38

39 The impact analysis in Chapter 4 does  
40 take into account AGDC's proposed mitigation measures  
41 and then it also discusses potential cumulative  
42 effects. So what are the effects of other projects  
43 that could impact the same resources that the project  
44 is impacting and then what would those look like if  
45 they were both to occur.

46

47 So here on this slide I have combined  
48 three of those resources listed on the last slide;  
49 soils and geology, water and wetlands. The reason that  
50

1 I did that is because the greatest expected potential  
2 impacts to these resources could be similar and they  
3 could be related to permafrost thaw.

4  
5 There's potential for permafrost thaw  
6 due to either vegetation removal along the project  
7 right-of-way or due to pipeline operations. As a  
8 result of permafrost thaw in some locations where the  
9 soils are less stable, you could see results such as  
10 soil collapse or subsidence and as a result you could  
11 have some altered surface or groundwater flow or  
12 altered wetland hydrology.

13  
14 So where would this occur. This could  
15 occur in areas of continuous permafrost, which was  
16 shown generally in blue. The green areas represent  
17 generally locations of discontinuous permafrost. So  
18 within those areas areas of unstable soils.

19  
20 Additionally, AGDC has proposed to  
21 construct the pipeline at an ambient temperature in  
22 order to mitigate some of those impacts. So in  
23 addition the impact to permafrost thaw due to the  
24 pipeline operation would occur mostly in areas where  
25 the pipeline was going from a warmer temperature into a  
26 cooler temperature where it could take a little time to  
27 acclimate. AGDC will also consider revegetation and  
28 then they'll also consider replacing those thaw  
29 unstable soils.

30  
31 For socioeconomic there could be both  
32 positive and negative impacts. Some of the positive  
33 impacts that we could expect to see are employment  
34 opportunities as well as increased natural gas supply,  
35 as well as local and state tax revenues. A negative  
36 impact that could occur is increases in upfront local  
37 and state expenditures resulting from improvements to  
38 infrastructure as well as increased demand on  
39 government services.

40  
41 For cultural resources we have  
42 identified 26 sites of the 72 known sites within the  
43 area of direct effects where there is potential for  
44 these impacts to occur. These impacts are physical  
45 destruction or damage as well as changes in character,  
46 setting or access. So those 26 sites that have been  
47 identified are based on the currently available survey  
48 results.

49  
50

1 I also want to point out that the  
2 mitigation measures to cultural resources are going to  
3 be finalized in the programmatic agreement. If in the  
4 programmatic agreement additional mitigation measures  
5 are required, then the impacts to these 26 sites could  
6 be reduced to moderate. If these sites are avoided,  
7 then the impacts to these sites would be reduced to  
8 minor or negligible.

9  
10 For subsistence resources potential  
11 impacts include displacement of subsistence resources  
12 as well as changes to access to those subsistence  
13 resources. This would be expected to occur to the  
14 greatest extent in communities that are located  
15 directly along the pipeline route, such as Wiseman,  
16 Coldfoot and Nenana, as well as the community of Minto  
17 because they have an increased use of subsistence areas  
18 that cross that pipeline proposed project route.

19  
20 Finally, there could be some impacts  
21 resulting from construction noise. These would be  
22 associated with horizontal directional drilling. The  
23 locations that the impacts are expected to occur to the  
24 greatest extent are areas where this drilling would  
25 occur within a tenth of a mile of a receptor.

26  
27 So the two locations that I want to  
28 point out are, one, the Kashwitna River HDD just north  
29 of Willow. There are some residences within a tenth of  
30 a mile. As well as McKinley Park. There's a  
31 horizontal directional drilling there that would be  
32 near some lodging and cabins.

33  
34 AGDC also proposes to minimize  
35 activities near tourist-related facilities during high  
36 use periods to help minimize some of the impacts  
37 related to that noise.

38  
39 So there are several ways that you can  
40 comment on the EIS or the project. The first way is to  
41 provide verbal comments tonight. We would be really  
42 happy to hear from you tonight. You could also fill  
43 out a comment form on the table or you can mail a  
44 comment to Sandy at the Army Corps of Engineers. That  
45 address is on the form over there on the table. You  
46 can also send an email to [asapeiscomments@erm.com](mailto:asapeiscomments@erm.com).  
47 There's a link to that on our project website  
48 [asapeis.com](http://asapeis.com). Just make sure that if you do submit  
49 comments, that you submit them by August 14th, which is  
50

1 the close of the comment period.

2

3 We do have a court reporter here  
4 tonight. So if you would like to make a comment, if  
5 you want to put your hand up or something, we'll bring  
6 you a microphone so that we make sure we get your  
7 comment on record. If you could also please state your  
8 name, your first and last name, and then make sure that  
9 you've signed in on that sign-in form.

10

11 We won't be making any decisions about  
12 the project during the comment period. We won't be  
13 responding to comments during the comment period, but  
14 we will then take all the comments that we've received,  
15 we'll prepare a comment analysis report and then those  
16 comments will be incorporated when we write the final  
17 EIS. That comment analysis report will also be made  
18 available to the public.

19

20 As I mentioned before, we will be happy  
21 if you want to have your comments on record, but we'll  
22 hang out after the comment period and we can help you  
23 find some answers if you'd like.

24

25 So, with that, Earl with the BLM is  
26 going to open the subsistence hearing.

27

28 MR. WILLIAMS: Thank you, Kate. I'd  
29 like to thank the community for giving us the  
30 opportunity tonight to come here and present some  
31 information on the project and hear your concerns. If  
32 you would please bear with me for a moment, I need to  
33 read a statement into the record.

34

35 My name is Earl Williams. I'm a  
36 project manager with the Bureau of Land Management. I  
37 am reading this statement into the record to let you  
38 know that this public meeting is also a subsistence  
39 hearing. Section 810 of the Alaska National Interest  
40 Lands Conservation Act, or ANILCA, requires the BLM to  
41 evaluate the effects of its actions on subsistence uses  
42 and to hold public hearings if it finds that  
43 subsistence use may be significantly restricted.

44

45 The Alaska Stand Alone Pipeline project  
46 is seeking a right-of-way from the BLM to allow for the  
47 construction and operation of a buried pipeline across  
48 public lands. In reviewing this application, the BLM  
49 must consider the potential effects to the environment

50

1 and the potential impacts to subsistence resources and  
2 uses on public lands. The ANILCA 810 evaluation done  
3 for this project assessed the potential effects of the  
4 proposed alternatives and the cumulative case on  
5 subsistence use, and it is included as an appendix in  
6 the Draft SEIS.

7  
8 In the evaluation, the BLM finds that  
9 the proposed project and its alternatives may result in  
10 a significant impact to subsistence uses. These  
11 potential impacts may include reductions in the  
12 availability or abundance of caribou, moose, and other  
13 wildlife. Additionally, there could be reductions in  
14 the availability of berries and other plants in some  
15 traditional harvest areas.

16  
17 This hearing is being held to provide  
18 you an opportunity to make comments on the preliminary  
19 subsistence analysis for the Alaska Stand Alone  
20 Pipeline. All comments are welcome, but we especially  
21 would like to hear your thoughts regarding mitigation  
22 measures that could be applied to minimize impacts to  
23 your subsistence use.

24  
25 The comments you provide will be  
26 considered in the preparation of the Final SEIS and the  
27 BLM's Record of Decision. You may provide your  
28 comments here tonight or submit them in writing.  
29 Please submit any written comments to the Corps of  
30 Engineers by the close of the comment period.

31  
32 Thank you.

33  
34 MS. JOHNSON: Thank you, Earl. So that  
35 will open the public comment period. We are interested  
36 in hearing your thoughts on both the project as well as  
37 the environmental impact statement. Is there anyone  
38 that would like to make a comment.

39  
40 MS. GEORGE: I have a question more  
41 than a comment.

42  
43 MS. JOHNSON: Would you like it to be  
44 on the record so that it's considered for the final?

45  
46 MS. GEORGE: Okay.

47  
48 MS. JOHNSON: Okay. That would be  
49 great. Don't forget to just state your name for the  
50

1 record.

2

3 MS. GEORGE: Tami George from Cantwell.  
4 My question is in your subsistence study that you just  
5 presented you only mentioned like Minto and I forget  
6 the other places that you mentioned, but why was that  
7 significantly more impacted than it would be in  
8 Cantwell?

9

10 MS. JOHNSON: Thank you for your  
11 comment. So that is described in Chapter 4 of the SEIS  
12 and I can show you that and we can talk a little bit  
13 more about it after. Thanks for your question.

14

15 Does anyone else have a question or a  
16 comment that they'd like to have on the record?

17

18 MR. TANSY: Roy Tansy. I live in  
19 Cantwell -- well, my family lives in Cantwell, so I  
20 grew up here. My question is in regards to the Ahtna,  
21 Incorporated land. Since Cantwell as a village  
22 corporation merged with Ahtna in 1980 Ahtna basically  
23 oversees the land here, the former village lands. I  
24 understand that a great deal of the pipeline  
25 right-of-way will be on Ahtna or former village lands.

26

27

28 My concern is in regards to the  
29 landowner Ahtna and wanting to make sure that for the  
30 record that we'd like to see a little bit more  
31 communication and discussion regarding the potential  
32 compensation for crossing Ahtna properties.

33

34 MS. JOHNSON: Thank you very much for  
35 your comment. So no comments?

36

37 MR. TANSY: Roy Tansy again. This  
38 actually is a comment regarding the fault line, the  
39 Denali fault, and my understanding is that there is  
40 going to be a sizeable amount of the pipe is going to  
41 be above ground or the fault.

42

43 I just have concerns regarding that  
44 because of the winter activities, other activities that  
45 are going to be done especially in that area, Windy  
46 Creek area, Panorama Mountain. I guess my concerns  
47 revolve around some of the restrictions that will  
48 follow with the above ground pipe.

49

50

1 I just wanted to get that on the record  
2 I have concerns.

3  
4 MS. JOHNSON: Great. Thank you. Any  
5 other questions or concerns.

6  
7 (No comments)

8  
9 MS. JOHNSON: Okay. So with that we  
10 will close the public comment period.

11  
12 As I mentioned before, we'll stick  
13 around.

14  
15 Thank you so much for coming tonight.

16  
17 (Off record)

18  
19 (END OF PROCEEDINGS)

## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 14 are a true, accurate, and complete transcript of Cantwell Scoping Meeting on August 3, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Fairbanks, Alaska  
July 20, 2017

## 1 P R O C E E D I N G S

2

3

(Fairbanks, Alaska - 7/20/2017)

4

5

(On record)

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MS. JOHNSON: Good evening, everybody.

Thanks for coming. I think we're going to get started with our meeting here. My name is Kate and I work for the company Environmental Resources Management. We are responsible for preparing the supplemental environmental impact statement for the Alaska Stand Alone Pipeline on behalf of the Army Corps of Engineers.

The purpose of our meeting tonight is to share with you what is included in the supplemental EIS, which I'll refer to tonight as the SEIS and then also to accept some comments for the public record.

So we're going to start out tonight with some introductions and then I'm going to talk to you a little bit about the steps that are involved in the National Environmental Policy Act or the NEPA process, which is the process that requires the SEIS to be written. We're also going to talk about the project description and background.

I do want to point out that this project is the Alaska Stand Alone Pipeline Project, which is the instate gas pipeline project. It's different than the AK LNG pipeline. That's a different project. That project would be sending natural gas to international markets, so that's the difference between the two names.

We'll also talk to you about the contents of the SEIS and then you'll have an opportunity provide comments. I'll tell you about some other ways you can provide comment as well.

With that I'd like to introduce Sandy Gibson with the Army Corps of Engineers and she's going to tell you a little bit about her role in the project.

MS. GIBSON: Thanks, Kate. Good evening. The Army Corps of Engineers is the lead Federal agency for development of the Alaska Stand Alone Pipeline project supplemental EIS. The

1 responsibility of the lead agency is to ensure  
2 compliance with applicable environmental review  
3 processes.

4  
5 USACE is responsible for managing the  
6 EIS process and the final content of the EIS,  
7 identifying and selecting the third-party contractor  
8 and involving the public in the environmental review  
9 process. These tasks are accomplished at the direction  
10 of the Corps and prepared using an independent third-  
11 party contractor. The third-party contractor selected  
12 for this undertaking is Environmental Resources  
13 Management, Incorporated.

14  
15 Thank you everyone for coming. At this  
16 time ERM will provide a brief overview of where we are  
17 in the EIS process. Afterwards we'd welcome all  
18 comments from the public. Thanks.

19 MS. JOHNSON: Thanks, Sandy. So this  
20 slide shows the steps that are involved in the NEPA  
21 process. As you can see we are currently conducting  
22 the public meeting on the draft SEIS. It's also  
23 currently the public comment period for the draft SEIS.  
24 It began June 30th and it will continue until August  
25 14th.

26  
27 There was an opportunity to comment  
28 during the scoping period in August of 2014. If you're  
29 interested in the comments at that time, those are  
30 available in a comment analysis report on the EIS  
31 website, which is asapeis.com. And then finally, once  
32 the final EIS is published you'll have an opportunity  
33 to comment on that as well.

34  
35 So why do we need a supplemental EIS.  
36 As many of you know, there was an EIS for this project  
37 prepared in 2012 and since then there have been some  
38 project changes and refinements resulting in some  
39 changes in the environmental impacts and that's what  
40 requires a supplemental EIS.

41  
42 This slide shows five of the main  
43 changes between 2012 and now. The first one is that  
44 the pipeline is now designed to carry utility-grade  
45 natural gas, so fewer support facilities will be  
46 required and only one compressor station will be  
47 required now at Prudhoe Bay.

48  
49 Additionally, both the mainline and the  
50

1 Fairbanks Lateral have been rerouted in some locations,  
2 in many cases to reduce the environmental impacts. You  
3 can see where those route changes are also on the  
4 asapseis.com website. There's a tab that's got maps  
5 and you can see the entire route.

6  
7 Finally, plans for the gas conditioning  
8 facility have been refined and will require importing  
9 modules to construct the GCF at Dock Head 3 at West  
10 Dock. So Dock Head 3 will require some modifications  
11 as well. There will also be some dredging in order for  
12 the barges to access the dock with these modules.

13  
14 I'm going to talk about the four main  
15 chapters of the SEIS and the first one is the project  
16 purpose and need. The second one is the proposed  
17 action and the NEPA process also requires that we  
18 analyze the environmental impacts of some alternatives.  
19 We'll talk about the existing conditions within the  
20 project area. We'll also talk about the environmental  
21 consequences.

22  
23 AGDC's proposed purpose and need for  
24 the project is to make North Slope natural gas  
25 available to residents in Fairbanks, the Southcentral  
26 region and other communities in the state as directed  
27 by the Alaska State Legislature and to provide access  
28 to a stable, affordable and long-term supply of natural  
29 gas for heating and powering homes and businesses.

30  
31 Here you can see the proposed pipeline  
32 route for Alternative 1 or the proposed action. It  
33 would begin in Prudhoe Bay and it will generally follow  
34 the Trans-Alaska Pipeline System down to Livengood and  
35 then it would continue south. It would stay on the  
36 west side of Fairbanks and Nenana and then it would  
37 stay on the east side of Denali National Park. It  
38 would then connect with ENSTAR's distribution system  
39 just southwest of Big Lake.

40  
41 This slide shows the Fairbanks Lateral  
42 route which would tie into the main line at Milepost  
43 440 and then it will follow Murphy Dome and Old Murphy  
44 Dome Roads and then it would come southeast into  
45 Fairbanks.

46  
47 This shows an illustration of what the  
48 project right-of-way might look like. The pipeline  
49 would be buried. This is the pipeline trench. Then  
50

1 the trench spoil would be stored within the  
2 right-of-way and then the right-of-way would also be  
3 used for equipment to access the mainline route.

4  
5 The right-of-way would be during  
6 construction between 120 and 350 feet wide. In  
7 addition there would be some temporary work spaces for  
8 storing materials and that would be within an 800-foot  
9 corridor along the pipeline route. During operations  
10 that route would be reduced to between 53 feet and at a  
11 maximum 350 feet wide.

12  
13 In addition to the pipeline, there  
14 would be a number of above-ground facilities. Those  
15 would include both mobile and stationary camps. Some  
16 pipeline storage yards and then also material sites  
17 for accessing gravel.

18  
19 A gas conditioning facility like I  
20 mentioned before would be constructed at Prudhoe Bay.  
21 This picture here shows the existing central gas  
22 facility. The gas conditioning facility would be  
23 constructed about a mile west of that.

24  
25 Additionally, I would add Dock Head 3  
26 at West Dock. I mentioned that there would be some  
27 modifications. There would be a dredge channel about  
28 500 feet wide by a mile long in order for those 23  
29 barges to bring in the materials to construct the gas  
30 conditioning facility. There would also be disposal of  
31 that sediment at a nearshore disposal site in Prudhoe  
32 Bay and I'll show you a map of where that is in the  
33 next few slides here.

34  
35 So this slide shows the five main  
36 differences between Alternative 1 and Alternative 2.  
37 Alternative 3 is the no action alternative, so the  
38 impacts of not constructing the pipeline. Under  
39 Alternative 2 the route would enter Denali National  
40 Park and it would go through the Park for about seven  
41 miles. I'll show you a map of that.

42  
43 So the pink route is Alternative 1 or  
44 the proposed action. Green is Denali National Park and  
45 this blue is the Alternative 2 route that goes through  
46 the Park. It would cross the Nenana River on a  
47 pedestrian footbridge and then it would cross the river  
48 again before aligning with the proposed action again.

49  
50

1                   The second difference between the  
2 alternatives are that modules would be offloaded at  
3 Dock Head 2 rather than Dock Head 3. The dredge  
4 materials that I mentioned before would consider the  
5 impacts of disposing of them out into the Beaufort Sea  
6 rather than in this nearshore location in Prudhoe Bay,  
7 which is proposed under Alternative 1.

8  
9                   On this slide I've just listed the  
10 resources that we discuss in chapter 3, existing  
11 environment. We don't have time today to go through  
12 all of those, but if you're interested we've brought  
13 the SEIS with us today. It's on the back table so you  
14 can take a look in there. We can help you find what  
15 you're looking for. It's also available online  
16 asapeis.com. There's also one at the Fairbanks library  
17 if you want to look at a hard copy.

18  
19                   We will spend a little time today  
20 talking about the environmental consequences to a few  
21 selected resources. We selected these because either  
22 they have received attention from stakeholders or  
23 because they're expected to potentially see greater  
24 impacts than other resources.

25  
26                   The impacts described in the EIS do  
27 consider proposed mitigation measures by AGDC and then  
28 Chapter 4 also includes cumulative effects, which talks  
29 about the impacts of other potential projects or  
30 natural events that could occur within the project area  
31 that would result in effects in the same area.

32  
33                   On this slide I've combined soils and  
34 geology, water and wetlands because the greatest  
35 potential impacts to these resources are related to  
36 potential for permafrost thaw. So that could occur  
37 both from vegetation removal along the project  
38 right-of-way. It could also occur during pipeline  
39 operation. It wouldn't be heated, but it would be  
40 designed to acclimate to the surrounding temperature,  
41 but there would still be some potential.  
42 The indirect effects of that could include altered  
43 surface and groundwater drainage and altered wetland  
44 hydrology if you've got any kind of soil collapsing or  
45 surface changes.

46  
47                   So where would those impacts occur.  
48 You can see on the map here, I'm sure most of you are  
49 familiar with this. Blue are areas generally where  
50

1 continuous permafrost exists and then the green are  
2 areas where in general this continuous permafrost could  
3 exist. This impact would also occur in areas where the  
4 soil geology was less stable, such as organic soils or  
5 clays rather than a gravel, so it would be limited to  
6 those areas. It would also be more likely to occur in  
7 areas where the pipeline was traveling from a warmer  
8 ground temperature to a colder ground temperature  
9 because it could take some time to acclimate.

10

11 So AGDC has proposed some mitigation  
12 which include, as I mentioned, constructing an ambient  
13 temperature pipeline. They would also consider  
14 revegetation and they would consider replacing the thaw  
15 unstable soils that I mentioned earlier.

16

17 For socioeconomic, we've got both  
18 major positive and negative impacts. The positive  
19 impacts are potential for employment opportunities  
20 during both construction and operations, increased  
21 natural gas supply during operations as well as local  
22 and state tax revenues. A negative effect could be the  
23 upfront local and state expenditures associated with  
24 the infrastructure as well as government services that  
25 could experience increased demand during pipeline  
26 construction.

27

28 For cultural resources there is some  
29 potential for physical damage or destruction or changes  
30 in character or setting or access. If you look in the  
31 EIS, there are 26 sites identified where these could  
32 occur, 26 of the 72 that are within the area of direct  
33 effects and that's based on the currently available  
34 survey data.

35

36 The mitigation measures could be  
37 identified in the programmatic agreement which is not  
38 finalized yet. So if mitigation measures are included,  
39 these 26 sites could see moderate impacts rather than  
40 major impacts. If the programmatic agreement requires  
41 that some of these sites are avoided, then the impacts  
42 would go down to minor or negligible.

43

44 Impacts to subsistence activities could  
45 include displacement of subsistence resources and also  
46 changes to access. These would occur to the greatest  
47 extent in communities that are located directly along  
48 the pipeline route or in communities that use  
49 subsistence areas that intersect the pipeline route.

50

1 This is one of the figures that we've got on the back  
2 table there. As you can see, Wiseman and Coldfoot  
3 could see some impacts as well as Nenana and Minto.  
4 Those communities would be the greatest affected.

5  
6 Finally, there could be noise impacts  
7 related to horizontal directional drilling activities.  
8 HDD would occur over a 24-hour period of 10 to 25  
9 weeks. However, it would occur intermittently and the  
10 noise would occur for approximately a third of that  
11 time. We've identified two locations where there are  
12 receptors within about a 10th of a mile of that noise  
13 and highlighted them here. So at the Kashwitna River  
14 crossing just north of Willow there are some residences  
15 that are nearby that location and then up by McKinley  
16 Park, the Denali Cabins are nearby an HDD as well.  
17 AGDC has proposed to minimize those activities near  
18 tourist-related facilities during the high use periods.

19  
20 So how can you submit comments on the  
21 SEIS. You can sign up to provide verbal comments  
22 tonight during our formal comment period, which will  
23 also serve as a subsistence 810 analysis. You can also  
24 fill out a comment form we have on the table here and  
25 you can leave them in an envelope today. You can go  
26 online to [asapeiscomments@erm.com](mailto:asapeiscomments@erm.com) and you can email us  
27 a comment. You can also mail your comments to Sandy at  
28 the Army Corps of Engineers. Just make sure that your  
29 comments are postmarked by August 14th.

30  
31 As I mentioned earlier, we'll be  
32 holding a public comment period. Everyone will have  
33 five minutes to comment. If we have more time at the  
34 end we might allow more comments. We do have a court  
35 reporter here as well, so make sure that you state and  
36 spell your name before you give your comment.

37  
38 We won't be making any decisions during  
39 the comment period and we also won't be responding to  
40 any comments or questions at this time. Your comments  
41 and questions will be entered into the record and then  
42 they will be considered while we're writing the final  
43 EIS. There will also be a comment analysis summary  
44 that will be available on the website as well. So make  
45 sure you focus your comments specifically to the  
46 project and the SEIS.

47  
48 If you do have questions about the  
49 project or you're looking for more information, we've  
50

1 brought a lot of project materials with us tonight and  
2 we would be happy to help you find the information that  
3 you're looking for. We'll stick around after the  
4 comment period is over so we can talk.

5  
6 So, with that, I will introduce Erin  
7 with the BLM and she's going to open the subsistence  
8 hearing.

9  
10 MS. JULIANUS: Thank you, Kate. My name  
11 is Erin Julianus and I am a wildlife biologist with the  
12 BLM here in Fairbanks. I am actually standing in for  
13 Earl Williams, who is the project manager for BLM.  
14 He's actually stuck in Kaktovik. So I feel a little  
15 underdressed. I apologize. As Kate said, I'm going to  
16 also initiate the ANILCA 810 subsistence hearing by  
17 reading the following statement.

18  
19 As I said, my name is Erin Julianus. I  
20 am reading this statement into the record to let you  
21 know that this public meeting is also a subsistence  
22 hearing. Section 810 of the Alaska National Interest  
23 Lands Conservation Act, or ANILCA, requires the BLM to  
24 evaluate the effects of its actions on subsistence uses  
25 and to hold public hearings if it finds that  
26 subsistence use may be significantly restricted.

27  
28 The Alaska Stand Alone Pipeline project  
29 is seeking a right-of-way from the BLM to allow for the  
30 construction and operation of a buried pipeline across  
31 public lands. In reviewing this application, the BLM  
32 must consider the potential effects to the environment  
33 and the potential impacts to subsistence resources and  
34 uses on public lands. The ANILCA 810 evaluation done  
35 for this project assessed the potential effects of the  
36 proposed alternatives and the cumulative case on  
37 subsistence use, and is included as an appendix in the  
38 Draft SEIS.

39  
40 In the evaluation, the BLM finds that  
41 the proposed project and its alternatives may result in  
42 a significant impact to subsistence uses. These  
43 potential impacts may include reductions in the  
44 availability or abundance of caribou, moose, and other  
45 wildlife. Additionally, there could be reductions in  
46 the availability of berries and other plants in some  
47 traditional harvest areas.

48  
49 This hearing is being held to provide  
50

1 you an opportunity to make comments on the preliminary  
2 subsistence analysis for the Alaska Stand Alone  
3 Pipeline. All comments are welcome, but we especially  
4 would like to hear your thoughts regarding mitigation  
5 measures that could be applied to minimize impacts to  
6 your subsistence use.

7  
8 The comments you provide will be  
9 considered in the preparation of the Final Supplemental  
10 EIS and the BLM's Record of Decision for the  
11 right-of-way. You may provide your comments here  
12 tonight or submit them in writing. Please submit any  
13 written comments to the Corps of Engineers by the close  
14 of the comment period.

15  
16 Thanks.

17  
18 MS. JOHNSON: Thanks, Erin. So with  
19 that we will open up the public comment period. If  
20 anyone would like to comment, you can come up to the  
21 table here and the microphone is on.

22  
23 We would love to hear from you today.

24  
25 (No comments)

26  
27 MS. JOHNSON: Do we have any commentators  
28 tonight.

29  
30 MR. SATTLER: We're all here to hear  
31 from you.

32  
33 MS. JOHNSON: Okay.

34  
35 MR. SATTLER: So your format here is  
36 formal comments that are recorded and then it will be  
37 transcribed and made available, is that right?

38  
39 MS. JOHNSON: There will be a comment  
40 analysis report that we'll summarize the comments.

41  
42 MR. SATTLER: I'll make a few comments.

43  
44 MS. JOHNSON: Okay. That would be  
45 great.

46  
47 MR. SATTLER: Robert Sattler is my name  
48 and I live here in Fairbanks. I wasn't prepared to  
49 come and do this, but I've been tracking this project  
50

1 for some time. I'm pretty sure I provided comments at  
2 the very beginning in the initial EIS when the NEPA  
3 review began.

4  
5 I want to say that I also work with  
6 Tanana Chiefs Conference. It's the regional tribal  
7 nonprofit organization. I work in the lands program  
8 and I'm a student of NEPA, so I've been involved in  
9 many of these pipeline projects over the last 10 or 15  
10 years. With that, I don't mean to -- in speaking here,  
11 I don't care for my comments to be considered official  
12 comments to Tanana Chiefs Conference, but I've been  
13 involved for some time and I'll just try to make a few  
14 general characterizations of things that I've heard  
15 over the years.

16  
17 I know the 810 analysis is a formal  
18 thing with many of the other projects that have come  
19 through. Specifically at TCC I work in the lands  
20 program and one of the issues that we're always faced  
21 with when a new access is opened up are issues about  
22 trespass and user conflicts. So the subsistence  
23 definition is one that can be I think interpreted in  
24 many ways. So in part the increased access causes  
25 typically trespassing issues that are very difficult to  
26 deal with and the increase in users.

27  
28 As I understand the routing and some of  
29 the concerns that I've heard is that the corridor  
30 especially in the eastern Minto Flats could certainly  
31 open up larger volume of traffic going through the  
32 eastern Minto Flats. From my experience, I would say  
33 that I'm certain it would create various kinds of  
34 trespass and user conflicts in that area. I could go  
35 on and talk a little further.

36  
37 Beyond that in a general sense I think  
38 you gave a good presentation. In the NEPA process in  
39 Alaska, typically the natural environment is really  
40 ratcheted up and the human environment that's equal in  
41 the loss is typically not addressed in a commensurate  
42 fashion in my perspective. I haven't read the  
43 document, but I'll immerse myself. I take it that the  
44 CD is the full document, is that right?

45  
46 MS. GIBSON: Uh-huh (affirmative).

47  
48 MR. SATTLER: So generally I think that  
49 from what you said there's a missing component of the  
50

1 human environment and that is the why. I can see the  
2 purpose and needs statement for this pipeline and so  
3 forth. It is an instate gas line. With that  
4 implication apparently it's for relief in energy and  
5 clean air. I know that's an issue in Fairbanks. The  
6 main impetus is to address some of the air quality  
7 issues in Fairbanks and there have been a lot of  
8 discussions about it.

9  
10 Frankly, my perspective, I wonder why  
11 isn't this thing already built with all the discussions  
12 that have gone on in the last 10 or 15 years and other  
13 different nuances that have been proposed in the  
14 various political economy of this pipeline project.

15  
16 In general, I'll likely make comments  
17 on my own. Again, I don't want my comments to be  
18 perceived as any official comments to Tanana Chiefs  
19 Conference, but as an employee coming here in part with  
20 my position I thought I'd make a few of those comments.  
21 So I'll elaborate on those further in written comments  
22 certainly by the deadline.

23  
24 Beyond that I see that you are doing  
25 some village meetings. You're going to Minto and  
26 Nenana also. So I'm sure you'll hear some of those  
27 same concerns about trespass user conflicts. Those are  
28 really the official positions that should be taken from  
29 the Native community.

30  
31 Then beyond that I look forward to  
32 reading the document and making formal comments. I'll  
33 certainly go back and review some of those initial  
34 scoping remarks. I believe I did have some in there.  
35 Again, I participate in so many of the pipelines I  
36 don't know which. I went to the earlier versions of  
37 the ASAP line, but I think it was called a different  
38 pipeline earlier.

39  
40 Anyway, that is the conclusion of my  
41 remarks and so thank you for the opportunity.

42  
43 MS. JOHNSON: Thank you very much for  
44 your comments. I'll just give a minute to see if  
45 anyone else wants to come up.

46  
47 MS. GIBSON: We certainly invite you to  
48 step to the back and look at some of the presentation  
49 materials, some of the project maps. A lot of that

50

1 information is very useful. So if you think of  
2 anything later, certainly let us know.

3  
4 (No comments)

5  
6 MS. JOHNSON: Okay. I think we will go  
7 ahead and close the comment period then.

8  
9 Thank you all very much for coming  
10 tonight and, as Sandy said, we'll stick around for a  
11 little while.

12  
13 Thanks.

14  
15 (Off record)

16  
17 (END OF PROCEEDINGS)

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## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 14 are a true, accurate, and complete transcript of Fairbanks Scoping Meeting on July 20, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Healy, Alaska  
August 2, 2017

## P R O C E E D I N G S

(Healy, Alaska - 8/2/2017)

(On record)

MS. JOHNSON: We're going to get started with our presentation here. Can you hear me okay? Welcome to the public meeting for the Alaska Stand Alone Pipeline project. My name is Kate and I work for the company Environmental Resources Management. We are responsible for writing the draft environmental impact statement on behalf of the Army Corps of Engineers.

The purpose of this meeting tonight is to tell you a little bit about the draft supplemental EIS, environmental impact statement, which I'll refer to as the SEIS tonight. Then we'll also hold an opportunity for everyone to provide a public comment on the EIS or on the project if you'd like tonight.

So we're going to start out by introducing some of the people involved in the project. We're going to go over the steps in the National Environmental Policy Act or the NEPA process. That's the process that requires the SEIS to be written. We're also going to talk about the project description and the project background.

I do want to point out that this meeting is about the Alaska Stand Alone Pipeline project, which is the State's instate natural gas option. It's a different project than the AK LNG pipeline project, which would bring natural gas to international markets.

We're going to talk about the contents of the draft SEIS. We're also going to talk about how you can provide comments on the SEIS in addition to tonight at the meeting. I know that some of you might have questions. If you could hold those questions until after the presentation and public comment period are completed, we will stick around and we can talk with you after and we can show you some of the materials that we've brought with us today.

With that I'd like to introduce Sandy Gibson with the Army Corps of Engineers and she's going

1 to tell you a little bit about their role in the  
2 project.

3  
4 MS. GIBSON: Thanks, Kate. The U.S.  
5 Army Corps of Engineers is the lead Federal agency for  
6 development of the Alaska Stand Alone Pipeline project  
7 supplemental EIS. The responsibility of the lead  
8 Federal agency is to ensure compliance with applicable  
9 environmental review processes.

10  
11 The Corps of Engineers is responsible  
12 for managing the EIS process, the content and final  
13 production of the EIS, identifying and selecting  
14 cooperating agencies, which you see listed below, and  
15 involving the public in the environmental review  
16 process. These tasks are accomplished at the direction  
17 of the Corps of Engineers and prepared using an  
18 independent third-party contractor. The third-party  
19 contractor selected for this undertaking is  
20 Environmental Resources Management.

21  
22 Thanks everyone for coming. At this  
23 time ERM will provide a brief overview of where we are  
24 in the NEPA process and changes to the recent project.  
25 Afterwards we'd welcome all comments from the public.

26  
27 Thanks for coming.

28  
29 MS. JOHNSON: Thanks, Sandy. So this  
30 slide shows some of the steps in the NEPA process. As  
31 you can see, we are currently conducting the public  
32 meeting on the draft SEIS. We are also currently in  
33 the middle of the 45-day public comment review period  
34 that started on June 30th and will continue until  
35 August 14th. There was an opportunity to provide  
36 comment during the scoping period in 2014 and there  
37 will be another opportunity to provide comment when the  
38 final SEIS is issued later this year.

39  
40 So why do we need a supplemental EIS.  
41 Many of you may be familiar with the 2012 EIS that was  
42 written for this project. Since that time there have  
43 been some project changes and project refinements that  
44 have changed the potential environmental impacts and  
45 for that reason a supplemental EIS is required.

46  
47 This slide shows some of the main  
48 changes since 2012 and now. The first change is that  
49 the pipeline is now proposed to carry utility grade  
50

1 natural gas. As a result, fewer support facilities  
2 will be required. So the current design is for only a  
3 single compressor station to be used at Prudhoe Bay.

4  
5 Additionally, both the mainline and the  
6 Fairbanks Lateral pipelines have been rerouted in some  
7 locations. For the most part those changes have been  
8 made to decrease the environmental impacts where  
9 possible. If you're interested in where those reroutes  
10 are, they're provided as an appendix to the SEIS.  
11 They're also provided online at [asapeis.com](http://asapeis.com). There's  
12 lots of maps up there so you can find them there as  
13 well.

14  
15 And then finally plans for the gas  
16 conditioning facility have been modified and refined.  
17 The modules would be imported at Dock Head 3 of West  
18 Dock. As a result, some modifications would be  
19 required to Dock Head 3 and also some dredging would be  
20 required as well as disposal of those dredged  
21 materials.

22  
23 Here we have the four main chapters of  
24 the SEIS. Chapter 1 is the project purpose and need.  
25 Chapter 2 talks about the proposed action and the  
26 project alternatives. The NEPA process requires that  
27 we identify some alternatives to the project and  
28 include those in our environmental impact analysis.  
29 Chapter 3 is the affected environment, so it describes  
30 the existing conditions within and around the project  
31 footprint. Then Chapter 4 is environmental  
32 consequences, so what could the potential environmental  
33 impacts of the project be.

34  
35 So the Alaska Gasline Development  
36 Corporation, who is also known as the project proponent  
37 or as the project applicant, we might refer to them in  
38 both of those ways. Their proposed purpose and need  
39 for the project is to make North Slope natural gas  
40 available to residents in Fairbanks, the Southcentral  
41 region and other communities in the state as directed  
42 by the Alaska State Legislature. It's also to provide  
43 access to a stable, affordable and long-term supply of  
44 natural gas for heating and powering homes and  
45 businesses.

46  
47 This slide shows the proposed pipeline  
48 route. It's also up on the maps on the wall there. I  
49 know some of you might have seen these. So the project  
50

1 would begin at Prudhoe Bay at Milepost 0. It would  
2 then follow generally the Trans-Alaska Pipeline System  
3 down to about Livengood. TAPS would continue east and  
4 then the ASAP pipeline would continue south. It would  
5 remain on the west side of Fairbanks and Nenana and  
6 then it would remain on the east side of Denali  
7 National Park. It would continue along the Parks  
8 Highway and it would connect to ENSTAR's existing  
9 distribution system just southwest of Big Lake.

10

11 The Fairbanks Lateral would connect at  
12 Milepost 440 and it would follow Murphy Dome and Old  
13 Murphy Dome Roads before extending into Fairbanks.

14

15 Here we have an image of what the  
16 project construction right-of-way might look like. As  
17 you can see, this would be a buried pipeline except for  
18 at fault crossings and some stream crossings. The  
19 construction right-of-way would be used to store trench  
20 spoils as well as for construction equipment to access  
21 and install the pipeline.

22

23 This would be anywhere between 120 feet  
24 wide up to 350 feet wide. It would vary along the  
25 pipeline route. In addition there would be some  
26 temporary work spaces out to an 800-foot corridor and  
27 those would be used to store equipment and materials.  
28 During pipeline operations, this right-of-way would be  
29 reduced to a minimum of 53 feet wide in some locations  
30 and out to 350 feet wide in other locations.

31

32 In addition to the below ground  
33 pipeline, there would be several above ground  
34 facilities. Those would include mobile camps,  
35 permanent camps. These are just some examples of what  
36 those might look like. As well as pipe storage yards,  
37 gravel material sites.

38

39 As I mentioned earlier, a gas  
40 conditioning facility would be constructed near Prudhoe  
41 Bay. This figure here shows the existing central gas  
42 facility at Prudhoe Bay. The gas conditioning facility  
43 is proposed to be constructed about a mile west of that  
44 central gas facility.

45

46 Also, as I mentioned earlier, there  
47 would be some modifications to Dock Head 3 at West Dock  
48 in order for those 23 barges to access the dock head  
49 and import those modules to construct this gas

50

1 conditioning facility. In order for those barges to  
2 access the dock, a channel would be dredged. It would  
3 be about 500 feet wide by about a mile long. Those  
4 dredged materials would be disposed of at a nearshore  
5 location within Prudhoe Bay. I've got a map of that.  
6 I'll show you an image of that location in the next few  
7 slides here.

8  
9 So alternatives. Alternative 3 is the  
10 no action alternative. Alternative 2 incorporates  
11 these five main differences. The first differences is  
12 that the route would enter Denali National Park from  
13 Milepost 536 to Milepost 543. Here you can see this  
14 pink line is the proposed action, green is Denali  
15 National Park and then blue is the Alternative 2 route  
16 that's been analyzed in the EIS.

17  
18 It would cross the Nenana River at a  
19 pedestrian footbridge, it would go seven miles through  
20 the Park and then it would cross the Nenana River again  
21 before joining with the proposed action. Also, if you  
22 want to look at it later, I opened up the EIS to the  
23 page that that route is mapped on if you want to take a  
24 closer look.

25  
26 Additionally, I mentioned that modules  
27 would be offloaded at Dock Head 2. Under this  
28 alternative we consider offloading them at Dock Head 2  
29 rather than Dock Head 3. We also consider the impacts  
30 of disposing of those dredged materials at a location  
31 out further in the Beaufort Sea. So this location here  
32 as I mentioned in Prudhoe Bay nearshore is the proposed  
33 action and then this is the Alternative 2 location.

34  
35 Under Alternative 2 we also consider  
36 the impacts of an above ground pipeline from Milepost 0  
37 to 62, so that's beginning at Prudhoe Bay at Milepost 0  
38 within the area that's the Beaufort Coastal Plain.  
39 Just to give you a frame of reference the pipeline  
40 would be 733 miles long, so that's a little bit less  
41 than 10 percent of the pipeline route. Finally we  
42 consider the impacts of using an aerial suspension  
43 bridge crossing the Yukon River rather horizontal  
44 directional drilling.

45  
46 Chapter 3, as I mentioned, describes  
47 the environment in terms of these 21 resources. We're  
48 not going to talk about that in detail today because we  
49 don't have time, but if you're interested in learning  
50

1 about the existing environment, we brought a copy of  
2 the EIS. If you want to look at a certain section,  
3 we're happy to help you find what you're looking for.  
4 It's also available online at [asapeis.com](http://asapeis.com). We brought a  
5 few CDs with us today. If you've got trouble accessing  
6 the internet, feel free to bring one of those home with  
7 you.

8  
9 We are going to talk a little bit more  
10 about environmental impacts. We're going to focus on  
11 seven of these resources and the reason that we've  
12 chosen these is because they've either received  
13 additional attention from stakeholders than the other  
14 resources or because they are expected to see greater  
15 impacts than the other resources. So we'll go over  
16 those in a little more detail on the next few slides.

17  
18 If you're interested in the impacts to  
19 the other resources, we've brought a number 11/17  
20 laminated maps. There's one figure for each resource  
21 and it's a good visual of where the minor, moderate and  
22 major impacts would be expected to occur. So you can  
23 zero in on a specific impact in an area that interests  
24 you. There's also a good summary in the executive  
25 summary. Just a bulleted list of impacts for each  
26 resource.

27  
28 Chapter 4 does include AGDC's proposed  
29 mitigation measures in the impacts analysis. It also  
30 includes discussion of cumulative impacts, so what the  
31 effects would be of other potential projects in the  
32 area occurring and impacting the same resources that  
33 this project could impact.

34  
35 So on this slide I have combined three  
36 of those resources that I showed on the last slide;  
37 soils and geology, water and wetlands. That's because  
38 the greatest potential impacts to these resources are  
39 expected to be related to the potential for permafrost  
40 thaw.

41  
42 There's two ways that that could occur.  
43 One way is due to the vegetation removal within the  
44 construction right-of-way during construction. Another  
45 way is potentially during pipeline operation due to the  
46 temperature of the pipeline. The pipeline wouldn't be  
47 heated. I'll talk about that in a little more details  
48 in just a second.

49  
50

1                   So if permafrost thaw did occur, there  
2 would be potential for soil subsidence, specifically in  
3 soils that are less stable. Then as a result of soil  
4 subsidence, you could have some altered surface and  
5 groundwater flow as well as altered wetland hydrology.  
6 So those are some potential indirect effects.

7  
8                   As I mentioned, this would occur in  
9 unstable soils within areas of continuous or  
10 discontinuous permafrost. This map here, which is also  
11 in the EIS, shows in blue just generally areas where  
12 continuous permafrost exists. And then the areas in  
13 green are areas where discontinuous permafrost  
14 generally exists.

15  
16                   AGDC has proposed some mitigation  
17 measures to help minimize these impacts. The first is  
18 that they would construct an ambient temperature  
19 pipeline. So that would reduce the operational impacts  
20 to permafrost to areas where the pipeline is making  
21 going from a warmer temperature to a cooler temperature  
22 where it takes a little time to acclimate, but it would  
23 generally be designed to acclimate to that surrounding  
24 soil temperature. AGDC will also consider revegetation  
25 and also consider replacing those thaw unstable soils  
26 that I mentioned earlier.

27  
28                   For socioeconomic there is potential  
29 for both positive and negative impacts. Some of the  
30 positive impacts that could occur are employment  
31 opportunities, especially during construction as well  
32 as operations, increased natural gas supply, as well as  
33 local and state tax revenues. A negative impact that  
34 could occur is upfront local and state expenditures  
35 associated with infrastructure improvements as well as  
36 increased demand on government services.

37  
38                   For cultural resources we have  
39 identified 26 sites of the 72 known sites within the  
40 area of direct effects where there is potential that  
41 there could be physical destruction or damage as well  
42 as changes in character, setting or access to those  
43 resources. That is based on the currently available  
44 survey data.

45                   I do want to point out that mitigation  
46 measures have not been finalized yet. They would be  
47 finalized in the programmatic agreement. If additional  
48 mitigation measures are applied based on the  
49 programmatic agreement, those impacts at these 26 sites  
50

1 could be reduced to moderate or if some of those sites  
2 are avoided, then the impacts could be reduced to minor  
3 or negligible.

4  
5 For subsistence resources there's  
6 potential for displacement of subsistence resources as  
7 well as changes to access to subsistence resources.  
8 The locations where that would be the greatest impact  
9 are communities that are located directly along the  
10 pipeline route, such as Wiseman, Coldfoot and Nenana,  
11 as well as Minto because they've got an increased use  
12 of areas that are intersecting the pipeline proposed  
13 project route.

14  
15 Finally, there is potential for impacts  
16 due to noise. These would generally occur in areas  
17 where horizontal directional drilling was occurring.  
18 And to the greatest extent where there's a receptor  
19 located within a tenth of a mile of that HDD location.  
20 So the horizontal directional drilling would occur 24  
21 hours a day. However, it would occur intermittently,  
22 so for about a third of that time over the 24-hour  
23 period, and then that would occur for a period of 10  
24 to 25 weeks for each horizontal directional drill.

25  
26 Go ahead.

27  
28 CLAY: Sorry. But as I understand  
29 Alternative 1 has HDD drilling in the Denali area while  
30 Alternative 2 does not, is that correct?

31  
32 MS. JOHNSON: I believe this would  
33 occur under either of the alternatives. So this isn't  
34 in Denali National Park. It's the.....

35  
36 CLAY: Right outside.

37  
38 MS. JOHNSON: .....Denali commercial  
39 area. Yeah. And I can show you on that map where that  
40 would be.

41  
42 CLAY: So you think this is for both.

43  
44 MS. JOHNSON: After the meeting I can  
45 look at the map with you and we can determine exactly  
46 where that is and whether it would occur for both  
47 alternatives.

48  
49 So the location that you just  
50

1 mentioned, the Denali National Park commercial area,  
2 Milepost 536, I think, is the area, and that would be  
3 within a tenth of a mile of the Denali Cabins.  
4 However, AGDC has proposed to minimize that activity  
5 during the tourist season. The other area where this  
6 could be an issue is just at the Kashwitna River HDD  
7 just north of Willow. There are a few residences  
8 located within about a tenth of a mile.  
9

10 So submitting comments on the SEIS.  
11 There are several ways. One way is to provide a  
12 comment verbally tonight. Just make sure that you've  
13 signed in on the sign-in forms. I think most of you  
14 did on your way in. You can also send an email to  
15 asapeiscomments@erm.com. You can also submit a written  
16 comment forms or you can write to Sandy at the Army  
17 Corps of Engineers. Just make sure that you get your  
18 comments in by August 14th.  
19

20 We'll start out tonight with providing  
21 each person five minutes to comment. If people want to  
22 comment longer than that, that's fine. You can come  
23 back up after. We just want to make sure that everyone  
24 has an opportunity to provide a comment.  
25

26 We do have a court reporter here  
27 tonight, so we ask that if you provide a comment,  
28 please come up and speak into the microphone. Make  
29 sure that you first state your first and last name  
30 before you begin.  
31

32 We won't be making any decisions about  
33 the project tonight and we won't be responding to  
34 comments or questions. However, if you do have  
35 questions that you want on the record, please feel free  
36 to state them. Those will be addressed along with the  
37 comments in the final EIS and a comment analysis report  
38 will be provided.  
39

40 So, with that, Earl with the BLM is  
41 going to open the subsistence hearing.  
42

43 MR. WILLIAMS: Thank you, Kate. I'd  
44 like to thank the community of Healy for providing us  
45 the opportunity to come here tonight to present some  
46 information on the project and hear your comments and  
47 concerns. If you would please bear with me for a  
48 moment, I'm going to read a statement into the record.  
49  
50

1 My name is Earl Williams. I'm a  
2 project manager with the Bureau of Land Management. I  
3 am reading this statement into the record to let you  
4 know that this public meeting is also a subsistence  
5 hearing. Section 810 of the Alaska National Interest  
6 Lands Conservation Act, or ANILCA, requires the BLM to  
7 evaluate the effects of its actions on subsistence uses  
8 and to hold public hearings if it finds that  
9 subsistence use may be significantly restricted.

10  
11 The Alaska Stand Alone Pipeline project  
12 is seeking a right-of-way from the BLM to allow for the  
13 construction and operation of a buried pipeline across  
14 public lands. In reviewing this application, the BLM  
15 must consider the potential impacts to the environment  
16 and the potential impacts to subsistence resources and  
17 uses on public lands. The ANILCA 810 evaluation done  
18 for this project assessed the potential effects of the  
19 proposed alternatives and the cumulative case on  
20 subsistence use, and it is included as an appendix in  
21 the Draft SEIS.

22  
23 In the evaluation, the BLM finds that  
24 the proposed project and its alternatives may result in  
25 a significant impact to subsistence uses. These  
26 potential impacts may include reductions in the  
27 availability or abundance of caribou, moose, and other  
28 wildlife. Additionally, there could be reductions in  
29 the availability of berries and other plants in some  
30 traditional harvest areas.

31  
32 This hearing is being held to provide  
33 you an opportunity to make comments on the preliminary  
34 subsistence analysis for the Alaska Stand Alone  
35 Pipeline. All comments are welcome, but we especially  
36 would like to hear your thoughts regarding mitigation  
37 measures that could be applied to minimize impacts to  
38 your subsistence use.

39  
40 The comments you provide will be  
41 considered in the preparation of the Final SEIS and the  
42 BLM's Record of Decision. You may provide your  
43 comments here tonight or submit them in writing.  
44 Please submit any written comments to the Corps of  
45 Engineers by the close of the comment period.

46  
47 Thank you.

48  
49 MS. JOHNSON: Thanks, Earl. So with  
50

1 that we will begin our public comment period. We would  
2 love to hear from you tonight. Please come up and make  
3 a comment.

4  
5 CLAY: I thought there was going to be  
6 a question and answer period. Before we even have an  
7 opportunity for commenting we should have some answers.

8  
9 MS. JOHNSON: Okay. So the question is  
10 a request for a question and answer period. So we will  
11 stick around after the public comment period and talk  
12 to you if you've got some questions. And then if you  
13 have some comments you'd like to make as a result, you  
14 can take one of the comment forms there and you can  
15 submit it that way or you could send an email to us  
16 that way.

17  
18 (No comments)

19  
20 MS. JOHNSON: Okay. If nobody wants to  
21 make a comment, then I'll go ahead and I'll close the  
22 comment period. If you change your mind, feel free to  
23 grab a written comment form.

24  
25 Thanks so much everyone for coming.

26  
27 (Off record)

28  
29 (END OF PROCEEDINGS)

## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 13 are a true, accurate, and complete transcript of Healy Scoping Meeting on August 2, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

DATE

SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Minto, Alaska  
July 21, 2017

## P R O C E E D I N G S

(Minto, Alaska - 7/21/2017)

(On record)

MS. JOHNSON: We're going to get started with the presentation. Do you guys want to come have a seat over here. Okay. My name is Kate and I work for the company Environmental Resources Management. We are responsible for writing the supplemental environmental impact statement for the Alaska Stand Alone Pipeline on behalf of the Army Corps of Engineers.

The purpose of our meeting tonight is to tell you a little bit about that document and then also to provide an opportunity for you to comment on the project and the potential environmental impacts.

So we're going to start out some introductions. We're going to talk about the steps in the National Environmental Policy Act or the NEPA process, which is the process that requires the environmental impact statement be written. I'm going to refer to that draft supplemental environmental impact statement as the SEIS tonight. We're also going to talk about the project description and background.

I do want to point out that this is the Alaska Stand Alone Pipeline Project, which is an instate gas pipeline project to provide natural gas to Alaskans. It's different than the AK LNG pipeline project, which would be sending natural gas to international markets, so that's a different project.

I'm going to tell you about the contents of the draft SEIS and then we'll also talk about how you can provide comments in addition to providing comments here tonight.

With that I'll introduce Sandy Gibson with the Army Corps of Engineers and she's going to tell you a little bit about their role in the project.

MS. GIBSON: Thank you all for coming. The U.S. Army Corps of Engineers is the lead Federal agency for development of the Alaska Stand Alone Pipeline project supplemental EIS. The responsibility

1 of the lead agency is to ensure compliance with  
2 applicable environmental review processes.

3  
4 USACE is responsible for managing the  
5 EIS process and the final content of the EIS,  
6 identifying and selecting the third-party contractor  
7 and involving the public in the environmental review  
8 process. These tasks are accomplished at the direction  
9 of the Corps and prepared using an independent third-  
10 party contractor. The third-party contractor selected  
11 for this undertaking is Environmental Resources  
12 Management.

13  
14  
15 Thank you everyone for coming. At this  
16 time ERM will provide a brief overview of where we are  
17 in the EIS process. Afterwards we'd welcome all your  
18 comments and questions. Thanks.

19 MS. JOHNSON: Thanks, Sandy. So this  
20 slide shows the main steps that are involved in the  
21 SEIS process. You can see in blue that we're currently  
22 conducting public meetings. We're also currently  
23 conducting the 45-day public review period. That  
24 started on June 30th and it will go until August 14th.

25  
26 In 2014, there was an opportunity to  
27 comment on the project during the scoping period.  
28 There's a comment analysis report located on the  
29 project website [asapeis.com](http://asapeis.com) where you can look at some  
30 of the things that were commented on and how those have  
31 been addressed in this EIS. And then finally there  
32 will be another opportunity to comment once the final  
33 EIS is published.

34  
35 So why do we need a supplemental EIS.  
36 You might be familiar with the EIS that was written in  
37 2012 for this project. Since that time there have been  
38 some project changes and some refinements to the  
39 project. As a result the environmental impacts might  
40 be a little bit different and that's what requires a  
41 supplemental EIS to be written.

42  
43 This slide shows the five main changes  
44 to the project. The first one is the gas composition  
45 is now planned to be utility grade natural gas, so as a  
46 result there are fewer support facilities required.  
47 There will be only one compressor station at Prudhoe  
48 Bay instead of multiple compressor stations.

1                   Additionally, both the mainline  
2 pipeline and the Fairbanks Lateral have been rerouted  
3 in some locations. For the most part those have been  
4 made to reduce the environmental impacts. You can see  
5 where those route changes are if you go to the website.  
6 There's some maps on there and you can see each of the  
7 changes.

8  
9                   Finally, plans for the gas conditioning  
10 facility have been refined and as a result it would  
11 require importing some modules to Dock Head 3 in West  
12 Dock at Prudhoe Bay. It will also require some  
13 dredging and disposal for the barges to access that  
14 dock.

15  
16                   This slide just shows the four main  
17 chapters of the EIS. I'm going to talk a little bit  
18 about each of these. So Chapter 1 is the project  
19 purpose and need. Chapter 2 is the proposed action and  
20 alternatives. The NEPA process requires that we  
21 analyze some alternatives to the proposed action.  
22 We'll talk about some of the existing conditions in the  
23 project area and then also environmental consequences.

24  
25                   AGDC's proposed purpose and need for  
26 the project is to make North Slope natural gas  
27 available to residents in Fairbanks, the Southcentral  
28 region and other communities in the state as directed  
29 by the Alaska State Legislature. It is also to provide  
30 access to stable, affordable and long-term supply of  
31 natural gas for heating and powering homes and  
32 businesses.

33  
34                   Here we've got the proposed pipeline  
35 route for Alternative 1. It would start here in  
36 Prudhoe Bay. It would generally follow TAPS until just  
37 south of Livengood and then it would continue south.  
38 It would stay west of Fairbanks and Nenana and then it  
39 would stay east side of Denali National Park. It would  
40 then continue south of Big Lake where it would tie into  
41 ENSTAR's distribution system down there.

42  
43                   This slide shows the Fairbanks Lateral  
44 route. It would connect at Milepost 440 of the  
45 mainline. So Milepost 0 is up in Prudhoe Bay and then  
46 it would continue on Murphy Dome and Old Murphy Dome  
47 Roads and then down into Fairbanks.

48                   This slide shows an example of what the  
49  
50

1 right-of-way might look like. Here is a pipeline which  
2 would be buried. The right-of-way would be used to  
3 hold the soil that's coming out of the trench and then  
4 also for equipment to be able to access the trench and  
5 lay the pipe.

6  
7 This right-of-way would be during  
8 construction that would be between 120 and 350 feet  
9 wide. In addition there would be some temporary work  
10 spaces used for storing equipment materials that would  
11 be within an 800-foot corridor of the pipeline. During  
12 operations that would be reduced slightly to 53 feet  
13 and then in some locations it would be as wide as 350  
14 feet.

15  
16 MS. DICK: It's following the pipeline  
17 though, right? Is it using the same corridor, the same  
18 -- yeah, same corridor as the pipeline?

19  
20 MS. JOHNSON: For the most part it's  
21 along the TAPS in the northern portion, but you can  
22 look at -- there's a map back there and you can see  
23 exactly where this pipeline would be in relation to the  
24 TAPS pipeline along the entire route.

25  
26 So in addition to the pipeline, there  
27 would be a number of above-ground facilities. This  
28 slide shows a picture of what mobile camps could look  
29 like as well as what a stationary camp could look like.  
30 There will also be some pipe storage yards as well as  
31 material sites for accessing gravel.

32  
33 As I mentioned before, a gas  
34 conditioning facility would be constructed on the  
35 Slope. This figure shows the existing central gas  
36 facility. The gas conditioning facility would be  
37 constructed in this location that's about a mile west  
38 of that.

39  
40 Additionally, Dock Head 3 at West Dock  
41 would undergo some improvements in order to accommodate  
42 23 barges of modules to construct this gas conditioning  
43 facility. It would also require dredging a channel,  
44 which would be approximately 500 feet wide and about a  
45 mile long. Those sediments would be disposed in a  
46 nearshore location in Prudhoe Bay and I'll show you a  
47 map of where that is in the next few slides here.

48  
49 MR. WEISER: What are they dredging?

50

1 MS. JOHNSON: So they're dredging the  
2 sediments so that it's deeper so that the barges can  
3 access the dock.

4  
5 MR. WEISER: Does TAPS have an existing  
6 dock?

7  
8 MS. JOHNSON: I'm not sure about that.

9  
10 MR. WEISER: They've been barging 30  
11 years up there.

12  
13 MS. JOHNSON: Yeah, I'm not sure what  
14 they used for the materials to construct TAPS.

15  
16 So this slide shows the alternatives  
17 that I mentioned earlier. Alternative 3 would be the  
18 no action alternative. Alternative 2 would have five  
19 main changes to it that are different than the proposed  
20 action. The first one is that the route would actually  
21 go through a portion of Denali National Park.

22  
23 So this pink line is the proposed  
24 action. The green is Denali National Park and then the  
25 blue is the Alternative 2 route. It would enter the  
26 Park, crossing the Nenana River on a pedestrian  
27 footbridge and then it would continue through the Park,  
28 it would cross the Nenana River again and then connect  
29 with the main proposed action route.

30  
31 Under Alternative 2 we consider the  
32 impacts of using Dock Head 2 rather than Dock Head 3 at  
33 West Dock. We also consider disposing of those  
34 sediments that are dredged near Dock Head 3 at a  
35 different location. So under the proposed action they  
36 would be disposed of here in Prudhoe Bay and then under  
37 Alternative 2 they'd be considered to be disposed out  
38 further into the Beaufort Sea.

39  
40 MR. WEISER: I can't conceive the  
41 National Park allowing a pipeline through the National  
42 Park.

43  
44 MS. JOHNSON: The Park Service is a  
45 cooperating agency, so they've been involved in the  
46 decision making for the EIS.

47  
48 So another difference between  
49 Alternative 2 and Alternative 1 is that the pipeline  
50

1 would be constructed from Milepost 0 to 62 above  
2 ground, so that's a little less than 10 percent of the  
3 pipeline. And then also crossing the Yukon River we  
4 consider using an area suspension bridge rather than  
5 HDD.

6  
7 MS. WEISER: What's HDD?

8  
9 MS. JOHNSON: Oh, I'm sorry. Thanks  
10 for asking. HDD is horizontal direction drilling, so  
11 they drill under the river.

12  
13 MS. WEISER: Under the river?

14  
15 MS. JOHNSON: Yeah. We're just going  
16 to briefly touch Chapter 3. We don't have time today  
17 to go through all of these resources today, but I just  
18 want to let you know that the existing environment in  
19 terms of these resources is what's described in Chapter  
20 3. So if you're interested in reading about any of  
21 these, you can find them discussed in the SEIS, which  
22 is on our website asapeis.com. We also have one copy  
23 if you want to take a look at it after the meeting  
24 today. We can point out where any particular  
25 information is that you might want to find out a little  
26 bit more about.

27  
28 MS. WEISER: What's benthic?

29  
30 MS. JOHNSON: Benthic? So they're I  
31 guess organisms and communities that live underwater in  
32 the sediments.

33  
34 MS. WEISER: For example?

35  
36 MS. JOHNSON: So if you'd like we can  
37 take a look in the EIS afterwards and I can show you  
38 some examples of what those might be.

39  
40 For environmental consequences we're  
41 going to talk about a few of the resources today.  
42 These have been selected because these are the  
43 resources that could potentially see the greatest  
44 impacts. And then also because the resources have  
45 received attention from stakeholders. So we'll talk a  
46 little bit about those. If you're interested in the  
47 other resources, we've brought some impact figures in  
48 the back that show where the potential minor versus  
49 moderate versus major impacts might be expected to

50

1 occur along the route.

2

3 The impacts analysis in Chapter 4 takes  
4 into account AGDC's proposed mitigation measures.  
5 Then finally Chapter 4 includes cumulative effects  
6 analysis, so what the impacts might look like if  
7 combined with other potential projects in the area or  
8 potential natural occurrences.

9

10 On this slide I've combined three  
11 resources because the greatest impacts to these  
12 resources could be similar. So there is potential for  
13 permafrost thaw as a result of stripping vegetation  
14 from the right-of-way as well as from the pipeline  
15 itself. In areas where permafrost thaw occurs, you  
16 could see some collapsing of soil, which could result  
17 in altered surface and groundwater drainage and altered  
18 wetland hydrology as sort of an indirect effect.

19

20 So where could this occur. First of  
21 all it is of continuous and discontinuous permafrost.  
22 In general are indicated by the blue areas on this map  
23 are continuous permafrost and then the green areas are  
24 where discontinuous permafrost may occur. So Minto is  
25 an area of discontinuous permafrost. Within that area  
26 this could in areas where the soils are less stable, so  
27 like an organic soil. A soil like a gravelly soil  
28 wouldn't see as much impact.

29

30 Another thing I wanted to mention is  
31 that AGDC would construct the pipeline at an ambient  
32 temperature, so the pipeline would acclimate to the  
33 surrounding environment. So that would result in these  
34 impacts being limited to areas where the pipeline was  
35 going from warmer ground into colder ground, those  
36 areas where you might see some permafrost thaw. So  
37 AGDC is doing that as well as considering revegetation  
38 and considering replacing thaw unstable soils.

39

40 For socioeconomics there would be  
41 potential positive and negative impacts. The positive  
42 impacts could include employment opportunities,  
43 increased gas supply, as well as local and state tax  
44 revenues. Then negative impacts could include upfront  
45 local and state expenditures resulting from  
46 infrastructure improvements or increased demand on  
47 government services during pipeline construction.

48

49 For cultural resources there would be

50

1 potential in some locations for physical damage or  
2 destruction or changes in character setting or access.  
3 There is potential for this to occur at 26 of the 72  
4 known sites based on current survey results and those  
5 are described in the SEIS.

6  
7 The mitigation measures have not yet  
8 been finalized and those will be finalized in the  
9 programmatic agreement. In that document if additional  
10 mitigation measures are identified, then these impacts  
11 could be reduced to moderate or if some of the sites  
12 are avoided, then those impacts could be reduced to  
13 minor or negligible.

14  
15 There could be some impacts to  
16 subsistence. The greatest expected impacts could be  
17 displacement of subsistence resources or changes to  
18 access of those resources. So where could this occur?  
19 In communities that are located adjacent to the project  
20 such as Wiseman, Coldfoot and Nenana. Then also  
21 communities that are increased use areas of undisturbed  
22 habitat, so that community is Minto.

23  
24 Finally, there could be noise impacts.  
25 So the horizontal directional drilling activities that  
26 I mentioned earlier could occur over a 24-hour period.  
27 The noise would occur intermittently during that period  
28 for approximately a third of that time. That could  
29 also occur for a 10 to 25 week period. So where the  
30 greatest impacts would occur is where that would happen  
31 nearby receptors.

32  
33 There are two locations where that  
34 could occur within about a 10th of a mile of a  
35 receptor, so like a residence. That's at the Kashwitna  
36 River HDD, which is just north of Willow. There are  
37 some residences near that location and then also at the  
38 Denali National Park commercial area by McKinley Park.  
39 The Denali Cabins are in close proximity to the HDD  
40 location. AGDC has proposed to minimize those  
41 activities near tourist-related facilities during the  
42 high use periods, so near those Denali Cabins.

43  
44 So how can you submit comments on the  
45 EIS. First of all we'd love to hear from you tonight.  
46 We'll open a public comment period in a few minutes.  
47 We also have some comment forms available on the back  
48 table there. If you'd like to write down your comment,  
49 you can leave it with us today or you can mail it to  
50

1 us. You can mail your comments to Sandy at the Army  
2 Corps of Engineers or you can email your comments to  
3 asapeiscomments@erm.com. There's a link to that on our  
4 website as well. Just make sure that we receive your  
5 comments by August 14th. That's the close of the  
6 comment period.

7  
8 During our comment period we have a  
9 court reporter present, so when you come up to make  
10 your comment, if you could state your name and spell  
11 your name as well, that would be helpful.

12  
13 We won't be making any decisions about  
14 the project tonight and we won't be responding to any  
15 comments or questions during this comment period. The  
16 comments will be considered when we're finalizing the  
17 EIS.

18  
19 If you do have questions, we've brought  
20 a lot of project materials with us tonight and we will  
21 stick around after the comment period and help you find  
22 the information that you're looking for.

23  
24 So, with that, I am going to -- this  
25 comment period also serves as a subsistence hearing, so  
26 I'm going to read the BLM's subsistence hearing opening  
27 statement.

28  
29 I am reading this statement into the  
30 record to let you know that this public meeting is also  
31 a subsistence hearing. Section 810 of the Alaska  
32 National Interest Lands Conservation Act, or ANILCA,  
33 requires the BLM to evaluate the effects of its actions  
34 on subsistence uses and to hold public hearings if it  
35 finds that subsistence use may be significantly  
36 restricted.

37  
38 The Alaska Stand Alone Pipeline project  
39 is seeking a right-of-way from the BLM to allow for the  
40 construction and operation of a buried pipeline across  
41 public lands. In reviewing this application, the BLM  
42 must consider the potential effects to the environment  
43 and the potential impacts to subsistence resources and  
44 uses on public lands. The ANILCA 810 evaluation done  
45 for this project assessed the potential effects of the  
46 proposed alternatives and the cumulative case on  
47 subsistence use, and is included as an appendix in the  
48 Draft SEIS.

49  
50

1 In the evaluation, the BLM finds that  
2 the proposed project and its alternatives may result in  
3 a significant impact to subsistence uses. These  
4 potential impacts may include reductions in the  
5 availability or abundance of caribou, moose, and other  
6 wildlife. Additionally, there could be reductions in  
7 the availability of berries and other plants in some  
8 traditional harvest areas.

9  
10 This hearing is being held to provide  
11 you an opportunity to make comments on the preliminary  
12 subsistence analysis for the Alaska Stand Alone  
13 Pipeline. All comments are welcome, but we especially  
14 would like to hear your thoughts regarding mitigation  
15 measures that could be applied to minimize impacts to  
16 your subsistence use.

17  
18 The comments you provide will be  
19 considered in the preparation of the Final Supplemental  
20 EIS and the BLM's Record of Decision for the  
21 right-of-way. You may provide your comments here  
22 tonight or submit them in writing. Please submit any  
23 written comments to the Corps of Engineers by the close  
24 of the comment period.

25  
26 So with that we will open up the public  
27 comment period. If you'd like to comment, if you could  
28 step up to the table here and speak into the  
29 microphone. I'll turn it on for you.

30  
31 MS. WEISER: What kind of comments have  
32 people made?

33  
34 MS. GIBSON: So I would say some of the  
35 comments that we're hearing some have been positive.  
36 Some people realize the value in increased economics  
37 within the communities, increased job opportunities.  
38 With that increase in population, there also comes  
39 competition for roadways, transportation, restaurants,  
40 hotels. There's a lot of training opportunities out  
41 there to help people kind of get a jump on some of  
42 these opportunities.

43  
44 There's some concerns about access to  
45 traditional hunting areas, trapline areas, some of the  
46 stream crossings. People want to ensure that any  
47 anadromous fish or salmon aren't cut off from being  
48 able to fully make their runs. That any access roads  
49 that are currently in place that people may utilize for  
50

1 snowmachining or dog mushing or to access other areas  
2 for hunting aren't restricted.

3  
4 Let's see here. Some of the other  
5 concerns or questions. Mary, can you think of any  
6 others? Largely that's what it's been is really just  
7 around subsistence. Use of equipment, how loud  
8 equipment may influence wildlife behavior. How use of  
9 helicopters and things like that may affect caribou  
10 migration, just spooking them in one direction or  
11 another. They may not follow their natural progression  
12 from east to west or around the Colville River areas.  
13 So questions about how that might be reduced.

14  
15 I think that's probably largely about  
16 it. We've just been in three other communities so far,  
17 but I think that's probably the biggest part is what's  
18 going to be beneficial for our community and then  
19 making sure that I can continue to reach the areas that  
20 I currently reach for recreation, fishing, hunting.

21  
22 MR. WEISER: I'd say that would be one  
23 of my biggest concerns is you're opening up access with  
24 the different roads and trails you have to build.

25  
26 MS. JOHNSON: Do you want to come up  
27 and speak into the microphone, please.

28  
29 MR. WEISER: All right. Listen to me,  
30 goddamn it! I've got something to say here.

31  
32 MS. JOHNSON: We need your name.

33  
34 MR. WEISER: My name is Josh Weiser.  
35 My Social Security Number is -- I'm wanted by the law.  
36 I'm a known felon. I've come in from the woods because  
37 I wanted grapes. I'm mad because there's no submarine  
38 sandwiches. Last time we had subs. You don't edit  
39 this.

40  
41 REPORTER: No editing.

42  
43 MR. WEISER: I'm on stage. Yay! God,  
44 that's right, I'm the only man here. Okay, let me add  
45 that I'm the only real man in Minto. I'm the last real  
46 man because I come up here and I talk. Cowards.

47  
48 Now what the hell am I going to say  
49 here. Oh, access. Okay. That's a big concern because  
50

1 you're going to bring in outside people from cities  
2 that have greater access to the country for hunting and  
3 that has an effect on Native people and their ability  
4 to hunt some places that game is scarce. So that added  
5 impact of outsiders with fancy snowmachines is  
6 definitely an issue. Not to mention their increased  
7 access to villages with their snowmachines and lack of  
8 sensitivity for rural people.

9  
10 Based on that I want this project  
11 stopped right away. No. But that is a real important  
12 concern. Of course I would hope Minto would have a  
13 spur. It seems like we'd be pretty close to it,  
14 relatively, from Livengood.

15  
16 MS. WEISER: Can't hear you.

17  
18 MR. WEISER: I'm talking to mic not  
19 you. While I'm here I just want to say hello to my  
20 mother and my father and happy birthday dad. Oh, this  
21 isn't broadcast. So anyway. Yeah, thank you for this  
22 opportunity and pastrami would be really good next time  
23 for the final comment period.

24  
25 (Discussion away from microphone)

26  
27 MR. WEISER: The studies that they did  
28 for the -- what they had to do for the pipeline, a lot  
29 of those studies are relevant. So it's almost overkill  
30 because the data used on what the effect of wildlife  
31 has been from that pipeline is just as relevant to this  
32 project too.

33  
34 MS. JOHNSON: Exactly.

35  
36 MR. WEISER: So we're asking questions  
37 that have pretty much been asked and answered.....

38  
39 MS. WEISER: A long time ago.

40  
41 MR. WEISER: .....by the effects of  
42 this pipeline.

43  
44 MS. GIBSON: Right. And the concern is  
45 still there and that is what we want to capture.

46  
47 MR. WEISER: Well, it's the same  
48 concern as building a pipeline. So why is the money  
49 being spent to do all over again when it's the same

50

1 basically. The process of destruction that you used in  
2 changing the landscape to build the pipeline is the  
3 same although on a smaller scale.

4  
5 MS. GIBSON: Yeah, there's been some  
6 changes, but yeah.

7  
8 MARY: It's the National Environmental  
9 Policy Act that's required.

10  
11 MR. WEISER: I know.

12  
13 MARY: When you do the EIS, you'll have  
14 public.....

15  
16 MR. WEISER: It's a duplication of  
17 information.

18  
19 MARY: .....meetings. Yeah. So that  
20 people can.....

21  
22 MR. WEISER: Wasting millions of  
23 dollars. Yeah.

24  
25 MARY: .....can express their concerns  
26 and comment on the project.

27  
28 MS. WEISER: When they did the EPAs,  
29 what kind of information did they take down.

30  
31 MARY: When they did what?

32  
33 MS. WEISER: The EPAs or.....

34  
35 MR. WEISER: What did they collect for  
36 information?

37  
38 MS. WEISER: .....the environmental  
39 whatever you were writing.

40  
41 MARY: So the environmental studies on  
42 it?

43  
44 MS. WEISER: Uh-huh (affirmative).

45  
46 MARY: What kind of information.

47  
48 MS. GILBERT: So they look at water  
49 quality. Or EPA looks at water quality. They look at  
50

1 impacts on wetlands, on groundwater hydrology. They're  
2 looking at air quality. Because all of those things  
3 fall under the EPA's jurisdiction. So dust emissions,  
4 flaring, all of those type of things EPA would require  
5 to be within.....

6  
7 MS. JOHNSON: Do you want to use the  
8 microphone.

9  
10 MS. GILBERT: I can if you want me to.

11  
12 MS. JOHNSON: Just so that we make sure  
13 we get everything on the record.

14  
15 MS. GILBERT: Oh, okay. All right.  
16 Gotcha. Sorry. Okay, I'll start over. So basically  
17 the EPA's jurisdiction is focused around clean air and  
18 clean water. So they'll be looking into impacts to  
19 wetlands, impacts to streams, water quality, habitat,  
20 habitat quality, air, impacts to air from construction,  
21 from -- climate change also falls within their  
22 jurisdiction. So a lot of that information they have  
23 commented on on this environmental review and we've  
24 worked with the applicant to try to fulfill some of  
25 that information and get that available to the public.

26  
27  
28 So EPA has several permitting avenues  
29 that they delegated to the State, such as storm water  
30 permits, implementing best management practices to  
31 prevent any type of unauthorized movement of materials,  
32 sediments. They have jurisdiction over hazardous  
33 materials such as gasoline, diesel, how those are  
34 stockpiled and protected onsite to avoid spills. So  
35 that's primarily the EPA's jurisdiction.

36  
37 Then of course the Corps, because we're  
38 lead for this effort, we look at all those public  
39 interest factors that we had listed above. But our  
40 agency jurisdiction is focused on navigable waterways,  
41 streams, wetlands and any other waters of the state.  
42 Ponds, lakes that are jurisdictional and have a  
43 jurisdictional tie to other waters that support  
44 navigable waterway capacities.

45  
46 MR. WEISER: You listed adverse effects  
47 up there possible, but what about -- I don't know what  
48 a pipeline break -- a gasoline break, what effects does  
49 that have? I know what an oil would, but gas, how does  
50

1 that affect the environment?

2

3 MS. GIBSON: I guess I'm kind of  
4 talking off the cuff here a little bit, but with it  
5 being a pressurized gas, instead of the traditional  
6 spill where it would be on the ground, it would  
7 actually be a release to the air.

8

9 MR. WEISER: So it's air pollution.

10

11 MS. GIBSON: Right. They're actually a  
12 break. There are several sections of the pipeline that  
13 can be tied off and there's also pressurized inline  
14 testing that's maintained. So if there were to be some  
15 type of a break, then most of that material is going to  
16 volatilize and they can isolate sections of that  
17 pipeline to avoid continuous spills.

18

19 MR. WEISER: The impacts are not going  
20 to be really visual. Some birds might pass out flying  
21 through it.

22

23 MS. GIBSON: Maybe. Hopefully, yeah.  
24 Depending upon -- there's several classes and I'm  
25 probably getting me way over my head because I'm not a  
26 pipeline engineer.

27

28 MR. WEISER: For greenhouse gas  
29 increase.

30

31 MS. GIBSON: Yeah, there's several  
32 classes of pipeline codes that have to be met based  
33 upon the density of residential neighborhoods, the  
34 number of buildings and then other infrastructure  
35 that's in close proximity to the lines.

36

37 MR. WEISER: Which would be nil because  
38 we're in the wilderness.

39

40 MS. GIBSON: Well, it depends on where  
41 you are though along that pipeline chain. That's  
42 things that the applicant has to look at. There's  
43 another Federal agency. PHMSA is their acronym. It's  
44 the Pipeline Hazardous Materials Safety Association.  
45 They have a rigorous engineering standard that must be  
46 met before they will authorize a pipeline construction  
47 as being safe for the human environment. So that's  
48 actually not in the Corps' jurisdiction, but we would  
49 not issue a permit without receiving PHMSA's permit

50

1 saying that this pipeline construction is deemed safe  
2 for the human environment.

3  
4 MS. JOHNSON: You can also look in the  
5 section of the EIS that's called reliability and safety  
6 and there will be some information there about that.

7  
8 MS. WEISER: When you're coming up over  
9 the ridge you see all the flats, you're at one of the  
10 most prettiest places in Alaska. We know we're going  
11 to get an influx of people all along that corridor  
12 there because we know it's just going to follow that  
13 foothills of the mountains here. We already have a lot  
14 of people coming in to our land and fishing and hunting  
15 and picking berries and killing moose and taking just  
16 the hindquarters or even just taking the horns. So we  
17 have a lot of people coming in that are playing in our  
18 front yard without asking us.

19  
20 MS. GIBSON: I'm sorry. What was your  
21 name again? I want to make sure we catch that comment.

22  
23 MS. WEISER: Vera.

24  
25 MS. GIBSON: Is it okay if we use that  
26 comment?

27  
28 MS. WEISER: Yeah.

29  
30 MS. GIBSON: That was Vera's comment.

31  
32 MS. WEISER: Vera Weiser, W-E-I-S-E-R.  
33 Do you want me to repeat what I said? Can you hear it?

34  
35 REPORTER: I got it.

36  
37 MS. GIBSON: Yeah, I think we got it.

38  
39 MS. WEISER: I mean just a lot of stuff  
40 that -- because we get people coming and hunting and  
41 fishing and ruining our land by riding over -- the  
42 four-wheelers on the tundra that's going to be scarred  
43 for eternity and they don't care. So it's like opening  
44 up our kitchen, our food source and supply to the whole  
45 world to come see. Oh, I want to buy this land. It's  
46 just me that's talking.

47  
48 MS. GIBSON: Yeah, it's very valid  
49 points.

50

1 MS. WEISER: Thank you.

2  
3 MR. WEISER: Like the statement about  
4 the submarine sandwiches.

5  
6 MS. WEISER: Stop it.

7  
8 MR. TITUS: I have a comment.

9  
10 MS. GIBSON: Sure. If you could just  
11 state your name.

12  
13 MR. TITUS: My name is Charlie Titus,  
14 Second Chief of Minto. I don't have any -- no, I do. I  
15 do have some problems with pipelines. I'm still  
16 reeling over the Land Claims Act and what the pipeline  
17 did to Alaska and to the Native people. I'm not  
18 pleased with it. After reading about it, I was a young  
19 man when the Alaska Native Claims Settlement Act came  
20 through and I was just beginning to understand what it  
21 was doing.

22  
23 The last few years I understand more of  
24 what Ichuk(ph) was saying from Barrow about what it  
25 does to us. The Land Claims Act and the Statehood Act  
26 really impacted Alaska Natives very much because we  
27 didn't get any land at all because of the pipeline. I  
28 said it before and I'll say it again tribes do not have  
29 any land. They formed corporations that don't benefit  
30 anybody. It can't sustain any one of us. Doyon gave  
31 us \$500 a year and truthfully we don't have any title  
32 to any land at all, the Native people of Alaska, the  
33 tribes. The corporations do. Even the corporations  
34 for that matter are under the State of Alaska.

35  
36 There's a misconception between  
37 pipelines and me and myself. I really don't trust them  
38 for that matter because of what happened to the Alyeska  
39 Pipeline, Alyeska Service, all the things they promised  
40 and did and never came true. They never held up their  
41 part of the promise. As soon as the pipeline was over  
42 they just wiped -- they said, okay, you five villages,  
43 they had an agreement between the five villages along  
44 the corridor. What they didn't do is -- during the  
45 life of the pipeline we'll hire your people. As soon  
46 as the pipeline was over they shut us all out. No,  
47 we're not hiring you anymore. Those kind of things.

48  
49 Maybe I would have felt a little bit

50

1 better if that happened, but today I can't really  
2 support a pipeline because one of the things -- there  
3 would be a lot of benefit to the Interior, the  
4 corridor, but I don't see where it's going to benefit  
5 those people on the west coast. Maybe through the  
6 Permanent Fund or revenue sharing. I have no idea how  
7 the hell that's going to work. You already see from  
8 the Alyeska Pipeline, Fairbanks and everybody else, the  
9 rest of the state. So that's my say on it.

10

11 To say there's just a bitter feeling.  
12 I think a lot of people my age understand what history  
13 -- the pipeline history did to us. So I'm not too  
14 pleased with pipelines. I don't know how the State of  
15 Alaska -- there was still a little bit of animosity  
16 between tribes and the State of Alaska. I never see  
17 where (indiscernible). Now maybe become real between  
18 both of us.

19

20 That's how I feel about it. I don't  
21 know. I think a lot of Native people, men, women feel  
22 the same way I do. I know I talked to quite a few of  
23 them. Some of them do. Some of them see they need a  
24 change and I said, well, if that change ever come,  
25 maybe I'll be wrong. That's my statement.

26

27 MS. GIBSON: Thank you, Chief.  
28 Appreciate your comments.  
29 Did anyone else have anything?

30

31 MR. TITUS: I don't know if you have  
32 anybody -- it's bad timing.

33

34 MS. GIBSON: No, it's -- that's the  
35 thing. The Corps is neither a proponent or an opponent  
36 of the project. Our goal is to assess the  
37 environmental impacts.

38

39 MR. TITUS: I meant for having a  
40 hearing or having a meeting. Fridays is no good in the  
41 villages.

42

43 MS. GIBSON: Hey, you all showed up.

44

45 MR. TITUS: I was kind of forced to. A  
46 lot of your young people that are starting to --  
47 there's no history. No history on -- a lot of our  
48 young people that are young men, young men and women --  
49 I'd say young people, in their 20's, 30's, late 20's

50

1 and 30's, they're just starting to understand what the  
2 pipeline was about, the Land Claims Settlement Act,  
3 because of the oil. A lot of things were forced on us.  
4

5  
6 So I think they're really -- for me  
7 it's been a -- I lived it. So the good thing about the  
8 Alyeska Pipeline is I worked on it. Never really  
9 knowing, understanding what it would do, the impacts,  
10 the social changes. I think the pipeline -- a lot of  
11 people died because of it. A lot of young men. There  
12 was a change. A lot of alcoholism and it still has an  
13 effect. It's all part of the change in Alaska. It's  
14 kind of hard to understand for other people, but me I  
15 could see it. I lived it.  
16

17 MS. GIBSON: Thank you.

18  
19 MR. FRANK: Hopefully there won't be  
20 any leaks.  
21

22 MR. TITUS: What's the funding now? I  
23 know they cut the funding of exploration. What they  
24 call the tax -- tax credit? The Legislature cut the  
25 other exploration on the North Slope. Did you hear  
26 about or know about that?  
27

28 MS. GIBSON: I've been following a  
29 little bit in the news. But, you know, honestly as far  
30 as the economics on funding the project that's going to  
31 be solely up to the applicant. So we assumed that  
32 whenever they put forth an application that.....  
33

34 MR. TITUS: Did you get any funding  
35 from the State this year?  
36

37 MS. GIBSON: Did I get any funding?  
38

39 MR. TITUS: No, the whole.....  
40

41 MS. GIBSON: That would actually be a  
42 question for the State. They're the applicant on the  
43 project, so we don't really get involved in how they  
44 get their money together.  
45

46 MR. TITUS: Well, like I said, if it  
47 benefitted the State in any way maybe that's a plus to  
48 help our school system, our government. Just things  
49 that the State needs. Our children aren't getting the  
50

1 education that they need, especially out here in the  
2 rural areas. We don't have the same benefits that they  
3 do in the city and it's costing us our children's  
4 education.

5  
6 For example, a lot of our children have  
7 to take remedial courses just to catch up when they get  
8 into college. It's sad to say and that's not because  
9 they can't learn. It's a lack of good teachers or the  
10 curriculum how they teach it. I think that's a problem  
11 there. We suffer because of funding. If that helps, I  
12 don't know. I have no idea how the pipeline will help  
13 us in that area. That's a sad thing for the Native  
14 people in rural areas.

15  
16 MS. GIBSON: Yes, ma'am.

17  
18 MS. WILDER: So the question in my mind  
19 right now is what kind of companies are funding this  
20 and how much money is going to be taken away like from  
21 the profits and all that? His concern is money  
22 for.....

23  
24 MS. GIBSON: Sure.

25  
26 MS. WILDER: You know what I mean? If  
27 it's a bunch of Lower 48 companies backing it and it's  
28 all going to go back to Lower 48 or is Alaska going to  
29 be in there with some of that money coming into Alaska  
30 revenue?

31  
32 MS. GIBSON: So as the Corps I'm not  
33 privy to that information. Lisa, would you like to  
34 comment one way or the other?

35  
36 MS. PARKER: This is Lisa Parker with  
37 Alaska Gasline Development Corporation. The question  
38 was what companies are funding and how much. Currently  
39 we are still just working on completing the  
40 environmental impact statement and getting the permits  
41 in order to be able to construct. At this time there  
42 are no companies and there is no funding for the actual  
43 construction. The work associated with obtaining and  
44 doing the work that is going on right now is coming  
45 from the State of Alaska.

46  
47 MS. WEISER: So we don't even know if  
48 there's going to be a pipeline.

49  
50

1 MS. PARKER: We need to get that  
2 permitted.  
3

4 MS. GIBSON: Okay. If you like, we can  
5 go ahead and stop the public comment period and just  
6 have a Q&A and just talk about the project if you like.  
7

8 (Off record)  
9

10 (END OF PROCEEDINGS)  
11  
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## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 23 are a true, accurate, and complete transcript of Minto Scoping Meeting on July 21, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Nuiqsut, Alaska  
July 18, 2017

## 1 P R O C E E D I N G S

2  
3 (Nuiqsut, Alaska - 7/18/2017)4  
5 (On record)6  
7 MS. JOHNSON: Welcome to the public  
8 meeting for the Alaska Stand Alone Pipeline Project.  
9 My name is Kate and I work for the company  
10 Environmental Resources Management. We are responsible  
11 for writing the draft supplemental environmental impact  
12 statement for the project on behalf of the Army Corps  
13 of Engineers.14  
15 Our purpose tonight is to share with  
16 you the information that is included in the  
17 supplemental environmental impact statement, which I'll  
18 call the SEIS for short. Then also to provide you an  
19 opportunity to comment on the document and on the  
20 project.21  
22 PUBLIC: Ma'am, can you introduce your  
23 staff?24  
25 MS. JOHNSON: Yeah. So we'll do  
26 introductions. I'm going to talk to you a little bit  
27 about what we're going to talk about tonight and then  
28 we'll do introductions to the people that are here.29  
30 Next we'll talk about the steps in the  
31 National Environmental Policy Act process after we do  
32 introductions. I'll call that the NEPA process and  
33 that's what requires the SEIS to be written. We're  
34 also going to talk about the project description and  
35 background.36  
37 Just to be clear, this project is the  
38 Alaska Stand Alone Pipeline Project. It's the instate  
39 gas pipeline project. It's a different project than  
40 the AK LNG, which many of you may have heard of. That  
41 project is bringing natural gas to international  
42 markets, so we won't be talking about that one today.43  
44 We'll also talk about what's included  
45 in the draft EIS and then we'll talk about how you can  
46 provide comments.47  
48 With that I'll introduce Sandy Gibson  
49 with the Army Corps of Engineers and she's going to  
50

1 tell you a little bit about who's involved in the  
2 project.

3  
4 MS. GIBSON: Thanks, Kate. Yes, I'm  
5 Sandy Gibson. I'm the project manager for the Corps of  
6 Engineers for the ASAP Pipeline Project. The Army  
7 Corps of Engineers is the lead Federal agency for  
8 development of the Alaska Stand Alone Pipeline project  
9 supplement EIS. The responsibility of the lead agency  
10 is to ensure compliance with applicable environmental  
11 review processes.

12  
13 The Army Corps of Engineers is  
14 responsible for managing the EIS process and the final  
15 content of the EIS, identifying and selecting  
16 cooperating agencies. Those cooperating agencies are  
17 listed below here. These tasks are accomplished at the  
18 direction of the Corps and prepared using an  
19 independent third-party contractor. The third-party  
20 contractor selected for this undertaking is  
21 Environmental Resources Management, so Kate Johnson  
22 here.

23  
24 Thank you everyone for coming. At this  
25 time ERM is going to continue with a brief overview of  
26 where we are in the EIS process. Afterwards we'd  
27 welcome all comments and input from the public. So  
28 thank you for coming.

29  
30 MS. JOHNSON: Thanks, Sandy. So this  
31 slide shows the steps that are involved in the NEPA  
32 process. As you can see in we are currently in the  
33 public meeting phase of the draft EIS. This figure  
34 highlights opportunities where the public has an  
35 opportunity to comment on the project. We're currently  
36 in the Draft SEIS 45-day public comment review period.  
37 That started on June 30th and it will go until August  
38 14th.

39  
40 Previously we held a scoping period.  
41 We had a meeting here in Nuiqsut and those comments  
42 have been reviewed and there's a comment analysis  
43 report located online at [asapeis.com](http://asapeis.com). And then finally  
44 there will be an opportunity to comment on the final  
45 EIS once that's developed.

46  
47 So why do we need a supplemental EIS.  
48 As many of you know, there was an EIS written for the  
49 project in 2012 and since then there have been some  
50

1 project changes and some project refinements. Those  
2 have potential to affect the environmental impact, so  
3 that's what requires a supplemental EIS.

4  
5 This slide shows five of the main  
6 changes since 2012. The first one is that the pipeline  
7 is now designed to transport utility-grade natural gas,  
8 so fewer support facilities will be required, fewer  
9 compressor stations. Only one compressor station will  
10 be required now at Prudhoe Bay.

11  
12 Additionally, both the mainline and the  
13 Fairbanks Lateral have been rerouted in some locations,  
14 mostly to lessen environmental impacts. If you'd like  
15 to see where those locations are, you can look on the  
16 website that I mentioned before and I'll put it up on  
17 the screen at the end as well.

18  
19 Finally, in order to construct the gas  
20 conditioning facility near Prudhoe Bay, AGDC will need  
21 to import some modules. So there will be some  
22 modifications made to Dock Head 3. It would also  
23 include some dredging of a channel so that the barges  
24 can access that dock and then disposal of those dredged  
25 materials.

26  
27 Here we have the four main chapters of  
28 the EIS that I'm going to talk about tonight. The  
29 first is the project purpose and need. The second one  
30 is the proposed action and the alternatives. The NEPA  
31 process requires that we evaluate alternatives to the  
32 proposed project. Chapter 3 is existing conditions  
33 within the project right-of-way. Chapter 4 is the  
34 environmental consequences, so potential impacts from  
35 the project.

36  
37 I'll just read to you the project  
38 purpose and need. AGDC's proposed purpose and need for  
39 the project is to make North Slope natural gas  
40 available to residents in Fairbanks, the Southcentral  
41 region and other communities in the state as directed  
42 by the Alaska State Legislature and to provide access  
43 to a stable, affordable and long-term supply of natural  
44 gas for heating and powering homes and businesses.

45  
46 I realize that I didn't mention that  
47 AGDC, Alaska Gasline Development Corporation, is the  
48 project proponent.

49  
50

1 Here we have a map of the pipeline  
2 route. We also have a lot of maps around the room  
3 here, so at the end of the presentation if you want to  
4 take a look at a close-up of where the pipeline will  
5 go, there's maps on the tables here as well as up here.  
6

7 So it will start in Prudhoe Bay and it  
8 will generally follow the Trans-Alaska Pipeline System  
9 down to just north of Fairbanks. At that point it will  
10 continue south. It would stay on the east side of  
11 Denali National Park. It wouldn't enter the Park.  
12 Then it would continue south along the Parks Highway  
13 and it will connect with ENSTAR's existing distribution  
14 system just southwest of Big Lake.

15  
16 This slide shows a picture of the  
17 Fairbanks Lateral which will connect to the main line  
18 at Milepost 440 and then it will extend along Murphy  
19 Dome and Old Murphy Dome Roads into Fairbanks.  
20

21 Here we have an example of what the  
22 pipeline right-of-way might look like during  
23 construction. So we can see it would be a buried  
24 pipeline. This is the pipeline trench. Then the  
25 material from inside the trench would be stored within  
26 the right-of-way and right-of-way would also be used  
27 for construction equipment to access.  
28

29 That right-of-way would be anywhere  
30 between 120-350 feet wide during construction and then  
31 additionally there would be some temporary work spaces  
32 for storing materials within an 800-foot corridor of  
33 the pipeline. During operations the pipeline  
34 right-of-way would be between 53 feet wide and in some  
35 cases would extend out to 350 feet wide.  
36

37 In addition to the pipeline, the  
38 project includes several above-ground facilities.  
39 Those include both temporary -- this is an example of a  
40 temporary camp, permanent camp, pipe storage yards and  
41 gravel material sites, as well as a gas conditioning  
42 facility. This figure shows the where the gas  
43 conditioning facility is planned to go. It's in  
44 Prudhoe Bay and it's approximately a mile from the  
45 existing central gas facility.  
46

47 In addition, there would be some  
48 modifications to Dock Head 3 at West Dock like I  
49 mentioned before. There would be a dredge channel  
50

1 about 500 feet wide by a mile long in order for those  
2 23 barges to bring in the materials to construct the  
3 gas conditioning facility. Those materials would be  
4 disposed of at a nearshore disposal site in Prudhoe Bay  
5 and I'll show you a map of where that is in the next  
6 few slides here.

7  
8 So this slide shows -- as I mentioned  
9 NEPA requires that we analyze alternatives to the  
10 proposed action. This slide shows the five main  
11 differences that we analyzed in Alternative 2. In  
12 Alternative 2 we consider the route entering Denali  
13 National Park and going through the Park for seven  
14 miles. I'll show you a map of that on the next slide.

15  
16 We also consider using Dock Head 2  
17 rather than Dock Head 3 to import those materials.  
18 Ocean disposal location would be further out into the  
19 Beaufort Sea rather than in Prudhoe Bay.

20  
21 A portion of the pipeline would be  
22 constructed above ground. The portion that's in the  
23 Beaufort Coastal Plain. That's the first 62 miles, so  
24 less than 10 percent of the pipeline total length,  
25 which is 733 miles.

26  
27 Finally, we consider constructing an  
28 aerial suspension bridge across the Yukon River rather  
29 than horizontal directional drilling, which is proposed  
30 under Alternative 1.

31  
32 Finally, Alternative 3 is where we  
33 consider what would happen, what the impacts would be  
34 if the pipeline wasn't constructed, so it's called the  
35 no action alternative.

36  
37 I mentioned I'd show you some maps.  
38 This shows a map of the proposed action in pink staying  
39 outside of Denali National Park. The blue line shows  
40 Alternative 2 going through the Park. It would cross  
41 the Nenana River at a pedestrian footbridge. It would  
42 go seven miles and then cross the river again and then  
43 match up to the Alternative 1 proposed action route.

44  
45 Over here we have the dredge disposal  
46 proposed location and the Alternative 2 proposed  
47 location.

48  
49 Chapter 3 of the SEIS just describes  
50

1 the affected environment within the project area. I'm  
2 not going to go through each of these today. That  
3 would take a long time. So if you're interested in  
4 reading about the affected environment, we've got a  
5 copy of the EIS up on the table here. You can look at  
6 what's in there. It's also available online. You can  
7 look at any of those resources if you're looking for  
8 more information.

9  
10 Chapter 4 talks about the potential  
11 environmental impacts from the project. We're going to  
12 focus today on just a few of the resources. If you are  
13 interested in understanding what the impacts might be  
14 to other resources, those are also described in the EIS  
15 and we've also got these figures up here. We've got  
16 one for each resource and it shows the approximate  
17 impacts along the route of the pipeline. So you can  
18 look up where Nuiqsut is and it's a nice summary.

19  
20 These have been chosen to talk about  
21 today because either they have received attention from  
22 stakeholders or they're expected to see greater impacts  
23 than other resources.

24  
25 The impacts described in the EIS do  
26 consider proposed mitigation measures by AGDC and then  
27 Chapter 4 also includes cumulative effects, which talks  
28 about the impacts of other potential projects or  
29 natural events that could occur within the project area  
30 that would result in effects in the same area.

31  
32 ON this slide I've combined impacts to  
33 three different resources; soils and geology, water and  
34 wetlands. That's because the greatest impacts to these  
35 resources could be similar and they're related to  
36 potential for permafrost thaw. So that potential  
37 occurs because vegetation would be removed within the  
38 project right-of-way and also because of the  
39 temperature of the pipeline during operation. It  
40 wouldn't be heated, but the temperature would fluctuate  
41 along the route.

42  
43 When you do have permafrost thaw,  
44 there's potential for soil to collapse causing altered  
45 surface and groundwater drainage and altered wetland  
46 hydrology. So those impacts could occur. There are  
47 some areas where those would be more likely to occur.

48  
49 As you can see on this figure we show  
50

1 in blue the general area where continuous permafrost  
2 exists. This green area shows in general where  
3 discontinuous permafrost might exist. So within those  
4 areas there are some areas where the soils are more  
5 stable like gravel. There are some areas where the  
6 soils are less stable, such as the organic soils or  
7 clays, and those are the soils that you could see more  
8 effects to if the permafrost were to thaw.

9  
10 So AGDC has proposed some mitigation  
11 measures to help minimize these impacts. The first one  
12 is that they would construct an ambient temperature  
13 pipeline, so the pipeline is intended to acclimate to  
14 the surrounding ground temperature. So those impacts  
15 would really occur mostly in locations where the  
16 pipeline was moving from maybe a warmer soil into a  
17 permafrost or maybe it would take some time to  
18 acclimate to that freezing temperature. AGDC would  
19 also consider revegetation and then also replacing some  
20 of those unstable soils.

21  
22 For socioeconomic, we've got both  
23 positive and negative impacts. The positive impacts  
24 would be employment opportunities during both  
25 construction and operation, increased natural gas  
26 supply during operation and then also increased local  
27 and state tax revenues. As a negative effect, there  
28 would be local and state expenditures both for  
29 infrastructure improvements and then also for  
30 government services, which could experience increased  
31 demand during construction.

32  
33 For cultural resources there are 26  
34 sites that have been identified in the EIS that could  
35 experience impacts such as physical damage or  
36 destruction or changes in character or setting. There  
37 are 26 of the 72 known sites within the area of direct  
38 effects and that's based on the currently available  
39 survey results.

40  
41 The mitigation measures will be further  
42 developed in the programmatic agreement which has not  
43 yet been written. So with additional mitigation  
44 measures these impacts could be reduced to moderate and  
45 then with avoidance these impacts could be reduced to  
46 minor or negligible.

47  
48 Subsistence resources. There are two  
49 main impacts that have the greatest potential to occur,  
50

1 which are displacement of subsistence resources and  
2 also changes to access. These would be expected to  
3 occur to the greatest extent in communities that are  
4 located directly along the pipeline such as Wiseman and  
5 Coldfoot as well as Nenana. This map is included up on  
6 the table here if you're interested in looking at the  
7 entire map that shows Nuiqsut. Additionally, in the  
8 community of Minto it might have an increased use of  
9 subsistence areas that intersect the pipeline project.

10  
11 Finally, noise impacts could occur  
12 during horizontal directional drilling activities and  
13 two locations have been identified where these could be  
14 the greatest. They are at the Kashwitna River HDD,  
15 which is located just north of Willow where there are  
16 some residences located within a 10th of a mile of that  
17 proposed site.

18  
19 Then also the Denali National Park  
20 commercial area where the Denali Cabins are located  
21 within a 10th of a mile. So in those locations  
22 horizontal directional drilling would occur  
23 intermittently for 24 hours a day, approximately one-  
24 third of the time the noise would be occurring, and  
25 that would occur over a period of 10-25 weeks. AGDC  
26 also proposes to minimize activities during the tourist  
27 season.

28  
29 So how can you submit comments on the  
30 SEIS. There are several ways. You can provide a  
31 comment tonight during our formal comment period, which  
32 we'll have in just a few minutes. Make sure that you  
33 you've signed up with Mary at the front table there if  
34 you do provide a comment. This will also serve as a  
35 subsistence 810 analysis. You can also fill out a  
36 comment form that Mary has on the table there. You can  
37 go online to [asapeiscomments@erm.com](mailto:asapeiscomments@erm.com) and you can email  
38 us a comment. You can also mail your comments to Sandy  
39 at the Army Corps of Engineers. Just make sure that  
40 those are postmarked by August 14th.

41  
42 During the public comment period  
43 tonight each commentor will have five minutes to make a  
44 comment. If we have more time at the end we might  
45 allow people to make more comments or you could also  
46 fill out a form with Mary if you've got a longer  
47 comment.

48  
49 We do have a court reporter present, so  
50

1 when you come up and give your comment, please make  
2 sure that you state and spell your name for her. We  
3 also have an interpreter here with us tonight, Edward,  
4 so he can help interpret if needed. When you make your  
5 comments, please focus on specific issues that are  
6 related to the SEIS and related to the ASAP project.  
7

8 We won't be making any decisions about  
9 the project tonight and we won't be responding to any  
10 comments or questions during this formal comment  
11 period. These comments will be analyzed and then  
12 they'll be incorporated into the final EIS.  
13

14 If you do have questions about the  
15 project and you want to stick around afterwards, we've  
16 got lots of project materials and we can help you to  
17 use the materials to answer whatever questions you have  
18 about the project.  
19

20 Now we will open the ANILCA 810  
21 hearing.  
22

23 MR. WILLIAMS: Thank you, Kate. I'd  
24 like to thank the community for giving us the  
25 opportunity to come here tonight and discuss this  
26 project with you. My name is Earl Williams and I am a  
27 project manager with the Bureau of Land Management. I  
28 am reading this statement into the record to let you  
29 know that this public meeting is also a subsistence  
30 hearing.  
31

32 Section 810 of the Alaska National  
33 Interest Lands Conservation Act, or ANILCA, requires  
34 the BLM to evaluate the effects of its actions on  
35 subsistence uses and to hold public hearings if it  
36 finds that subsistence use may be significantly  
37 restricted.  
38

39 The Alaska Stand Alone Pipeline project  
40 is seeking a right-of-way from the BLM to allow for the  
41 construction and operation of a buried pipeline across  
42 public lands. In reviewing this application, the BLM  
43 must consider the potential effects to the environment  
44 and the potential impacts to subsistence resources and  
45 uses on public lands. The ANILCA 810 evaluation done  
46 for this project assessed the potential effects of the  
47 proposed alternatives and the cumulative case on  
48 subsistence use, and is included as an appendix in the  
49 Draft SEIS.  
50

1 In the evaluation, the BLM finds that  
2 the proposed project and its alternatives may result in  
3 a significant impact to subsistence uses. These  
4 potential impacts may include reductions in the  
5 availability or abundance of caribou, moose, and other  
6 wildlife. Additionally, there could be reductions in  
7 the availability of berries and other plants in some  
8 traditional harvest areas.

9  
10 This hearing is being held to provide  
11 you an opportunity to make comments on the preliminary  
12 subsistence analysis for the Alaska Stand Alone  
13 Pipeline. All comments are welcome, but we especially  
14 would like to hear your thoughts regarding mitigation  
15 measures that could be applied to minimize impacts to  
16 your subsistence use.

17  
18 The comments you provide will be  
19 considered in the preparation of the Final SEIS and the  
20 BLM's Record of Decision. You may provide your  
21 comments here tonight or submit them in writing.  
22 Please submit any written comments to the Corps of  
23 Engineers by the close of the comment period.

24  
25 Thank you.

26  
27 MS. JOHNSON: Thanks, Earl. So with  
28 that we will begin our public comment period. If  
29 anyone would like to make a comment, you can come up to  
30 the microphone and state your comment.

31  
32 MR. E. NUKAPIGAK: (In Inupiaq).

33  
34 I just gave a brief of your opening  
35 statement as to what he presented before public  
36 hearing. Some people always have questions to ask, but  
37 about that you have to answer them at the end of the  
38 meeting. I do have a concern, but I think I can wait  
39 on that.

40  
41 MS. JOHNSON: If you have a concern  
42 that you'd like to state during the public comment  
43 period, we'd love to hear that. If you do have  
44 specific questions about the project, as you said,  
45 we'll answer those afterwards using the materials here.  
46 But come on up if you've got a comment.

47  
48 MR. E. NUKAPIGAK: (In Inupiaq).

1 MS. JOHNSON: Would anyone like to make  
2 a comment tonight? We'd love to hear from you.  
3

4 MS. E. BROWER: My name is Eunice  
5 Brower. I have to say we're a small village here in  
6 Nuiqsut. We haven't developed very much around here,  
7 so there's a limited availability of jobs. A lot of  
8 our people -- we're a lot of subsistence users in this  
9 area over here and with a lot of these development of  
10 these pipelines and stuff especially near our village  
11 is creating a big impact to our community.  
12

13 A lot of these animals get deviated on  
14 their natural migrations to our village, so in that  
15 part where the subsistence is being impacted there's  
16 having to go further out to go hunt and get our food,  
17 like the caribou. Of course a majority of our diet is  
18 based on the whaling. What we eat a majority of the  
19 year is because of the whaling crews.  
20

21 Where you guys are going to be starting  
22 your project is near our hunting grounds of the Cross  
23 Island by Prudhoe Bay area and that could impact our  
24 subsistence partially in that area. That's a big  
25 concern because a majority of our diet is based off of  
26 if we are lucky enough to get these whales that utilize  
27 that area around Prudhoe Bay.  
28

29 A majority of our diet also comes from  
30 the land, from the caribou. A major part of our diet  
31 is coming from the land and the caribou that come  
32 around here. Because the prices of the store are so  
33 expensive because of the freight to fly it in, it's  
34 very expensive and a lot of those people can't afford  
35 to always go to the store for our food.  
36

37 A lot of the times our subsistence  
38 users either have to go out further to go hunting and a  
39 possible mitigation for that is probably fuel vouchers  
40 for our subsistence users. But also for our people  
41 maybe you could subsidize their diets, maybe provide a  
42 food package at least once a month. I don't know.  
43 It's just an idea. You guys want to ask about ways to  
44 mitigate all this subsistence or you know.  
45

46 Because of our place here in Nuiqsut a  
47 majority of our people are subsistence users and then  
48 having to look further for food or different places to  
49 hunt because of the impacts to our community is a  
50

1 little bit more -- you know, because we have to go out  
2 further and look for caribou. It doesn't always no  
3 longer just -- it makes us have to look further for our  
4 caribou.

5  
6 So, I don't know, maybe you could look  
7 at providing a supplemental diet, I don't know, maybe  
8 it's just an idea, that you could provide to the  
9 residents of Nuiqsut. Because a lot of the time we are  
10 subsistence users and we look at our land for food.  
11 It's a healthier option than going to the store where,  
12 you know, our food is brought in and we don't even know  
13 where these other foods come from, if they're raised on  
14 a farm or, you know, we don't know where these food  
15 come from.

16  
17 We don't know if it has -- we're just  
18 mostly subsistence users because the food that we hunt  
19 locally is a lot healthier and we have ways to preserve  
20 our food. It's just a lot fresher and a lot more  
21 healthier to live off of our land than to go to the  
22 store. Plus that's only most of what we know is living  
23 a subsistence lifestyle and that's being changed  
24 because we have to go look further for caribou.

25  
26 Then not only that we also trade and  
27 barter for food with other communities that are on the  
28 North Slope because maybe some of the other villages  
29 might not get caribou because of where they're at, you  
30 know. So most of our economy is based on subsistence  
31 hunting.

32  
33 Thank you.

34  
35 MS. JOHNSON: Thank you very much for  
36 your comment. If you'd like after the meeting I can  
37 show you in the EIS as well the section that talks  
38 about subsistence and some of the mitigation measures  
39 that are proposed if you're interested in looking at  
40 them.

41  
42 Does anyone else have a comment.

43  
44 (No comments)

45  
46 MS. JOHNSON: Okay. So, with that I  
47 think we'll close the comment period. As I said  
48 before, we'll stay around if you've got questions. Oh,  
49 do you have a comment? Okay, great.

50

1 MR. E. NUKAPIGAK: Good evening and  
2 welcome to Nuiqsut. My name is Edward Nukapigak. I'm  
3 one of the six whaling captains. One of our main  
4 concerns on the ASAP based on the North Slope we are  
5 the closest village to all the industry that is being  
6 developed, explored.

7  
8 Our caribous are one of the main diets  
9 that we depend on. We depend on Central Herd and a  
10 portion of Porcupine Herd. Once the studies are done,  
11 your surveys and all that, once it's all finalized,  
12 we're going to see a lot of impact.

13  
14 Our caribous have not come through yet.  
15 The first two herds have already passed. The third  
16 herd is sitting over at east side. Why? Too much  
17 activity is going on. And then they cross to Colville.  
18 The majority of our caribous that come from the east  
19 side and Colville are either in that east side or not  
20 able to come here further west.

21  
22 That's why our people here I'm telling  
23 you are hurting for caribous right now. So much  
24 activities going on. So many studies, so many choppers  
25 flying to and from. Those are the people that we're  
26 hearing. These are those that are doing a lot of  
27 studies.

28  
29 We feel a lot of our people are  
30 scrounging for caribou and they're scrounging for gas  
31 vouchers. Gas vouchers are depend on what company  
32 comes to our village and they're the one that provide  
33 in order for them to study like Armstrong to the south,  
34 ConocoPhillips to the north, KDS to the east, ENI to  
35 northeast. So those are the impact we're feeling.

36  
37 When we see a lot of our people right  
38 now heading all directions -- and I agree with that  
39 lady that comment on this project that's to happen. A  
40 lot of our impact are related to industry. None of us  
41 (indiscernible) since NPR-A was open. Look at all the  
42 roads that's been built to the west. Caribous,  
43 Teshekpuk Herd from the west side aren't here. The  
44 caribous that used to be have not been mentioned on the  
45 North Slope.

46  
47 What month does ERM do the caribou  
48 study of migration from the south going north. You look  
49 at those May, June. That would be the best time to do  
50

1 your caribou study. When do they migrate south. Those  
2 aren't mentioned. They are not on your draft EIS.

3  
4 All these things have been studied in  
5 the Interior, the Athabascan land. We feel like we've  
6 been robbed about this ASAP lack of caribou migration  
7 study by ASAP and the contractor. Lichens, the food  
8 that they depend on, have not been thoroughly mentioned  
9 because I am familiar with this project. This ain't  
10 the first time I've testified and this ain't the first  
11 time I translate on behalf of ASAP.

12  
13 I've met a lot of people that relates  
14 to this project and I see them come and go and they  
15 never come back. The studies that we have done have  
16 not been passed on to the community. Once you folks  
17 leave we have no idea of what your next plan is.

18  
19 The final EIS is something that's kind  
20 of scary. If that EIS is finalized and the wrong  
21 decision is final, what part of the month will this  
22 natural gas pipeline start? During the height of  
23 caribou migrations? Are you going to be careless?  
24 When TAPS was built, TAP didn't have no Federal  
25 regulators here in Nuiqsut because I built TAPS.

26  
27 Once that has been approved they're  
28 going to go forward in a manner of no time. I see the  
29 build of the TAP was careless, but this one has to be  
30 pretty much according to your regulators. I exposed  
31 TAPS at some point. A lot of diesel spills. A lot of  
32 things being built around the TAPS being exposed, a  
33 portion of the land. A lot of those hasn't been  
34 cleaned up yet.

35  
36 If ASAP is to go forward, North Slope  
37 needs to be a thorough study because that's where it  
38 starts from. It doesn't start from the Interior. And  
39 the West Dock, the whale is going to feel that because  
40 we're only 14.5 northeast of West Dock, Cross Island  
41 that we depend on for subsisting for whaling.

42  
43 We have a lot of impacts offshore  
44 during whaling season. We have so many offshore  
45 vessels that come and go and without those who don't  
46 sign the CIA with Alaska Eskimo Whaling Commission are  
47 the ones that are involved. You'll see how many barges  
48 are going to be out there dredging expanding West Dock  
49 in the wake of ASAP.

50

1 More of our people will have to travel  
2 further, like I have done. When I feel that impact  
3 from the offshore vessels, I have to go further. If  
4 it's nature, the icy conditions, we need to travel  
5 further, but majority of the time in our past whaling  
6 seasons a lot of the impacts were offshore vessels that  
7 relate to industry and it's still ongoing today.

8  
9 But we know a company that wants to do  
10 an offshore exploration are the ones we're fighting  
11 right now. So our people feel the pain, that these are  
12 the problems today, offshore and onshore industry  
13 activity that is going on. And with this I'd like to  
14 see that our caribou migration be a thorough study,  
15 that there would be no impact when this development is  
16 starting.

17  
18 Caribous migrate coming south to the  
19 north, May June. That's when they start coming down  
20 from the foothills. They start migrating in late  
21 September going back south, sometimes right through  
22 October. I've seen caribous migrate right through  
23 Atigun Pass. So it depends on the season we have. If  
24 we have an early freeze-up, they head out early. If  
25 it's a late freeze-up, they hang around.

26  
27 But right now our caribous are further  
28 from Nuiqsut. About 5,000 or more on the east side are  
29 waiting to come across the Colville, but a lot of the  
30 areas that the choppers fly, I think they're headed  
31 back eastward.

32  
33 So those are the impacts we're feeling  
34 and what kind of mitigation are we going to get from  
35 these kind of impacts that comes to our village?  
36 (Indiscernible) hasn't come all winter long. So they  
37 start building GMDM GMDD road, CD-5 road. Majority of  
38 these resources we depend on are not near Nuiqsut or  
39 near Fish Creek.

40  
41 So those are the impacts we are feeling  
42 today and how is that going to be mitigated? How is  
43 that east side going to mitigate our State and how is  
44 the State going to feel about listening to our people  
45 here in the village. Too much leases going on. The  
46 State no longer communicate with this village. They  
47 will do anything they want onshore and offshore. They  
48 got -- we can't control them because they no longer  
49 come to our village like they used to.

50

1                   The village has been cut off by state.  
2 Once we were cut off, look at what's going on on the  
3 east side. More of the lands are being leased and more  
4 of those are coming closer and closer. How can state  
5 feel about this village when there is so much of this  
6 going on.

7  
8                   I think the State and Federal need to  
9 sit down and come together. How best can you deal with  
10 this village as far as caribou migration. What kind  
11 of mitigation can we give this village. I know the  
12 State won't, but whatever the level this is a lot more  
13 than State.

14  
15                   This is the kind of concerns that we  
16 all have. More of these activities going on every day.  
17 We have 14 choppers flying in the heart of caribou  
18 migration, in the heart of where caribou lives.  
19 Conoco, KDS, Armstrong and BLM chopper here in this  
20 area. ConocoPhillips got two choppers flying.  
21 Armstrong got two choppers flying. KDS got a chopper  
22 flying and that's in the heart of the caribou migration  
23 on the east side of the Colville. We have no idea  
24 where BLM is going to be flying, but I have a gut  
25 feeling that they'll be flying down that GMT-2 and BIA  
26 side on behalf of ConocoPhillips.

27  
28                   So in order for any of this to go  
29 forward we need to get a thorough study on the  
30 caribous. That's our main diet. The whale is our main  
31 diet too offshore. That's our food that what we depend  
32 on besides fish that are coming in.

33  
34                   I just want to give my two cents piece  
35 about this project and let the State and Federal know  
36 where we're coming from and why the State are not  
37 listening when the migration have started. I want you  
38 to see 30-50,000 caribous at one point before all this  
39 development was set up. Since all this were developed  
40 the caribou migration has changed its pattern.

41  
42                   Our hunters travel 30, 40 miles west of  
43 the east side or the south. Some of our people don't  
44 hunt on the east side anymore after so much activity.  
45 You have regulations, you're restricted on something  
46 that you can't have firearms over there on the State  
47 side.

48  
49                   So I just want to give my portion of my  
50

1 comments in this ASAP project and we'd like to get more  
2 feedbacks after your meetings are done and over with.  
3 We'd like to get more feedbacks as to how this project  
4 is going along instead of having to wait for the next  
5 public hearing.

6  
7 Thank you.

8  
9 MS. JOHNSON: Thank you very much,  
10 Edward. Is there anybody else who would like to  
11 provide comment.

12  
13 MS. ITTA: Good evening. Martha Itta  
14 for the record. I serve as the tribal administrator  
15 for Native Village of Nuiqsut.

16  
17 Where do I start. First of all my  
18 concerns with this project, like Edward said, is the  
19 mitigation issue. There has been a lot of concern on  
20 the mitigation. We work a lot with the Federal  
21 government on the government to government basis  
22 relationship with them and I know for a fact that there  
23 is no way to mitigate our loss of land, our loss of  
24 subsistence, also our loss of life.

25  
26 So my main concern with any project  
27 from here on out given that we've been impacted for the  
28 past 40 years since Prudhoe Bay. Even though it started  
29 in Prudhoe Bay we still get the effects from Prudhoe  
30 Bay to this day and growing. So my main concern  
31 because not even the Fed government can answer or  
32 address our concerns in regards to our safety and  
33 health of our people, our way of life, our food  
34 security. We've been disregarded.

35  
36 So my concern is any project going  
37 forward here on out needs to address and respect the  
38 wishes of our community. We're living it, we're here,  
39 you're not. It hurts to see our people suffer day to  
40 day, hour by hour, minute by minute, second by second,  
41 every day. So that's my main concern is being able to  
42 mitigate and do it right the way it should be.

43  
44 But this project in my opinion is not  
45 feasible in my eyes given the fact and the state that  
46 the State of Alaska is in and their funds. And I don't  
47 think developing gas or oil is going to fix that no  
48 matter how much gas or oil there is out there.

49  
50

1                   The Department of Natural Resources  
2 need to live up to their title and look at other  
3 resources besides gas and oil because that's not going  
4 to fix it. There's too many impacts. They're not  
5 being addressed. You need to start listening to the  
6 people, respecting and doing it the way -- if you guys  
7 are to go forward, it should be on our terms.

8  
9                   More transparency. More higher-ups  
10 coming to these meetings. No more sending their  
11 associates. They need to start coming to our community  
12 and presenting themselves to us so they can hear it  
13 from us directly.

14  
15                   So those are my concerns of this  
16 project. You guys are not serving the North Slope. I  
17 see that and that is very wrong just because it comes  
18 from underneath us. Our people should be the first  
19 priority no matter what. I mean if we're going to be  
20 giving money to the State of Alaska or leasing a lease  
21 to the State of Alaska, our people should be first.

22  
23                   Anything else I have I will write down  
24 and I will submit them. Thank you.

25  
26                   MS. JOHNSON: Thank you.

27  
28                   MR. R. NUKAPIGAK: Hi. For the record,  
29 Robert Nukapigak from Nuiqsut. I've been here since  
30 Tent City. First of all I'd like to welcome you guys  
31 in this public hearing and the proposed pipeline that  
32 you guys are about to do. Will it start or will it be  
33 a reality?

34  
35                   We need continuous subsistence. For so  
36 many years I have seen so many paths on the migrations  
37 of the caribou. There are a few studies that has been  
38 done on the Slope, but there's not much that the State  
39 has come up with. So many years or so many times in  
40 these public meetings on these issues the State or the  
41 regulators use our voices and that's taken away our  
42 identity.

43  
44                   So in that case, you know, I don't like  
45 the way how the State regulates the people by how  
46 they're going to change their lives especially when it  
47 comes to subsistence. So many years I've been going to  
48 the meetings regarding the oil companies or the State  
49 or BLM, but most of the time ignore it, because the

50

1 State don't care about our voices. Whenever the people  
2 comment about these issues it seems like we're talking  
3 for nothing especially when it comes to subsistence.

4  
5 So the proposal that you're doing on  
6 this pipeline there should be more environmental  
7 assessment, there should be more health assessment in  
8 this community because some of the times I think none  
9 of these oil companies have reported any of these  
10 health assessments. That's the main concern that I  
11 want to point out to you guys because I know you guys  
12 are going to be regulating so many of these issues in  
13 the coming years if this pipeline becomes a reality.

14  
15 Dedication should be going directly to  
16 the community that is heavily impacted by oil and gas  
17 industry. Some of the years I see a little dedications  
18 coming in from the oil companies and that's not enough.  
19 It's like giving pennies to the communities while the  
20 oil companies make billions of dollars from our land.  
21 You know, they only give us what they can give. It's  
22 like robbing us, you know. It's like a common ground.

23  
24  
25 So I'd like to see more public meetings  
26 before this gas pipeline becomes a reality in this part  
27 of the region. I'm afraid of the next generations and  
28 how they're going to cope with the development because  
29 they are going to be out future leaders someday. The  
30 younger generations are the most important people that  
31 we need to look up to.

32  
33 Right now we're being too regulated by  
34 the State, by the Federal government. Even though we  
35 voiced some of our concerns during the meetings after  
36 meetings, but seems like most of the time our voices  
37 are taking away because of what the EIS or the impact  
38 statement that you guys do. I think these need to be  
39 directly addressed to the community even before, during  
40 and after the project is done. So that is one of my  
41 concerns for this public meeting or public comment that  
42 you have.

43  
44 For the record, my name is Robert  
45 Nukapigak, resident of Nuiqsut. Thank you.

46  
47 MS. JOHNSON: Thank you, Robert. Is  
48 there anybody else?

49  
50

1 (No comments)

2

3 MS. JOHNSON: Okay. Well, if there's  
4 nobody else, I'll go ahead and close the comment  
5 period. Thank you all for coming. Oh, one more  
6 comment.

7

8 MR. AHNUPKANA: I'm Clarence E.  
9 Ahnupkana. I'm a resident of Nuiqsut for the record.  
10 I eat caribou. Like they're talking about today.  
11 Caribou and talking about caribou and fish, mammal.  
12 Fish, mammal or the plant we eat inland. Caribou  
13 migration from northeast and we eat caribou. Caribou  
14 eat grass and we eat the meat. We eat the caribou.  
15 Not just caribou, fish. White fish, arctic char,  
16 arctic cisco, least. We eat them. We eat the plants  
17 at the same time, like berries, cranberries inland.

18

19 We'll all be affected if you build a  
20 pipeline. Caribou migration will be going out further  
21 and out further and out further inland and no further.  
22 I hear this about the pipeline that they talk about  
23 since a few years ago over and over and over again.

24

25 I eat caribou and fish, all that, and  
26 even eggs. My nephews they come and we go and I teach  
27 them to survive. It seems like the State don't care no  
28 more about Alaska. Only because Alaska is part of the  
29 State. Now you want everything from me. You want  
30 this, you want that. It seems like you want this to  
31 yourself without me. You just want money, more money,  
32 more impacts, more impact money for yourself without  
33 me.

34

35 I've been surviving. How? Survive, no  
36 job, no money. You're using my land so much, so much  
37 of this. You're making billions and billions and  
38 billions of dollars and last PFD, how much PFD? Not so  
39 much. It seems like State don't care no more about  
40 Native Eskimo people like me. And I survive more and  
41 more and more and more.

42

43 I go Fish Creek go hunt caribou and  
44 fish. There's road blocking my way. I used to travel  
45 by snowmachine going down to Fish Creek to go fish  
46 hunting. Now I have to go further out, further in or  
47 further other way. Blocking where I need to go.

48

49 Now this one same thing, pipeline. I

50

1 used to hunt caribou, take me out across the river.  
2 Now I don't hunt there no more. Now they have  
3 pipeline. I don't want to shoot the pipeline. Now  
4 there are more pipelines going southwest. Now I'm  
5 going further in, going in and going hunting and I'll  
6 be surrounded by pipeline. More pipe around us.

7  
8 They don't even care about Natives. I  
9 know that they won't care no more. I heard that they  
10 won't care no more. My grandma talked me and talked  
11 and talked and talked. The oil companies won't care no  
12 more at all when they strike a pipeline -- or strike  
13 the oil. So she said, grandson, be quiet, you have to  
14 listen carefully.

15  
16 I hunt wildlife. I survive. I don't  
17 just sit around and watch TV at my home. What I need  
18 at my table I need food at my table. You go to coffee  
19 shop, you go to the coffee shop and order hamburgers,  
20 french fries for your own meal. Do you go hunting and  
21 put food on the table at your hometown? No, I don't  
22 think so. It's just easy life these days. I go out  
23 caribou hunting even now. I'm waiting for those  
24 caribous coming from southwest. There's choppers,  
25 helicopters chasing at them, chasing at us. Even  
26 nowadays they still do.

27  
28 They don't care about Native Eskimo  
29 people. We are real people, Inupiat. We are the  
30 Indian people. Native. Real live Inupiat people  
31 living on North Slope. And you're going to build a  
32 pipeline further down to Fairbanks and blocking the  
33 caribou migration further up and further up and further  
34 up.

35  
36 Go to grocery store. Groceries one bag  
37 is, what, \$100? Hundred, \$200 for one bag of  
38 groceries.

39  
40 I have more information after. Thank  
41 you.

42  
43 MS. JOHNSON: Thank you for your  
44 comments. Would you like to come up and comment?

45  
46 MR. STINE: Hello. My name is Abraham  
47 Stine. I've been here forever. I read in the  
48 newspaper scientists don't know why the caribou is  
49 declining. I know why it's declining. They put so

50

1 much pipelines, roads. Where they migrate there's  
2 pipelines, roads. They have to go elsewhere. That's  
3 why they're declining.

4  
5 And the pollution coming from the  
6 Prudhoe Bay area, you can see it, yellow, making us  
7 sick. And you want to put more pipelines up so the  
8 caribou can decline some more. I used to watch  
9 Teshekpuk Caribou where the pipelines are now. They're  
10 not there anymore. They're somewhere else. They used  
11 to be double. You want to make some more pipeline,  
12 you're going to kill all the caribou and the Eskimo,  
13 making us sick. Pollution. You can see the pollution  
14 coming from Prudhoe Bay.

15  
16 Thank you.

17  
18 MS. JOHNSON: Thank you.

19  
20 MS. GIBSON: So I guess if there's no  
21 more comments, then feel free to check out project maps  
22 and ask questions of the team. Thank you.

23  
24 MS. JOHNSON: Thank you everyone for  
25 coming.

26  
27 (Off record)

28  
29 (END OF PROCEEDINGS)

## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 24 are a true, accurate, and complete transcript of Nuiqsut Scoping Meeting on July 18, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Trapper Creek, Alaska  
August 4, 2017

## P R O C E E D I N G S

(Trapper Creek, Alaska - 8/4/2017)

(On record)

MS. JOHNSON: Good evening. Thanks for coming to the public meeting tonight on this beautiful Friday evening. This is the public meeting for the Alaska Stand Alone Pipeline project. My name is Kate and I work for the company Environmental Resources Management. We are responsible for writing the draft supplemental environmental impact statement on behalf of the Army Corps of Engineers.

The purpose of our meeting tonight is to tell you a little bit about the draft supplemental EIS, environmental impact statement, which I'll refer to as the SEIS tonight. Then we'll also provide an opportunity for you to comment on the document verbally.

So we're going to start out the night tonight with some introductions. We're going to go over the steps involved in the National Environmental Policy Act process, which I'll refer to as the NEPA process. We're also going to talk about the project description and background.

I do want to point out that this Alaska Stand Alone Pipeline project is the State's instate natural gas pipeline option. It's different than the AK LNG pipeline project, which would be providing natural gas to international markets. So we're talking about the ASAP pipeline tonight.

We're also going to talk about the draft supplemental environmental impact statement contents and I'll refer to that document as the SEIS. And then we'll also talk about some of the different ways that you're able to provide comment in addition to here in the meeting tonight if you'd like.

I do ask that if you have questions if you could hold those until after the presentation and public comment period are completed unless you want your comment on the record. We'll all hang out for as long as you'd like and we can use some of the project materials that we've brought to answer your questions

1 at that time.

2

3 With that I'd like to introduce Sandy  
4 Gibson with the Army Corps of Engineers and she's going  
5 to tell you a little bit about their role in the  
6 project.

7

8 MS. GIBSON: Thanks, Kate. Good  
9 evening. The U.S. Army Corps of Engineers is the lead  
10 Federal agency for development of the Alaska Stand  
11 Alone Pipeline project supplemental EIS. The  
12 responsibility of the Federal lead agency is to ensure  
13 compliance with applicable environmental review  
14 processes.

15

16 The Corps of Engineers is responsible  
17 for managing the EIS process and the final content of  
18 the EIS document, identifying and selecting the  
19 cooperating agencies, which are these individuals that  
20 you see below, and involving the public in the  
21 environmental review process. These tasks are  
22 accomplished at the direction of the Corps of Engineers  
23 and prepared using an independent third-party  
24 contractor. The third-party contractor that the Corps  
25 has selected for this undertaking is Environmental  
26 Resources Management.

27

28 Thanks again for coming. At this time  
29 ERM is going to provide a brief overview of where we  
30 are in the current EIS development process. Upon  
31 conclusion we welcome all of your comments.

32

33 Thank you.

34

35 MS. JOHNSON: Thanks, Sandy. So this  
36 slide here shows a summary of the steps involved in  
37 this NEPA process. Right now we're in this blue step.  
38 We are currently conducting public meetings. This is  
39 our last public meeting today. It's also the 45-day  
40 public comment review that began on June 30th and it  
41 will continue until August 14th.

42

43 I want to point out that the steps that  
44 are highlighted in orange are the opportunities that  
45 the public has to comment on the document. So right  
46 now as well as during the scoping period, which was  
47 conducted in 2014, we heard comments from the public at  
48 that time, those comments have been summarized in a  
49 comment analysis report. If you're interested in that,

50

1 you can find that online at [asapeis.com](http://asapeis.com).  
2 Additionally, once the final SEIS is issued there will  
3 be another opportunity for the public to comment.

4  
5 As many of you know, there was an EIS  
6 written for this project in 2012. Since that time  
7 there have been some project changes and refinements.  
8 As a result of those changes, the environmental impacts  
9 have changed slightly and that's what requires a  
10 supplemental EIS to be written.

11  
12 This slide here gives the five main  
13 changes between the 2012 project and the current  
14 project. The first one is that the pipeline is now  
15 designed to transport utility grade natural gas. As a  
16 result, fewer support facilities will be required.  
17 Rather than multiple compressor stations only a single  
18 compressor station is going to be required at Prudhoe  
19 Bay.

20  
21 Additionally, both the mainline and the  
22 Fairbanks Lateral routes have been rerouted in some  
23 locations. For the most part those have been made to  
24 avoid and minimize environmental impacts. If you are  
25 interested in where those changes have occurred, there  
26 are maps online at [asapeis.com](http://asapeis.com) as well as in an  
27 appendix to the SEIS. We've brought a copy of that.  
28 That's one copy on the table for you to reference  
29 tonight if you're interested.

30  
31 And then finally plans for the gas  
32 conditioning facility have been refined, so in order to  
33 construct that modules would be imported to Dock Head 3  
34 at West Dock. In order to accommodate those, that Dock  
35 Head 3 would require some modifications. Additionally  
36 some dredging would be required for those barges to  
37 access Dock Head 3 and then those dredged sediments  
38 would need a location to be disposed. I'll show you  
39 that in the next few slides, the proposed location..

40  
41 So there's four main chapters that I  
42 want to point out tonight in the EIS. The first one is  
43 the project purpose and need. We'll talk a little bit  
44 about each of these. The second is the proposed action  
45 and alternatives to the proposed action. So the NEPA  
46 process requires that we analyze the environmental  
47 impacts of some alternatives to the proposed action.  
48 So I'm going to talk about what those are tonight as  
49 well.

50

1 We'll talk about the affected  
2 environment, so what are the existing environmental  
3 conditions within the project area and around the  
4 project area. Also the environmental consequences, so  
5 what are the potential environmental impacts from the  
6 project.

7  
8 This slide shows the Alaska Gasline  
9 Development Corporation's proposed purpose and need for  
10 the project. The Alaska Gasline Development  
11 Corporation is also referred to as the applicant or the  
12 project proponent in the EIS. Their proposed purpose  
13 and need is to make North Slope natural gas available  
14 to residents in Fairbanks, the Southcentral region and  
15 other communities in the state as directed by the  
16 Alaska State Legislature. It's also to provide access  
17 to a stable, affordable and long-term supply of natural  
18 gas for heating and powering homes and businesses.

19  
20 Here we have a figure that shows  
21 generally where the pipeline route would be. As you  
22 can see, it would begin at Milepost 0 at Prudhoe Bay,  
23 then it would follow generally the Trans-Alaska  
24 Pipeline System down to just south of Livengood. TAPS  
25 would continue east and then the ASAP pipeline would  
26 continue south. It would stay on the west side of  
27 Fairbanks and Nenana and then it would remain on the  
28 east side of Denali National Park. It would continue  
29 down the Parks Highway and connect into ENSTAR's  
30 existing distribution system just southwest of Big  
31 Lake.

32  
33 If you're interested in locally where  
34 the pipeline route is going to be, there's some maps on  
35 the wall here that you can take a look at after the  
36 presentation.

37  
38 This slide shows the proposed route for  
39 the Fairbanks Lateral. It would connect to the  
40 mainline pipeline at Milepost 440. It would run along  
41 Murphy Dome and Old Murphy Dome Roads before extending  
42 southeast into Fairbanks.

43  
44 This figure shows an example of what  
45 the pipeline construction right-of-way might look like.  
46 As you can see, the pipeline would be a buried pipeline  
47 with the exception of at fault crossings as well as at  
48 some stream and river crossings. The construction  
49 right-of-way would be used to store trench spoils as

50

1 well as for the construction equipment to access the  
2 trench to install the pipeline.

3  
4 During construction that right-of-way  
5 would be between 120 and 350 feet wide. In addition,  
6 there would be temporary work spaces used to store  
7 equipment and materials within an 800-foot corridor.  
8 During pipeline operations that right-of-way would be  
9 reduced slightly. It would be reduced to 53 feet at a  
10 minimum rather than 120 and then it would still in some  
11 locations extend out to 350 feet.

12  
13 In addition to the below ground  
14 pipeline, there would be a number of above ground  
15 facilities associated. Those would include both mobile  
16 camps and permanent camps as well as pipeline storage  
17 yards and gravel material sites. These photos here  
18 just show an example of what a mobile camp might look  
19 like or what a permanent camp might look like.

20  
21 As I mentioned earlier, there would be  
22 a gas conditioning facility up on the North Slope. It  
23 would be located near where the existing central gas  
24 facility is. It would be about a mile west of that.

25  
26 As I mentioned earlier, in order to  
27 construct that 23 barges would be required to transport  
28 those modules to West Dock. Additionally, in order for  
29 those barges to access the dock head, there would be  
30 dredging required and the dredging channel would be  
31 approximately 500 feet wide by approximately a mile  
32 long.

33  
34 So the project I've been describing is  
35 the proposed action, which we also refer to as  
36 Alternative 1. The other alternatives that are  
37 considered in this SEIS are Alternative 3, which is the  
38 no action alternative, so what are the impacts of not  
39 completing the project, and then Alternative 2 includes  
40 these five main differences from Alternative 1.

41  
42 The first thing that's considered is  
43 the impacts of routing the pipeline through seven miles  
44 of Denali National Park. On this figure you can see  
45 where that location would be. So this pink line is the  
46 proposed action that would go on the east side of the  
47 Park. This green hatching is Denali National Park and  
48 this blue line is the Alternative 2 route. It would  
49 cross the Nenana River on a pedestrian footbridge, it

50

1 would then travel seven miles through the Park, it  
2 would cross the Nenana River again and then meet up  
3 with the proposed action route.

4  
5 Under Alternative 2 we also consider  
6 the impacts of offloading those modules at Dock Head 2  
7 rather than Dock Head 3. We consider a different  
8 location for the disposal of materials from the  
9 dredging, so those disposed sediments. So under the  
10 proposed action they would be disposed of in Prudhoe  
11 Bay in a nearshore location. Under Alternative 2 we  
12 consider the impacts of disposing of those further out  
13 in the Beaufort Sea.

14  
15 The fourth difference between  
16 Alternatives 1 and 2 is that under Alternative 2 we  
17 consider a portion of the pipeline being constructed  
18 above ground and that portion would be from Milepost 0,  
19 way up in Prudhoe Bay, down to Milepost 62 and that's  
20 the area that's within the Beaufort Coastal Plain.

21  
22 So the pipeline would be 733 miles  
23 long. So just to give you a frame of reference, that  
24 62-mile section is a little bit less than a tenth of  
25 the pipeline length. Finally under Alternative 2 we  
26 consider the impacts of crossing the Yukon river using  
27 an aerial suspension bridge crossing rather than using  
28 a horizontal directional drill crossing and crossing  
29 under the river.

30  
31 Chapter 3, as I mentioned earlier,  
32 describes the existing environment in and around the  
33 project area. It describes that in terms of these 21  
34 resources. We don't have time to go through all of  
35 those during the presentation today, but if you are  
36 interested in any of these specifically, you could take  
37 a look in the EIS that we brought tonight. We can help  
38 you find what you're looking for. The entire EIS is  
39 also available at [asapeis.com](http://asapeis.com). We've also brought some  
40 CDs in the back there. They're got the entire EIS on  
41 them as well if you'd like to take one of those.

42  
43 We are going to spend a little time  
44 tonight talking about Chapter 4 and we're going to talk  
45 about just a few of those resources that I showed on  
46 the last screen. The reason that we've selected these  
47 resources is because these are resources that either  
48 stakeholders have expressed interest in or they are  
49 expected to incur greater impacts than other resources.

50

1 So that's how we've selected these.

2

3 If you're interested in what the  
4 potential impacts could be to the other resources that  
5 I showed on the last slide, we've brought some figures  
6 on the back table. They're laminated 11x17 and there's  
7 one for each resource. So you can see where the major,  
8 moderate and minor impacts could be expected to occur  
9 and they're color-coded on there so you can zero in on  
10 what you're looking for.

11

12 The executive summary provides a good  
13 bulleted list of potential impacts for each resource.  
14 Of course, the EIS describes in detail the analysis,  
15 how we came up with those ratings.

16

17 The impacts described in the SEIS do  
18 include mitigation measures that the Alaska Gasline  
19 Development Corporation has proposed to minimize  
20 impacts. Finally, Chapter 4 includes a section that  
21 talks about potential cumulative effects. So if there  
22 are other potential projects occurring in the area,  
23 what could those impacts when combined with the  
24 impacts of this project look like. So that's  
25 considered in that section as well.

26

27 So the last few slides here we're just  
28 going to go through each of those resources that I  
29 showed on the last slide and talk about the greatest  
30 potential impacts. On this slide I have combined three  
31 of those resources; soils and geology, water and  
32 wetlands. The reason that I've done that is because  
33 the greatest potential impacts to these resources could  
34 all be related to the potential for permafrost thaw.

35

36 Permafrost thaw could occur for two  
37 reasons. One is where vegetation is being removed from  
38 the project right-of-way and then the other is actually  
39 during pipeline operation as a result of the pipeline  
40 temperature. The pipeline would not be heated. It  
41 would be constructed to be at ambient temperature and  
42 I'll talk a little bit more about that in just a  
43 second.

44

45 So as a result of permafrost thaw in  
46 locations where the soils are unstable, there could be  
47 locations where there's soil subsidence and as a result  
48 of that there could be changes to surface water  
49 groundwater flow as well as wetland hydrology. So it  
50

1 considered those potential indirect effects.

2  
3 So I want to talk a little bit about  
4 where this could occur. This could occur in areas of  
5 continuous or discontinuous permafrost. So the blue  
6 areas on this map show generally where continuous  
7 permafrost exists and then the green areas show  
8 generally where discontinuous permafrost exists. So  
9 within those areas these impacts would be most likely  
10 in areas, like I mentioned, where the soils are less  
11 stable.

12  
13 Additionally, in locations where the  
14 pipeline is traveling from locations of warmer soil  
15 temperatures into cooler soil temperatures, I mentioned  
16 that the pipeline would be designed to acclimate to the  
17 surrounding soil temperature. If it's moving from a  
18 warmer to a cooler soil, it could take a little bit of  
19 time to acclimate, so that could be a location where  
20 this impact could occur. AGDC has also proposed to  
21 consider revegetation and to consider replacing some of  
22 those thaw unstable soils to help minimize this impact.

23  
24 For socioeconomic there could be both  
25 positive and negative impacts. Some of the positive  
26 impacts could be employment opportunities during both  
27 construction and operations. Increased natural gas  
28 supply, as well as increased local and state tax  
29 revenues. A negative impact that could occur is the  
30 upfront local and state expenditures that could be  
31 associated with improvements to infrastructure as well  
32 as an increased demand on government services.

33  
34 For cultural resources within the area  
35 of direct effects we have identified in the EIS 26  
36 sites of the 72 cultural resource sites that could be  
37 subject these impacts. That number of sites is based  
38 on the currently available survey data. Those could  
39 include physical destruction or damage as well as  
40 changes in character, setting or access to those  
41 cultural resources.

42  
43 I do want to point out that the  
44 mitigation measures for cultural resources haven't yet  
45 been finalized. They will be finalized in the  
46 programmatic agreement. If additional mitigation  
47 measures are defined in that programmatic agreement,  
48 these impacts could be reduced to moderate. If as a  
49 result some of these sites are avoided, then the

50

1 impacts could be reduced to minor or negligible.

2

3 For subsistence resources there would  
4 be potential for displacement of subsistence resources  
5 as well as changes to access to those resources. The  
6 analysis in the EIS is done based on several factors,  
7 including the frequency, duration and geographic extent  
8 and likelihood of the impacts. So those are all  
9 considered and a rating was assigned to each community  
10 along the pipeline.

11

12 In that way we've identified some  
13 communities that are expected to see more major  
14 impacts. Those communities are Wiseman and Coldfoot as  
15 wells as Nenana and Minto. So if you're interested in  
16 that, Trapper Creek is included in that list and we can  
17 show you where that is in the EIS.

18

19 Finally, potential impacts due to noise  
20 would most notably occur in locations where horizontal  
21 directional drilling is occurring. More specifically  
22 where that directional drilling is occurring within a  
23 tenth of a mile of a receptor. So that HDD would occur  
24 24 hours a day, however the noise would occur  
25 intermittently for about a third of that time. In  
26 order to construct each HDD, it would take  
27 approximately 10 to 25 weeks.

28

29 So the two locations where that does  
30 occur in a nearby receptor are, one, at the Kashwitna  
31 River crossing just north of Willow. There are some  
32 residences that are located near that horizontal  
33 directional drill. Then also by McKinley Park there's  
34 a horizontal directional drilling and it would be near  
35 some lodges and cabins located in that area. AGDC has  
36 proposed to minimize activities in tourist areas  
37 during high-tourist seasons to help minimize that  
38 impact.

39

40 If you do have some comments that you'd  
41 like to submit, we would love to hear from you. You  
42 can either sign up tonight and provide a verbal  
43 comment. If you do provide a comment, please make sure  
44 that you just sign in on our sign-in sheet at the back  
45 table. You could also fill out a written comment form,  
46 which is also at the back table there and you can  
47 either leave that with us tonight or you can mail that  
48 to the Army Corps of Engineers. You can send a letter  
49 to Sandy as well. Just make sure that those are

50

1 postmarked by August 14th. Then finally you can email  
2 your comments to asapeiscomments@erm.com. There's a  
3 link to that on our project website as well at  
4 asapeis.com and I'll put up the website address after  
5 the presentation here.

6  
7 During our public comment period we'll  
8 start out by providing five minutes for each person.  
9 We just want to make sure that everyone has an  
10 opportunity to comment that wants to. If anyone has  
11 more comments at the end, you're welcome to make more  
12 comments.

13  
14 We do have a court reporter here with  
15 us tonight, which is why we're using a microphone. So  
16 if you would like to make a comment, just let me know  
17 and I'll bring the microphone over to you. Please make  
18 sure that you state your first and last name before  
19 your comment.

20  
21 Then finally we won't be making any  
22 decisions or responding to comments during the public  
23 comment period. Your comments will go on the record  
24 and then they will be included in a comment analysis  
25 report as well as considered when we're writing the  
26 final EIS. As I mentioned before, if you'd like to  
27 have a question on the record, you're welcome to do  
28 that and then we'll stick around after the meeting and  
29 we can help you find the answer using our materials  
30 here tonight.

31  
32 So, with that, Earl with the BLM is  
33 going to open the subsistence hearing and then we'll  
34 get started.

35  
36 MR. WILLIAMS: Thank you, Kate. I'd  
37 like to thank the community for this wonderful  
38 facility. It really makes it nice for us to be able to  
39 come here and present the information we've got on the  
40 project and hear your comments and concerns. If you  
41 would please bear with me, I will read this statement  
42 into the record.

43  
44 My name is Earl Williams. I'm a  
45 project manager with the Bureau of Land Management. I  
46 am reading this statement into the record to let you  
47 know that this public meeting is also a subsistence  
48 hearing. Section 810 of the Alaska National Interest  
49 Lands Conservation Act, or ANILCA, requires the BLM to  
50

1 evaluate the effects of its actions on subsistence uses  
2 and to hold public hearings if it finds that  
3 subsistence use may be significantly restricted.

4  
5 The Alaska Stand Alone Pipeline project  
6 is seeking a right-of-way from the BLM to allow for the  
7 construction and operation of a buried pipeline across  
8 public lands. In reviewing this application, the BLM  
9 must consider the potential effects to the environment  
10 and the potential impacts to subsistence resources and  
11 uses on public lands. The ANILCA 810 evaluation done  
12 for this project assessed the potential effects of the  
13 proposed alternatives and the cumulative case on  
14 subsistence use, and it is included as an appendix in  
15 the Draft SEIS.

16  
17 In the evaluation, the BLM finds that  
18 the proposed project and its alternatives may result in  
19 a significant impact to subsistence uses. These  
20 potential impacts may include reductions in the  
21 availability or abundance of caribou, moose, and other  
22 wildlife. Additionally, there could be reductions in  
23 the availability of berries and other plants in some  
24 traditional harvest areas.

25  
26 This hearing is being held to provide  
27 you an opportunity to make comments on the preliminary  
28 subsistence analysis for the Alaska Stand Alone  
29 Pipeline. All comments are welcome, but we especially  
30 would like to hear your thoughts regarding mitigation  
31 measures that could be applied to minimize impacts to  
32 your subsistence use.

33  
34 The comments you provide will be  
35 considered in the preparation of the Final SEIS and the  
36 BLM's Record of Decision. You may provide your  
37 comments here tonight or submit them in writing.  
38 Please submit any written comments to the Corps of  
39 Engineers by the close of the comment period.

40  
41 Thank you.

42  
43 MS. JOHNSON: Thank you, Earl. So with  
44 that we will open the public comment period. We would  
45 love to hear any thoughts, comments on the project as  
46 well as on the environmental impacts tonight. Is there  
47 anyone that would like to provide a comment.

48  
49 (No comments)

50

1 MS. JOHNSON: Any questions that you  
2 want on the record to be addressed in the final EIS.  
3 Anything.

4  
5 (No comments)

6  
7 MS. JOHNSON: Okay. So I guess no  
8 comments tonight. I guess we'll go ahead and close the  
9 public comment period. Thank you so much for joining us  
10 tonight.

11  
12 We'll stick around and talk with you  
13 for a little bit.

14  
15 Thanks a lot.

16  
17 (Off record)

18  
19 (END OF PROCEEDINGS)

## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 14 are a true, accurate, and complete transcript of Trapper Creek Scoping Meeting on August 4, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Willow, Alaska  
August 18, 2017

## P R O C E E D I N G S

(Willow, Alaska - 8/18/2017)

(On record)

MS. JOHNSON: Good evening, everyone.

I think we're going to get started with our meeting here. We really appreciate you all joining us tonight on this Friday night. Welcome to the public meeting for the Alaska Stand Alone Pipeline project. My name is Kate and I work for the company Environmental Resources Management. We are responsible for writing the supplemental environmental impact statement for the Alaska Stand Alone Pipeline project on behalf of the Army Corps of Engineers.

The purpose of our meeting tonight is to tell you a little bit about that document, which I'll refer to as the SEIS tonight for short and then also the purpose of this meeting is also to provide an opportunity for you to comment publicly on the record about the EIS or the project. We'll do that after the presentation.

So we're going to start out tonight with some introductions. We're going to talk about the steps that are involved in the National Environmental Policy Act, also known as the NEPA process, which is the process that requires that this SEIS be written. We're also going to talk about the project description and project background.

I do want to point out that this project is the Alaska Stand Alone Pipeline project. So it's a different project than the AK LNG pipeline project, which many of you may have heard about. The difference is that this project intends to bring natural gas to the State of Alaska while the AK LNG project intends to bring natural gas to international markets.

We're going to talk about the contents of the draft SEIS tonight. And then we're also going to talk about the different ways that you can provide comments on the document. I'm sure many of you have some questions tonight. It would be helpful if you could hold your questions until after the presentation and public comment period are completed. Of course, if

1 you've got a question that you want on the record, feel  
2 free to ask that at that time.

3  
4 With that I'd like to introduce Sandy  
5 Gibson with the Army Corps of Engineers and she's going  
6 to tell you a little bit about their role in the  
7 project.

8  
9 MS. GIBSON: Thanks, Kate. Good  
10 evening. The U.S. Army Corps of Engineers is the lead  
11 Federal agency for development of the Alaska Stand  
12 Alone Pipeline project supplemental EIS. The  
13 responsibility of the lead agency is to ensure  
14 compliance with applicable environmental review  
15 processes.

16  
17 The Corps of Engineers is responsible  
18 for managing the EIS process and the final content of  
19 the EIS, identifying and selecting cooperating  
20 agencies, which are those individuals that you see  
21 listed below here, and involving the public in the  
22 environmental review process. These tasks are  
23 accomplished at the direction of the Corps of Engineers  
24 by use of undertaking of a third-party contractor. The  
25 third-party contractor selected is Environmental  
26 Resources Management.

27  
28 Thanks again for everyone coming. At  
29 this time ERM will provide a brief overview of where we  
30 are in the current EIS development process. Afterwards  
31 we'd welcome all comments from you.

32  
33 Thanks again.

34  
35 MS. JOHNSON: Thank you, Sandy. So in  
36 this slide we show the steps in the NEPA process. I  
37 want to highlight a few of them tonight. The first one  
38 I want to highlight is the opportunities that the  
39 public has to comment on the project and on this  
40 document. The first one is the public meeting which  
41 we're conducting. This is the last public meeting that  
42 we'll be conducting. The public comment period began  
43 on June 30th and it will extend through August 29th.

44  
45 There was an opportunity to comment in  
46 2014 during the scoping period and if you're interested  
47 in what those comments were and how they were addressed  
48 in the draft, there's a comment analysis report  
49 provided online at [asapeis.com](http://asapeis.com). There's also a table  
50

1 in the draft SEIS that describes where those comments  
2 have been addressed.

3  
4 Finally, in winter of 2017 when the  
5 final EIS is published, there will be another  
6 opportunity to comment on that document at that time.

7  
8 So many of you may be aware that in  
9 2012 an SEIS was written for this same project and  
10 since then there have been many project changes and  
11 refinements. So that is what results in this  
12 supplemental EIS being required by the NEPA process.  
13 So when there are changes that result in a different  
14 impact to the environment, they have to be analyzed in  
15 a supplemental EIS.

16  
17 This slide shows the five main changes  
18 between 2012 and now. The first change is that the  
19 pipeline is now proposed to carry utility grade natural  
20 gas. As a result, fewer support facilities will be  
21 required along the pipeline. Only one compressor  
22 station will be required at Prudhoe Bay.

23  
24 Additionally, both the mainline  
25 pipeline and the Fairbanks Lateral pipeline have been  
26 rerouted in some locations. For the most part those  
27 changes have been rerouted in order to avoid  
28 environmental impacts. You can see where those changes  
29 have been made. There are maps online at [asapeis.com](http://asapeis.com)  
30 and then also in the draft SEIS.

31  
32 And then finally plans for the gas  
33 conditioning facility up at Prudhoe Bay have been  
34 refined. The modules would be required to be imported  
35 to construct the gas conditioning facility and as a  
36 result some modifications would be required at Dock  
37 Head 3 at West Dock as well as some dredging. We'll  
38 talk about that in the next few slides.

39  
40 So what's included in an SEIS. Chapter  
41 1 describes the project purpose and need. We're going  
42 to go over each of these in a little more detail in the  
43 next few slides. Chapter 2 describes the proposed  
44 action and the alternatives. The NEPA process requires  
45 that the EIS analyze the environmental impacts of some  
46 alternatives to the proposed action. We're going to  
47 talk about the affected environment, so what are the  
48 existing conditions within and around the project area.  
49 Then we'll also talk about the environmental

50

1 consequences or the potential environmental impacts.

2

3 The Alaska Gasline Development  
4 Corporation, also known as the project proponent or the  
5 project applicant, their proposed purpose and need for  
6 the project is to make North Slope natural gas  
7 available to residents in Fairbanks, the Southcentral  
8 region and other communities in the state as directed  
9 by the Alaska State Legislature. It's also to provide  
10 access to a stable, affordable and long-term supply of  
11 natural gas for heating and powering homes and  
12 businesses.

13

14 Here we have a general overview of the  
15 proposed pipeline route. As you can see, it would  
16 begin up at Prudhoe Bay at Milepost 0. It would then  
17 continue generally along the Trans-Alaska Pipeline  
18 System until Livengood where it would continue south  
19 and TAPS would continue west. It would stay on the  
20 west side of Denali National Park and then it would  
21 follow the Parks Highway down to Willow before  
22 connecting to ENSTAR's existing distribution system  
23 southwest of Big Lake.

24

25 There are some close-up maps provided  
26 on the wall and the table over there if you're  
27 interested in a close-up of the location in this area  
28 specifically.

29

30 The project also includes a proposed  
31 Fairbanks Lateral that would tie into the mainline at  
32 Milepost 440. It would generally follow Murphy Dome  
33 and Old Murphy Dome Roads and then it would extend  
34 southeast into Fairbanks.

35

36 This slide shows an example of what the  
37 project construction right-of-way might look like. So  
38 it would be a buried pipeline except for at fault  
39 crossings and at some elevated stream crossings. This  
40 figure illustrates that part of the construction  
41 right-of-way would be used for the trench spoil and  
42 part of the construction right-of-way would be used  
43 for equipment to access that trench and install the  
44 pipeline.

45

46 This right-of-way during construction  
47 would be between 120 and 350 feet wide. In addition to  
48 that there would be some temporary work spaces for  
49 storing equipment and materials within an 800-foot

50

1 corridor of the pipeline. Then during operations that  
2 pipeline right-of-way would be reduced to a minimum of  
3 53 feet in some areas and then in some areas it would  
4 remain out to 350 feet wide.

5  
6 In addition to the below ground  
7 pipeline there would be some above ground facilities.  
8 Those would include mobile camps, stationary camps.  
9 These are just photos of what a mobile camp and a  
10 stationary camp might look like. The project would  
11 include pipe storage yards as well as gravel material  
12 sites.

13  
14 As I mentioned earlier, a gas  
15 conditioning facility would be constructed up on the  
16 North Slope near Prudhoe Bay. This photo here  
17 illustrates where the existing central gas facility is  
18 and where the location for the proposed gas  
19 conditioning facility would be. It's about a mile west  
20 of that central gas facility.

21  
22 In order to construct that facility,  
23 modifications would be required at West Dock in order  
24 to accommodate 23 barges, which would be bringing in  
25 the modules to construct this gas conditioning  
26 facility. Dredging would be required for those barges  
27 to access the dock. It would occur within about a 500  
28 foot wide channel about a mile long.

29  
30 The project description that I just  
31 gave is for the proposed action or Alternative 1. Now  
32 I want to talk a little bit about the alternatives that  
33 are also evaluated in the SEIS. Alternative 3 is the no  
34 action alternative, so what would the impacts be if the  
35 pipeline were not constructed.

36  
37 (Someone from the public clapping)

38  
39 Alternative 2 includes these five  
40 differences from Alternative 1. The first difference  
41 that's analyzed is a route that enters the Denali  
42 National Park for about seven miles. I can show you a  
43 map of what that would look like. So the EIS evaluates  
44 the impacts of this possibility compared to Alternative  
45 1. The proposed action is shown in pink east of Denali  
46 National Park and the blue line shows the proposed  
47 Alternative 2 within the Park.

48  
49 The EIS also considers the impacts of  
50

1 modules being offloaded at Dock Head 2 rather than Dock  
2 Head 3. It also considers disposal of those dredged  
3 materials in a different location. So I mentioned the  
4 dredging that could occur at Dock Head 3. Under the  
5 proposed action those would be disposed of in a  
6 nearshore location near Prudhoe Bay. Under Alternative  
7 2 the SEIS considers disposing of those further out in  
8 the Beaufort Sea.

9  
10 Additionally, the SEIS considers the  
11 impacts of an above ground pipeline from Milepost 0 to  
12 62 within the Beaufort Coastal Plain area. Also  
13 constructing an aerial suspension bridge crossing the  
14 Yukon River rather horizontal directional drilling  
15 under the river.

16  
17 Chapter 3, as I mentioned, is the  
18 affected environment or the existing environment. We  
19 won't have time to go over the existing environment,  
20 but the SEIS describes it in terms of the resources  
21 shown on this slide. So if you're interested in any of  
22 these resources specifically, what the existing  
23 conditions are, we've brought a copy of the EIS. So if  
24 you're looking for something after the meeting, we can  
25 help you look up where that is. It's also available  
26 online at [asapeis.com](http://asapeis.com).

27  
28 What we are going to talk in a little  
29 bit more detail is the environmental consequences. So  
30 we're going to focus on some of the resources that  
31 either could be expected to have greater impacts than  
32 the others and also resources that have received more  
33 attention from stakeholders. So the resources that  
34 we're going to talk about today are these seven listed  
35 on the slide. We'll go through each of those one by  
36 one.

37  
38 If you're interested in the  
39 environmental consequences of the other resources that  
40 were on the last slide, we've brought these laminated  
41 figures up here on the table. There's one figure for  
42 each resource and it gives a general geographic  
43 overview of where the minor, moderate and major impacts  
44 might be expected to each of those resources. So  
45 that's a good place to start. Also a good place to  
46 start is the executive summary which gives just a  
47 bulleted list of impacts associated with each  
48 resources. Then, of course, in the SEIS there's a  
49 description of how we came up with those impacts.

50

1                   The impact analysis in Chapter 4 does  
2 take into account the Alaska Gasline Development  
3 Corporation's proposed mitigation measures. Chapter 4  
4 also includes a section about cumulative effects, so  
5 what could the cumulative impacts of another project  
6 and this project be if they both were to occur.  
7

8                   So in this slide I'm going to talk  
9 about three of those resources that were on the last  
10 slide. I'm going to talk about soils and geology,  
11 water and wetlands. The reason that I've combined  
12 these together is because the greatest potential for  
13 impacts to these resources are all related to potential  
14 impacts to permafrost.  
15

16                   There is potential for permafrost thaw  
17 due to vegetation removal during construction as well  
18 as potentially during operation due to the temperature  
19 of the pipeline. It would not be a heated pipeline.  
20 I'll talk a little bit more about that in a minute. So  
21 as a result of those direct effects, if there were to  
22 be some soil subsidence due to that permafrost thaw,  
23 there could be impacts to water resources and wetland  
24 hydrology.  
25

26                   So where would this be most likely to  
27 occur. This figure here shows, this blue area, is  
28 generally areas where continuous permafrost occurs.  
29 This greenish color are areas where discontinuous  
30 permafrost generally occurs. So within those areas you  
31 would look for areas where the soils are less stable.  
32 So a more stable soil wouldn't collapse under  
33 permafrost thaw, but a less stable soil might.  
34

35                   AGDC proposes to construct the pipeline  
36 at ambient temperature so the pipeline would acclimate  
37 to the temperature of the surrounding ground. Some  
38 areas where permafrost thaw could still occur is if  
39 that pipeline was going from warmer soil into colder  
40 soil where it could take a little time to acclimate.  
41 AGDC is also going to consider revegetation and will  
42 also consider replacing some of those thaw unstable  
43 soils that I described.  
44

45                   For socioeconomics there could be both  
46 positive and negative impacts. Here I've highlighted  
47 some of the greater impacts. The greater positive  
48 impacts would be employment opportunities, increased  
49 natural gas supply, as well as local and state tax  
50

1 revenues. A negative socioeconomic impact would be the  
2 upfront local and state expenditures associated with  
3 infrastructure improvements as well as increased demand  
4 on government services.

5  
6 For cultural resources the SEIS  
7 identifies 26 cultural resource locations where these  
8 impacts could occur, the impacts of physical  
9 destruction or damage or changes in character, setting  
10 or access. These are 26 of the 72 known sites within  
11 the area of direct effects and that information is  
12 based on what is currently available in the survey  
13 results.

14  
15 So mitigation measures for cultural  
16 resources will be finalized in the programmatic  
17 agreement. They have not yet been finalized. If  
18 additional mitigation measures are identified during  
19 that process, these impacts could be reduced to  
20 moderate. If some of these sites are avoided as a  
21 result of the programmatic agreement, then these  
22 impacts could be reduced to minor or negligible.

23  
24 There could be potential for impacts to  
25 subsistence resources such as displacement of  
26 subsistence resources or changes to access to  
27 subsistence resources. The SEIS uses a process that  
28 provides a numeric rating for each of the communities  
29 shown on this map. It considers the geographic  
30 location, the likelihood of the impact, the magnitude  
31 of the impact, among other things.

32  
33 As a result of that process that I  
34 described, a few communities were identified as having  
35 major impacts. Those are communities adjacent to the  
36 included communities adjacent to the project or  
37 communities that have increased use area of undisturbed  
38 habitat crossing the project. Those communities are  
39 Wiseman, Coldfoot, Minto and Nenana.

40  
41 Finally, impacts could occur resulting  
42 from the construction noise. Locations where noise  
43 could be most significant are locations where  
44 horizontal directional drilling would occur within a  
45 tenth of a mile of a receptor. Horizontal directional  
46 drilling would occur over 24 hours a day intermittently  
47 and for about a third of those 24 hours at each HDD  
48 location. That would occur over a period of 10 to 25  
49 weeks.

50

1                   So there are two locations shown on  
2 here where this could be a greater impact. One is at  
3 the Kashwitna River HDD just north of Willow. There  
4 are some residences located within a tenth of a mile of  
5 that location. The other location is up by McKinley  
6 Park. There are some cabins and lodges near an HDD in  
7 that area.

8  
9                   So how can you provide comments on the  
10 SEIS. You can sign up to provide verbal comments  
11 tonight. I think most of you have a copy of the  
12 comment form. There are also a few sheets of looseleaf  
13 paper over there on the table if you didn't get one or  
14 if you'd like a little more room to write. You can  
15 leave them with us tonight or you can mail them to  
16 Sandy at the Army Corps of Engineers. Those should be  
17 postmarked by August 29th. Not August 14th. That date  
18 has been extended. You can also email your comments to  
19 asapeiscomments@erm.com. There's a link to that email  
20 on asapeis.com. Everything you need is there. You can  
21 also comment tonight during our public comment period.

22  
23                   So we're going to start by providing  
24 each commentor with five minutes. We just want to make  
25 sure that everyone gets an opportunity to comment. If  
26 you do want to comment for longer than five minutes,  
27 you're welcome to come back up again after everyone has  
28 had an opportunity to comment the first time.

29  
30                   We've got a court reporter here  
31 tonight, so if you do want to comment, please come up  
32 to the microphone here and state your first and last  
33 name so that you can be put on the public record.

34  
35                   I do want to point out that we won't be  
36 making any decisions about the project during this  
37 public comment period and we won't be providing  
38 responses to questions during this public comment  
39 period. If you've got a question, please feel free to  
40 state it. It will be put on the comment record and  
41 addressed following the NEPA process in the EIS.

42  
43                   If you are looking for answers tonight,  
44 please feel free to stick around after the comment  
45 period. We've got lots of project information with us  
46 tonight. We will be happy to help you find the answer  
47 to your question or answer it if we can. This is the  
48 project website if anyone wants to write that down.

49  
50

1                               With that we will begin the public  
2 comment period. We would love to hear from you  
3 tonight.

4  
5                               MR. GRENIER: Brian Grenier, G-R-E-N-I-  
6 E-R B-R-I-A-N. About the economic scope of this  
7 project, has anyone spoken with the governor about the  
8 economic potential of this project? There's not a  
9 positive return on investment possible. It's been  
10 calculated by major gas producers that \$4.20 per  
11 million BTUs is required to be profitable and the  
12 current spot price is \$2.85. \$4.20 to be profitable.  
13 \$2.85 current price. That's my comment.

14  
15                               Thank you.

16  
17                               MS. JOHNSON: Thank you very much.  
18 Would anyone else like to comment tonight.

19  
20                               MR. SMOLDON: My name is Todd Smoldon,  
21 T-O-D-D S-M-O-L-D-O-N. I talked to Kalb at the Trapper  
22 Creek meeting a couple weeks ago and we discussed the  
23 pipe storage yard that is off of Willow Creek Parkway,  
24 about a mile down Willow Creek Parkway, and it's a pipe  
25 storage yard that is just north of Willow Creek Parkway  
26 and it does intersect a trail that is used to access  
27 Lucky Shot Trail, a multi-use trail.

28  
29                               I sent Kalb a screen shot of that and  
30 he told me that -- he asked me to speak to an engineer,  
31 if there was an engineer here, to remind them of that.  
32 I don't know if that person is here, so I just wanted  
33 to get it on the record in public comment. So he  
34 suggested there's a number of ways that that could be  
35 mitigated and we would like that to happen because it  
36 does interfere with a multi-use trail if this project  
37 goes forward, which I doubt.

38  
39                               Thank you.

40  
41                               MS. JOHNSON: Thank you. Scott with  
42 AGDC is here tonight, so he can come chat with you  
43 after. He's in the back there. Does anyone else have a  
44 comment they'd like to share.

45  
46                               MR. CHARLES: I'm Steve Charles and I'm  
47 a resident of Willow. I'd just briefly mention that I  
48 think our Willow area community organization about four  
49 years ago sent a resolution I think addressing the

50

1 first EIS, the original. And I'd like to make sure  
2 you're aware of that and go back and take a look at it.  
3 As a member of the Willow Trail Committee, it affected  
4 our trails and trails are a very important part of  
5 recreation in Willow.  
6

7 As Todd, the last commentor mentioned,  
8 we addressed the man camp that was located on the Lucky  
9 Shot connector trail and we commented about that and  
10 asked that it be located somewhere else since there's a  
11 lot of land here to locate something like that.  
12

13 I believe about two years ago I think  
14 some representatives came up to the Willow Chamber of  
15 Commerce meeting. That might have been another form of  
16 EIS. I'm not sure, acquainted with that exactly, but I  
17 think there was another addition to it or supplement.  
18 That second supplement that I mentioned still had a man  
19 camp right there, like they just ignored our first  
20 resolution and our first comment, when we have all this  
21 other land around. I mentioned that the same thing.  
22

23 Now I see we've gone from a man camp to  
24 a pipe storage area right on the trail and it's a major  
25 trail that's used. The Junior Iditarod uses it almost  
26 every year. A lot of our local races use it. I think  
27 it's right in Willow Creek State Recreation area. I  
28 think there's just a lot of available areas.  
29

30 And just a quick comment about I think  
31 this pipeline, when I looked at the route, is sort of  
32 similar west of Willow to the Point MacKenzie Railroad  
33 corridor at the time and there's arguments there where  
34 the same thing with the pipeline, the effect it would  
35 have on recreation trails and the semi quasi-wilderness  
36 that people come out to Willow to enjoy.  
37

38 I hope those trails are addressed. You  
39 know, a pipeline is a big project and I can't see where  
40 recreational trails are going to have a major impact,  
41 but what I'm asking, I guess, is that you consider that  
42 and if there's good alternative mitigation factors  
43 rerouting, to consider that for our trails. And our  
44 residential areas because we're growing out there too.  
45

46 MS. JOHNSON: Thank you. We really  
47 appreciate the specific comments.  
48

49 MS. SMOLDON: My name is Carrie  
50

1 Smoldon, C-A-R-R-I-E S-M-O-L-D-O-N. First I would love  
2 for you all to take note of how many people are here  
3 tonight. I don't know how many people showed up in  
4 Anchorage. I know how many people showed up at Trapper  
5 Creek. This matters to the residents of Willow. It  
6 will impact our way of life. It will impact our  
7 activities, it will impact private residents as well as  
8 the community as a whole.

9  
10 It's frustrating because we went  
11 through a process, had a gasline committee with our  
12 community organization several years ago that I was the  
13 chairperson for and we commented specifically on many  
14 things, especially trails. So to see it go from a man  
15 camp to a storage yard, that's great, we don't have a  
16 man camp across from our new 40-acre park, but to still  
17 have a storage area I feel like our comments were  
18 ignored and that the trails -- the importance of those  
19 trails was completely ignored.

20  
21 I don't know if people have been out  
22 here to walk around and look. I know that I saw the  
23 miles and miles that people went through and surveyed.  
24 Our community organization and the members of our  
25 community are a great resource. Our trails committee  
26 is very active. They're a great resource. I would  
27 appreciate those resources being utilized if this  
28 pipeline actually happens.

29  
30 MS. JOHNSON: Thank you. I'll give you  
31 just a few seconds here to see if anybody else wants to  
32 come up.

33  
34 MR. BOEVE: My name is Talon Boeve,  
35 that's T-A-L-O-N B-O-E-V-E. I'll just start by saying  
36 that tonight I appreciate Sandy and Kate and a few  
37 other people who made this additional meeting possible.  
38 I attended the meeting in Trapper Creek and just  
39 expressed some concern that it wasn't adequate time for  
40 certain residents to comment since there was only a  
41 meeting in Trapper Creek and Anchorage and many  
42 residents between those areas were lost in the process.  
43 So I appreciate them both working to get this  
44 additional meeting and to extend the comment period.

45  
46 I will also say that having gone to the  
47 Trapper Creek meeting and now this meeting, I seem to  
48 remember a couple of things from the Trapper Creek  
49 meeting that weren't discussed in as great a detail at  
50

1 this meeting. A few things about the noise mitigation,  
2 techniques that they might ensue for the horizontal  
3 directional drilling under the creeks and rivers and  
4 some of the subsistence concerns and those mitigation  
5 techniques.  
6

7 So I just want to thank the -- I think  
8 I counted 31 other residents of Willow and the  
9 surrounding area that turned out tonight and I just  
10 want to thank them for showing up.  
11

12 MS. JOHNSON: Thank you. Is there  
13 anyone else that wants to comments.  
14

15 (No comments)  
16

17 MS. JOHNSON: Okay. If there's no one  
18 else, then we'll go ahead and close the public comment  
19 period. As I said earlier, we will stick around and  
20 we will try and help you find answers to your questions  
21 if you have them.  
22

23 Thanks very much for coming tonight.  
24

25 (Off record)  
26

27 (END OF PROCEEDINGS)  
28  
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## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 15 are a true, accurate, and complete transcript of Willow Scoping Meeting on August 18, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

DATE

SALENA A. HILE

ALASKA STAND ALONE PIPELINE, ASAP

PUBLIC SCOPING MEETING

Wiseman, Alaska  
July 26, 2017

## P R O C E E D I N G S

(Wiseman, Alaska - 7/26/2017)

(On record)

MS. JOHNSON: Good evening, everybody. Thanks for coming. This is the public meeting for the Alaska Stand Alone Pipeline project. My name is Kate and I work for the company Environmental Resources Management. We are responsible for preparing the supplemental environmental impact statement on behalf of the Army Corps of Engineers.

The purpose of our meeting tonight is to tell you a little bit about what is included in this document and then also to provide you an opportunity to comment on the document or on the project itself. So we'll hold a hearing after the presentation.

So we're going to start out tonight with some introductions and then I'm going to talk to you a little bit about the steps that are involved in the National Environmental Policy Act process, also known as the NEPA process. We're also going to talk about the project description a bit.

I do want to point out that this is the Alaska Stand Alone Pipeline project, so it would be an instate natural gas pipeline project. It's different than the AK LNG pipeline project, which would primarily bring natural gas to international markets, so that's a different project.

I'm going to tell you a little bit about the contents of the EIS and then I'm going to talk about the different ways that you can provide comment on the document.

With that I'd like to introduce Sandy Gibson with the Army Corps of Engineers and she's going to tell you a little bit about her role in the project.

MS. GIBSON: Hi. Thanks everyone for coming. The U.S. Army Corps of Engineers is the lead Federal agency for development of the Alaska Stand Alone Pipeline project supplemental EIS. The responsibility of the lead agency is to ensure compliance with applicable environmental review

1 processes.

2  
3 The Corps of Engineers is responsible  
4 for managing the EIS process and the final content of  
5 the EIS, identifying and selecting cooperating  
6 agencies, these individuals listed below, and involving  
7 the public in the environmental review process. These  
8 tasks are accomplished at the direction of the Corps  
9 and prepared using an independent third-party  
10 contractor. The third-party contractor selected for  
11 this undertaking is Environmental Resources Management,  
12 Kate.

13  
14 At this time ERM will provide a brief  
15 overview of where we are in the SEIS process.  
16 Afterwards we'd welcome all comments from the you.  
17 Thanks.

18  
19 MS. JOHNSON: Thanks, Sandy. So this  
20 slide shows the steps that are involved in the NEPA  
21 process. I'm going to highlight a few. First of all  
22 we are currently conducting the public meeting on the  
23 draft EIS. We are also currently in the middle of this  
24 45-day public comment review period. That began June  
25 30th and it will continue until August 14th.

26  
27 The steps that are highlighted in  
28 orange here are opportunities for the public to provide  
29 comment. So a scoping period was held in 2014. The  
30 results of the comments at that time have been  
31 published in a document on the website asapeis.com in a  
32 comment analysis report, so you can take a look at that  
33 if you'd like.

34  
35 It's also summarized in the beginning  
36 of this EIS. It talks a little bit about what the  
37 common themes were and how those have been addressed in  
38 the EIS. And then finally, once the final EIS is  
39 published, there will be another opportunity to comment  
40 on the document at that time.

41  
42 So why do we need a supplemental EIS.  
43 As many of you know, an EIS was written for this  
44 project in 2012 and since then there have been some  
45 project changes and refinements. As a result there  
46 have been some changes to the potential environmental  
47 impacts and that's why this supplemental EIS is  
48 required.

1 On this slide we've got the five main  
2 differences between 2012 and now. The first one is  
3 that the gas composition would actually be utility  
4 grade natural gas. As a result there would be fewer  
5 support structures, including a single compressor  
6 station at Prudhoe Bay as opposed to multiple  
7 compressor stations in the previous version.

8  
9 Secondly, both the mainline and the  
10 Fairbanks Lateral have been rerouted in some locations.  
11 That's for the most part to decrease the environmental  
12 impacts. If you're interested in knowing where those  
13 reroutes are you can go online to our website. I'll  
14 post it up at the end of our meeting here. You can  
15 actually look at maps of all of the changes in the  
16 route between 2012 and now.

17  
18 Additionally, plans for the gas  
19 conditioning facility at Prudhoe Bay have been  
20 modified. The modules for the gas conditioning  
21 facility will now be imported and as a result some  
22 modifications would be required at Dock Head 3 up on  
23 the North Slope and some dredging would also be  
24 required so that those barges could access the dock  
25 head and import those modules.

26  
27 I'm going to talk about the four main  
28 chapters of the SEIS tonight. Chapter one is the  
29 project purpose and need. Chapter two is the proposed  
30 action and alternatives. The NEPA process that  
31 requires an EIS also requires that we analyze the  
32 environmental impacts of alternatives to the proposed  
33 action. Chapter three is the affected environment, so  
34 the existing conditions within and around the project  
35 area. Then chapter four describes the environmental  
36 consequences or potential environmental impact to these  
37 resources described in chapter three.

38  
39 The Alaska Gasline Development  
40 Corporation, who is the project proponent or the  
41 project applicant, their proposed purpose and need for  
42 the project is to make North Slope natural gas  
43 available to residents in Fairbanks, the Southcentral  
44 region and other communities in the state as directed  
45 by the Alaska State Legislature and to provide access  
46 to a stable, affordable and long-term supply of natural  
47 gas for heating and powering homes and businesses.

48  
49 This slide shows the proposed pipeline  
50

1 route. It would begin at Prudhoe Bay, Milepost 0. It  
2 would be a buried pipeline generally following the  
3 Trans-Alaska Pipeline System route down to Livengood,  
4 where it would continue south. It would stay west of  
5 Fairbanks and Nenana, it would stay on the east side of  
6 Denali National Park, and then it would connect with  
7 ENSTAR's existing distribution system just southwest of  
8 Big Lake.

9  
10 There would also be a Fairbanks Lateral  
11 that would tie into the mainline at Milepost 440.  
12 Again Milepost 0 is up here in Prudhoe Bay. The  
13 Fairbanks Lateral would travel on Murphy Dome and Old  
14 Murphy Dome Roads and then it would extend southeast  
15 into Fairbanks.

16  
17 This figure shows an example of what  
18 the project right-of-way might look like during  
19 construction. As I mentioned, the pipeline would be  
20 buried. The construction right-of-way would be used to  
21 store trench spoils during construction as well as for  
22 equipment access in order to install the pipeline.

23  
24 This would be anywhere between 120 feet  
25 wide to 350 feet wide during construction. In  
26 addition, there would be some temporary work spaces for  
27 storing materials and equipment that would be within an  
28 800-foot corridor of the pipeline route. During  
29 operations the right-of-way would be reduced to 53 feet  
30 wide in some locations, but it would continue to be out  
31 to 350 feet in some locations.

32  
33 In addition to the below ground  
34 pipeline, there would be a number of mobile camps and  
35 permanent camps. There would also be pipe storage  
36 yards as well as gravel material sites. These pictures  
37 just show an example of what a mobile camp might look  
38 like and what a stationary camp might look like.

39  
40 As I mentioned earlier, a gas  
41 conditioning facility would be constructed up on the  
42 Slope near Prudhoe Bay. This shows the existing  
43 central gas facility. That gas conditioning facility  
44 would be constructed about a mile west of there.

45  
46 In order to import the modules to  
47 construct that, there would be some modifications to  
48 Dock Head 3 at West Dock. So 23 barges would transport  
49 those modules and in order for those barges to access  
50

1 the dock, there would be dredging of a channel which  
2 would be approximate 500 feet wide by about a mile  
3 long.

4  
5 So as I mentioned we also analyzed the  
6 impacts of alternatives to the proposed action. We've  
7 identified Alternative 2, which has five different  
8 components which I'll go over, and also Alternative 3  
9 which is the no action alternative, which is required,  
10 so the impacts of the pipeline not being constructed.

11  
12 So under Alternative 2 we considered  
13 the impacts of the route that enters Denali National  
14 Park. This pink line is the proposed action. Green is  
15 the Denali National Park and then the Alternative 2  
16 route is shown in blue. This route would cross the  
17 Nenana River on a pedestrian footbridge, go seven miles  
18 through the Park and then it would cross the Nenana  
19 River again before connecting to the proposed action  
20 route.

21  
22 Secondly, modules would be offloaded at  
23 Dock Head 2 rather than Dock Head 3. The dredge  
24 sediments would be disposed of in a different location.  
25 Under the proposed action we consider the impacts of  
26 disposing those here nearshore in Prudhoe Bay. Under  
27 Alternative 2 we consider the impacts of disposing  
28 those further out in the Beaufort Sea.

29  
30 Alternative 2 considers an above ground  
31 pipeline for a portion of the route. It would be the  
32 first 62 miles in the Beaufort Coastal Plain. That's a  
33 little less than 10 percent of the entire pipeline  
34 route. It's 733 miles long. Finally, under  
35 Alternative 2 we consider the impacts of an aerial  
36 suspension bridge crossing the Yukon River rather  
37 horizontal directional drilling.

38  
39 MR. REAKOFF: How high would that  
40 elevated section be on the North Slope or what distance  
41 off the ground?

42  
43 MS. JOHNSON: You know, I don't know the  
44 answer to that offhand, but I can help you find that in  
45 the EIS after the comment period.

46  
47 Chapter 3 gives a description of  
48 existing conditions in terms of these 21 resources.  
49 We're not going to talk about that in detail today  
50

1 because we just don't have time, but if you're  
2 interested in any of these we've got a copy of the EIS.  
3 Jack also has a copy of the EIS here in town. So if  
4 you're looking for any information we'll stick around  
5 after the comment period and we can help you find what  
6 you're looking for in there.

7  
8 We are going to talk a little bit about  
9 the environmental consequences to some of these  
10 resources. So we selected these resources because  
11 these are resources that could have the greatest  
12 environmental impacts as well as resources that have  
13 received a greater amount of attention from  
14 stakeholders.

15  
16 If you're interested in impacts to the  
17 other resources, we've got some figures here. There's  
18 one figure for each resource, each of the 21 resources.  
19 They do a nice job of showing where the minor, moderate  
20 and major impacts would be expected to be along the  
21 pipeline route for each resource. You can also look in  
22 the executive summary or the EIS for more detail.

23  
24 Chapter 4 also describes cumulative  
25 effects, so the effects of other potential projects in  
26 the area that could result in impacts in the same area  
27 as this proposed project. So what would those combined  
28 impacts look like.

29  
30 So on this slide I've combined three  
31 resources together, soils and geology, water and  
32 wetlands, and the reason I've done that is because the  
33 greatest potential impacts to these resources are  
34 similar in that they're all related to a potential for  
35 permafrost thaw. That could occur either due to  
36 vegetation removal during the construction of the  
37 pipeline within the project right-of-way or it could  
38 also occur during pipeline operation.

39  
40 As a result of that permafrost thaw,  
41 sometimes you can get soil subsidence and as a result  
42 of that soil subsidence you could get altered surface  
43 and groundwater drainage as well as altered wetland  
44 hydrology as indirect effects.

45  
46 So where could that occur. This map  
47 shows in blue areas of continuous permafrost generally.  
48 These green areas are generally discontinuous  
49 permafrost. I'm sure as you know Wiseman is in this  
50

1 area of continuous permafrost. Within this area this  
2 soil subsidence could occur to the greatest extent in  
3 areas where the soil is less stable. So maybe like  
4 organic soils or clay soils rather than more stable  
5 soils like a gravel.

6  
7 MR. REAKOFF: So is it a chilled gas or  
8 is it above and freezing?

9  
10 MS. JOHNSON: So it would be an ambient  
11 temperature pipeline and that's actually the next thing  
12 I was going to talk about.

13  
14 AGDC has proposed some mitigation. The  
15 first thing is that they propose to construct an  
16 ambient temperature pipeline. So the pipeline would  
17 acclimate to the surrounding temperature. There would  
18 be some situations where the pipeline, as you can  
19 imagine, is moving from a warmer soil into an area of  
20 permafrost which may take some time to acclimate. So  
21 that's another situation where you might see that  
22 impact. AGDC will also consider revegetation and  
23 consider replacing some of those unstable soils that I  
24 mentioned earlier to help mitigate this impact.

25  
26 So for socioeconomics we could seek  
27 both positive and negative impacts. Some positive  
28 impacts that we could see are employment opportunities  
29 during both construction and operations of the  
30 pipeline. We could see an increased natural gas supply  
31 during operations, as well as local and state tax  
32 revenues. One negative impact is upfront local and  
33 state expenditures that could be associated with  
34 improvements to infrastructure as well as increased  
35 demand on government services during construction.

36  
37 For cultural resources there could be  
38 potential for some physical destruction or damage or  
39 changes in character, setting or access at some  
40 cultural resource locations. So in the SEIS we've  
41 identified 26 of the 72 sites within the area of direct  
42 effects that could see some of these impacts. These  
43 are based on current survey results.

44  
45 I do want to point out that mitigation  
46 measures would be finalized in the programmatic  
47 agreement. So if some additional mitigation measures  
48 are required as part of that document these impacts to  
49 these 26 sites could be reduced to moderate. If some

50

1 of these sites are avoided, if that's required by the  
2 programmatic agreement, then those impacts could be  
3 reduced to minor or negligible.

4  
5 For subsistence resources there's  
6 potential for displacement of subsistence resources as  
7 well as changes to access. We've identified some areas  
8 that we'd likely see greater impacts than other  
9 communities, so communities located directly along the  
10 pipeline route. Wiseman and Coldfoot are listed as  
11 having major impacts here as well as Nenana and then  
12 Minto because of increased use areas that cross that  
13 pipeline.

14  
15 Sure.

16  
17 MR. REAKOFF: Change in access is  
18 exclusion in subsistence access. Is that what you're  
19 talking about?

20  
21 MS. JOHNSON: So it could be increased  
22 access or I guess excluding access. Yeah, it could go  
23 either way.

24  
25 Here we're highlighting the greatest  
26 impacts. There's a potential impact of noise during  
27 horizontal directional drilling activities. There are  
28 a couple locations where this could occur in nearby  
29 receptors. The HDD could occur for over 24-hour  
30 periods. However, it would occur intermittently and  
31 for approximately a third of that 24 hours. It would  
32 occur potentially for a 10 to 25 week period.

33  
34 So where this could have a greater  
35 impact are two locations at the Kashwitna River  
36 crossing drilling site. There are some residences  
37 located within a tenth of a mile of that location as  
38 well as at the McKinley Park area, the Denali Cabins.  
39 They are within a tenth of a mile of an HDD location.

40  
41 So that's a quick summary of some of  
42 the impacts described in the EIS. If you're interested  
43 in commenting on the document, we will have an  
44 opportunity for you to provide public comment tonight.  
45 You can also go online to [asapeis.com](http://asapeis.com) and you can  
46 access this email comment address at  
47 [asapeiscomments@erm.com](mailto:asapeiscomments@erm.com).

48  
49 We brought a comment form with us  
50

1 tonight if you prefer to comment privately. You can  
2 turn that in tonight or you can also mail your comments  
3 to Sandy at the Army Corps of Engineers. Her address  
4 is listed right here. It's also on the form. Just  
5 make sure that you get comments to us by August 14th in  
6 order to be considered because that's the close of the  
7 comment period.

8  
9 So during our comment period tonight  
10 we'll start out by allowing each person five minutes to  
11 comment. We just want to make sure that everyone has  
12 an opportunity to comment. If you've got more comments  
13 after that you're welcome to come back up and comment  
14 some more. We do have a court reporter present  
15 tonight, so please make sure that you speak into the  
16 microphone. She'll bring you the microphone if you'd  
17 like to comment. We want to make sure that we get your  
18 comment recorded so that it can be addressed. Then  
19 also make sure that you state your name first and last  
20 before you comment.

21  
22 We won't be making any decisions about  
23 the project today. We won't be able to provide  
24 responses to any comments during the public comment  
25 period and we won't be answering questions during the  
26 public comment period. Those will be reviewed and then  
27 they will be addressed when we're writing the final  
28 EIS. There will also be a public comment analysis  
29 report published so you can see how comments were  
30 addressed.

31  
32 After the public comment period we will  
33 stick around. If you've got questions about where you  
34 can find information, we can help you find that  
35 information and we can answer some questions at that  
36 time.

37  
38 This is also serving as a subsistence  
39 hearing tonight, so Earl with the BLM is going to open  
40 the subsistence hearing.

41  
42 MR. WILLIAMS: Thank you, Kate. I'd  
43 like to thank you. I really appreciate the community  
44 of Wiseman giving us an opportunity to come here  
45 tonight and present the project and hear your comments  
46 and concerns. I would like to open the subsistence  
47 hearing by reading a statement into the record.

48  
49 My name is Earl Williams. I'm a  
50

1 project manager with the Bureau of Land Management. I  
2 am reading this statement into the record to let you  
3 know that this public meeting is also a subsistence  
4 hearing. Section 810 of the Alaska National Interest  
5 Lands Conservation Act, or ANILCA, requires the BLM to  
6 evaluate the effects of its actions on subsistence uses  
7 and to hold public hearings if it finds that  
8 subsistence use may be significantly restricted.

9  
10 The Alaska Stand Alone Pipeline project  
11 is seeking a right-of-way from the BLM to allow for the  
12 construction and operation of a buried pipeline across  
13 public lands. In reviewing this application, the BLM  
14 must consider the potential effects to the environment  
15 and the potential impacts to subsistence resources and  
16 uses on public lands. The ANILCA 810 evaluation done  
17 for this project assessed the potential effects of the  
18 proposed alternatives and the cumulative case on  
19 subsistence use, and is included as an appendix in the  
20 Draft SEIS.

21  
22 In the evaluation, the BLM finds that  
23 the proposed project and its alternatives may result in  
24 a significant impact to subsistence uses. These  
25 potential impacts may include reductions in the  
26 availability or abundance of caribou, moose, and other  
27 wildlife. Additionally, there could be reductions in  
28 the availability of berries and other plants in some  
29 traditional harvest areas.

30  
31 This hearing is being held to provide  
32 you an opportunity to make comments on the preliminary  
33 subsistence analysis for the Alaska Stand Alone  
34 Pipeline. All comments are welcome, but we especially  
35 would like to hear your thoughts on mitigation measures  
36 that could be applied to minimize impacts to your  
37 subsistence use.

38  
39 The comments you provide will be  
40 considered in the preparation of the Final Supplemental  
41 EIS and the BLM's Record of Decision for the  
42 right-of-way. You may provide your comments here  
43 tonight or submit them in writing. Please submit any  
44 written comments to the Corps of Engineers by the close  
45 of the comment period.

46  
47 Thank you.

48  
49 MS. JOHNSON: Thanks, Earl. So we'd  
50

1 love to hear your comments tonight and we will be  
2 opening the public comment period. Do you have a  
3 comment? Tina will be bringing you a mic.

4  
5 MR. REAKOFF: I'm going to make  
6 comments in regard to the 810 analysis subsistence use.  
7 My name is Jack Reakoff. I'm the Chairman of the  
8 Western Interior Regional Advisory Council to the  
9 Federal Subsistence Board. Our Regional Council has a  
10 vested interest in ensuring that subsistence accesses  
11 are maintained and subsistence uses are mitigated.

12  
13 When you discussed an elevated section  
14 of pipe, the Central Arctic Caribou Herd and Teshekpuk  
15 Herds migrate east and west across that coastal plain,  
16 especially just post-calving. I would like to see the  
17 pipeline -- if you're going to elevate the pipeline, it  
18 has to be high enough to where those caribou can get  
19 underneath it and move through it just like TAPS is.

20  
21 So it can't be right close to the  
22 ground. The caribou have to be able to move back and  
23 forth unimpeded because they're a very important  
24 resource. They have to be able to access areas to the  
25 east. They calve east and west of Prudhoe Bay and they  
26 move to the east, usually over into the Arctic Refuge,  
27 and then move towards their wintering grounds. So  
28 that's one comment on subsistence resources.

29  
30 I'd like to see that the ASAP  
31 right-of-way is maintained as open access to  
32 subsistence uses, crossing or paralleling it. For  
33 customary and traditional users for hunting, fishing,  
34 trapping and wood gathering. All resources, fish and  
35 wildlife and other wild renewable resources are  
36 protected under Alaska National Interest Lands  
37 Conservation Act. Also wood cutting and berry picking  
38 and et cetera.

39  
40 I would like to see construction crews  
41 are excluded from harvest of fish and wildlife during  
42 construction. Recreational uses of very limited  
43 fishery resource and terrestrial resources should not  
44 occur by construction crews on off hours. During the  
45 construction of the pipeline the crews were excluded  
46 from that. They violated those in some instances and  
47 they fished Galbraith Lake out. They wiped the lake  
48 trout out of there. They're still on a catch and  
49 release system on Galbraith Lake. These are very

50

1 sensitive resources.

2

3 Moose populations are .1 to .2 moose  
4 per square mile. There's two moose per square mile  
5 down in the Tanana Valley. These are very limited  
6 resources. We have specific lottery draw permits for  
7 sport hunting in this area. So we have limited  
8 resources and we do not want to see those abuse by  
9 pipeline crews. There literally could be thousands and  
10 thousands of participants.

11

12 So grayling resources in the Jim River  
13 would be wiped out with recreational use. These  
14 grayling in the Jim River is one of the major areas  
15 where grayling are summering. They're right along the  
16 road. They'd be easily accessed. A lot of those fish  
17 are 15 to 25 years old, so we can't have just unlimited  
18 recreational use. So I would like to see that as a  
19 mitigation.

20

21 Spawning habitat for whitefish in the  
22 south fork of the Koyukuk River, I saw that the  
23 pipeline was going right through where there's a least  
24 cisco spawning area in the fall. So it's a very  
25 sensitive area. If construction is going to occur, it  
26 should not be happening in the river environment during  
27 that spawning period.

28

29 So the whitefish show up there in early  
30 September. They're there through after the ice is  
31 coming down. So if they're going to bury a pipeline  
32 across the south fork, they have to get it in there  
33 before that spawning occurs. They spawn and the fry  
34 out-migrate, so it could easily be done, but it has to  
35 be done at the right time of the year.

36

37 The Jim River has lots of spawning  
38 habitat for chinook salmon and summer chum and coho,  
39 especially in what's known as the Jim River 1 and 2  
40 slough that has coho spawning habitat in it. Those  
41 should be looked at as far as mitigations. The TAPS  
42 goes right across it. It's elevated over those  
43 drainages so it's not an impedance to those fish.

44

45 So those are my offhand comments on  
46 subsistence use. The primary thing that I would like  
47 to see is that subsistence resources are protected to  
48 the highest degree. We, as a community, do not want to  
49 see borrow pits near this community, noise and

50

1 disruption to this life way here.

2

3 The previous pipeline proposals there  
4 was areas -- and I saw that most of the borrow, most of  
5 the gravel extraction was in areas that would not be  
6 nearly as detrimental as some previous proposals that  
7 we've looked at here.

8

9 So that would be my comments on the  
10 subsistence aspects. Thank you.

11

12 MS. JOHNSON: Thank you very much.

13

14 MR. REAKOFF: Can I make a comment on  
15 just general aspects? I saw that there would be  
16 significant access impedance to Wiseman itself.  
17 There's a route that crosses our access road, so this  
18 community has two lodges here, actually three, a summer  
19 endeavor, but there's two lodges here in Wiseman.  
20 Those have 12 to 14 person and 16 to 18 person and I  
21 work with Northern Alaska Tour Company. Last year I  
22 had nearly 5,000 visitors that came from mid May  
23 through the 10th of September.

24

25 Those accesses to this historic  
26 community is part of the economic strength of this  
27 area. Coldfoot Camp derives a lot of revenue from the  
28 visitor industry, so it can't have our access road  
29 blocked off for indefinite periods of time. We have to  
30 maintain the access into Wiseman because of the  
31 socioeconomic impacts that would be extreme to this  
32 community if we had even a few day displacement of  
33 visitation to this area.

34

35 I was happy to see that the new project  
36 doesn't have nearly as many compressors. That they  
37 have one compressor. That was a big issue with  
38 previous projects with all these compressor stations  
39 strung out with crews and that kind of impact to that  
40 surrounding area. So I was happy to see that.

41

42 I'm concerned about the thaw placement.  
43 There's these thaw lobes coming off the sides of the  
44 mountains up in the Dietrich River. I don't even think  
45 the State of Alaska's avoidance of -- they want to  
46 reroute the Dalton Highway around that thaw lobe that's  
47 advancing to the road. They didn't think it's far  
48 enough away. They've got only 400 feet from the  
49 current center line of the Dalton Highway. Where they

50

1 placed it it's on a steep bank on permafrost and I  
2 don't think that that road is going to hold there.

3  
4 I think that the State of Alaska needs  
5 to do more site investigation, looking at what they're  
6 actually going to address. I'm concerned that I see  
7 that the routing of this gas line is right parallel to  
8 that road alignment. I don't know that this project  
9 understands that that thaw lobe is cutting 75 feet  
10 below the surface of the ground. It's cutting deep  
11 into the material. There's State engineers that are  
12 looking at that depth of penetration of the thaw lobe  
13 that's advancing to the Dalton Highway.

14  
15 If they put the gas line in there, it  
16 could cut right into it. I think the gas line needs to  
17 be routed way out into the Dietrich River Valley down  
18 onto the flood plain to get around that. There's no  
19 avoiding that. That thing is coming down, advancing  
20 right to the road. The road is on the lip of a bench  
21 and once it crosses that lip at 75 foot of advancement,  
22 it's going to dive right up the valley floor.

23  
24 So that's a serious concern, is it  
25 could actually displace the pipe, break the pipe and  
26 have an explosion or something like that, the worst  
27 case scenario. So I think there needs to be a little  
28 more thought put into how the State is putting in the  
29 road, where that placement of that road is and where  
30 that pipeline is in relation to that road. I don't  
31 think there's enough site investigation going on  
32 because 400-foot displacement from the current center  
33 line is not adequate to avoid that thaw lobe.

34  
35 There's another one to the south that  
36 advances at 150 feet or 140 feet annually. So that  
37 one's coming down and it's got a lot more material. It  
38 could be down in the road in 20 years. So these thaw  
39 lobes in the Dietrich River Valley are something that's  
40 a serious engineering concern that I don't think is  
41 quite being taken nearly as seriously as it could be  
42 and the State environmental groups have  
43 instrumentation. They've drilled in there. They know  
44 exactly what's going on with that. I think there needs  
45 to be -- that data needs to be incorporated into the  
46 engineering plan of this project.

47  
48 Those are my other comments. Thank  
49 you.

50

1 MS. JOHNSON: Great. Thank you. Would  
2 anybody else like to comment? We'd love to hear from  
3 you.

4  
5 (No comments)

6  
7 MS. JOHNSON: With that we will close  
8 the public comment period. Thank you very much for  
9 participating.

10  
11 (Off record)

12  
13 (END OF PROCEEDINGS)

## TRANSCRIBER'S CERTIFICATE

I, Salena A. Hile, hereby certify that the foregoing pages numbered 02 through 17 are a true, accurate, and complete transcript of Wiseman Scoping Meeting on July 26, 2017, transcribed under my direction from a copy of an electronic sound recording to the best of our knowledge and ability.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SALENA A. HILE