Final Environmental Impact Statement

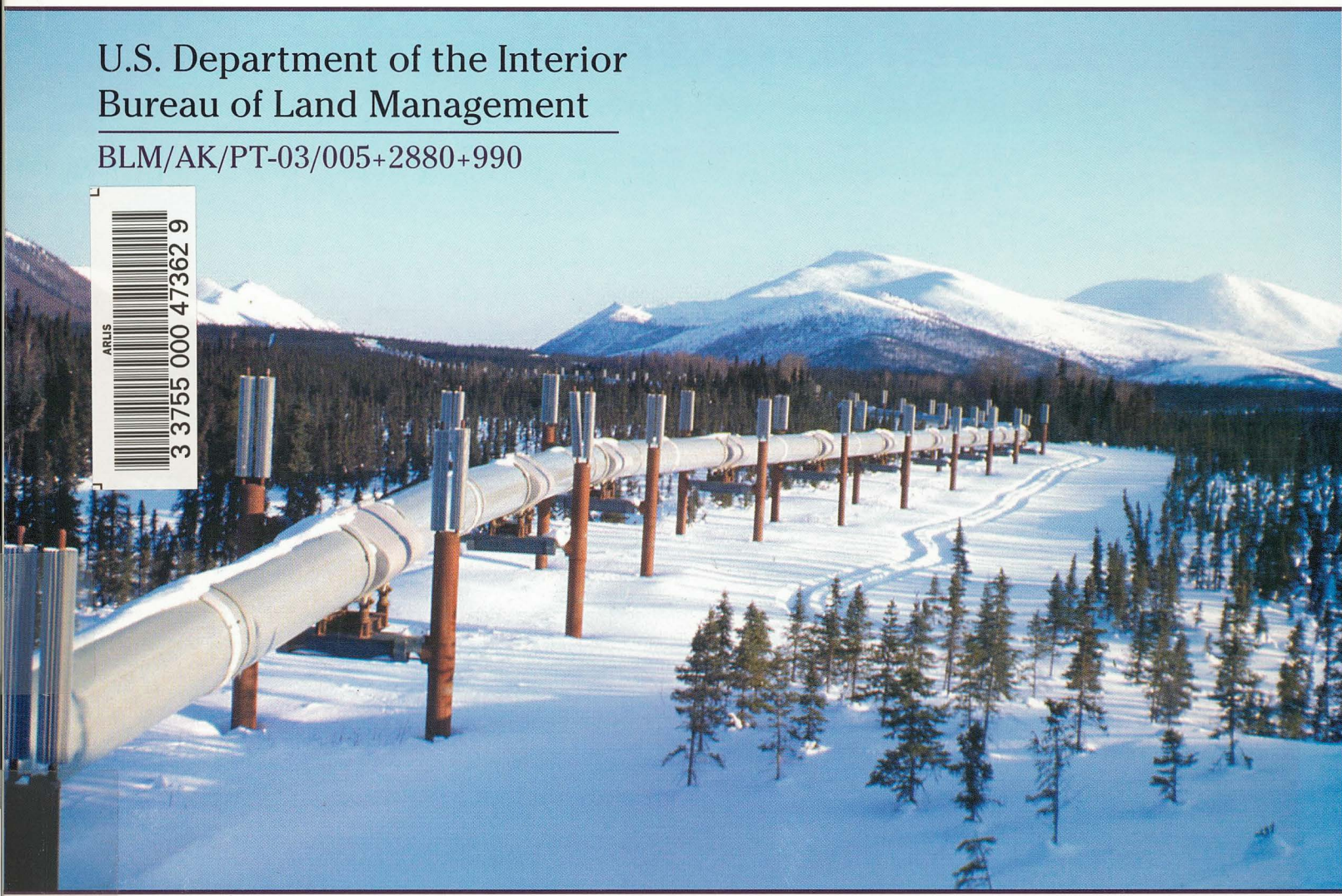
Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way

November 2002

U.S. Department of the Interior
Bureau of Land Management

BLM/AK/PT-03/005+2880+990

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Volume 6: Comment and Response Document – Part 1

BLM/AK/PT-03/005+2880+990

Final Environmental Impact Statement

Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way

Volume 6: Comment and Response Document, Part 1

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Notation

The following is a list of acronyms and abbreviations (including units of measure) used in this document.

Acronyms and Abbreviations

AAAQS	Alaska Ambient Air Quality Standards
AAC	Alaska Administrative Code
AADT	annual average daily traffic
ACEC	area of critical environmental concern
ACM	asbestos-containing material
ACMA	Alaska Coastal Management Act
ACMP	Alaska Coastal Management Program
ACS	Alaska Clean Seas
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game
ADGC	Alaska Department of Government Coordination
ADNR	Alaska Department of Natural Resources
ADPS	Alaska Department of Public Safety
ADT	average daily traffic
AFB	Air Force Base
AFFF	aqueous film-forming foam
AFN	Alaska Federation of Natives
AK	Alaska
AKOSH	Alaska Occupational Safety and Health
ALOHA	Areal Locations of Hazardous Atmospheres
AMHS	Alaska Marine Highway System
AMM	asset maintenance management
ANCSA	Alaska Native Claims Settlement Act
ANILCA	Alaska National Interest Lands Conservation Act
ANSI	American National Standards Institute
ANUA	Alaska Native Utilization Agreement
ANWR	Arctic National Wildlife Refuge
AO	Authorized Officer (Joint Pipeline Office)
AOGCC	Alaska Oil and Gas Conservation Commission
APHIS	Animal and Plant Health Inspection Service
API	American Petroleum Institute
APSC	Alyeska Pipeline Service Company
AQCR	Air Quality Control Region
AQRV	air-quality-related value
ARCO	Atlantic Richfield Company
ARRC	Alaska Railroad Corporation
ARRT	Alaska Regional Response Team
AS	Alaska Statute
ASME	American Society of Mechanical Engineers
ATV	all-terrain vehicle
BE	biological evaluation
BLM	Bureau of Land Management (U.S. Department of the Interior)
BLS	Bureau of Labor Statistics
BMP	best management practice

BOD	biochemical oxygen demand
BOD_5	biochemical oxygen demand measured over a five-day period
BP	British Petroleum
BPXA	British Petroleum Exploration (Alaska), Inc.
BS&W	basic sediments and water
BTEX	benzene, toluene, ethylbenzene, xylene
BTT	biological treatment tank
BWT	ballast water treatment
BWTF	Ballast Water Treatment Facility
BWTS	ballast water treatment system
CBR	Constitutional Budget Reserve
CBRF	Constitutional Budget Reserve Fund
CCP	Central Processing Plant
CDMS	Corrosion Data Management System
CEO	chief executive officer
CEQ	Council on Environmental Quality
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
Cir.	Circuit Court
CMP	Coastal Management Program or Comprehensive Monitoring Program
CNG	compressed natural gas
CO	carbon monoxide
CO_2	carbon dioxide
CP	Contingency Plan
CPF	Central Production Facility
CPlan	Contingency Plan
CS	containment site
CSU	conservation system unit
CY	calendar year
CZ	coastal zone
CZM	coastal zone management
CZMA	Coastal Zone Management Act
DAF	dissolved air flotation
DBGC	designated big-game crossing
DCE	design contingency earthquake
DDT	dichloro-diphenyl-trichloro-ethane
DEIS	draft environmental impact statement
DHCMA	Dalton Highway Corridor Management Area
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DOT	U.S. Department of Transportation
DOT/OPS	U.S. Department of Transportation, Office of Pipeline Safety
DRA	drag reducing agent
DRO	diesel-range organics
DS	drill site
DSMA	digital strong-motion accelerograph
EIA	Energy Information Administration
EFH	essential fish habitat

e.g.	exempli gratia (for example)
EGHP	exhaust-gas horsepower
EIA	Energy Information Administration
EIS	environmental impact statement
EMS	environmental monitoring system or earthquake monitoring system
EPA	U.S. Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ER	environmental report
ERPG	emergency response planning guideline
ESA	Endangered Species Act
et al.	and others
ETT	enhanced tractor tug
FAA	Federal Aviation Administration
FACA	Federal Advisory Committee Act
FDA	U.S. Food and Drug Administration
FDS	Fire Dynamics Simulation (computer model)
Fe	iron
Fe_2O_3	ferric oxide
FEIS	final environmental impact statement
FEOC	Fairbanks Emergency Operations Center
FLIR	forward looking infrared
FOSC	Federal On-Scene Coordinator
FR	Federal Register
FSIH	Fire Safety and Industrial Hygiene
FTE	full-time equivalent
GAO	General Accounting Office
GC	Gathering Center
GHG	greenhouse gas
GIS	geographic information system
GMU	Game Management Unit
GNOME	General NOAA Oil Modeling Environment
GRO	gasoline-range organics
GSP	gross state product
H_2O_2	hydrogen peroxide
H_2S	hydrogen sulfide
HAP	hazardous air pollutant
HAZCORE	Hazardous Materials Consolidation and Redistribution
HAZMAT	hazardous material
HAZWOPER	hazardous waste operations
HC	hydrocarbon
HCFC	hydrochlorofluorocarbon
HCl	hydrogen chloride
Hg	mercury
HRR	heat release rate
HVAC	heating, ventilation, and air conditioning

ICS	Incident Command System
i.e.	that is (id est)
IMPROVE	Interagency Monitoring of Protected Visual Environments
IRIS	Integrated Risk Information System
IRT	Initial Response Team
ISC3	Industrial Source Complex Model (Version 3)
ISCST	Industrial Source Complex Short Term
IWSS	industrial wastewater sewer system
JPO	Joint Pipeline Office
L_{dn}	day-night average sound level
L_{eq}	equivalent steady sound level
LEFM	leading-edge flow meter
LNG	liquefied natural gas
LVB	line volume balance
MAP	Man in the Arctic Program
MCCF	mobile contingency camp facility
MCL	maximum contaminant level
MEI	maximally exposed individual
MEK	methyl ethyl ketone
MGV	manual gate valve
MLA	Mineral Leasing Act
MLR	Mainline Refrigeration
MMC	Marine Mammal Commission
MMPA	Marine Mammal Protection Act
MMS	Minerals Management Service
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MP	milepost
MSDS	Material Safety Data Sheets
MSFCMA	Magnuson-Stevens Fisheries Conservation and Management Act
MSGP	Multi-Sector General (NPDES) Permit
MSWLF	municipal solid waste landfill
N	nitrogen
NAAQS	National Ambient Air Quality Standards
NADP	National Atmospheric Deposition Program
NAICS	North American Industry Classification System
NANA	Northwest Alaska Native Association
NEPA	National Environmental Policy Act
NF	National Forest
NFRAP	no further remedial action planned
NGL	natural gas liquid
NH_3	ammonia
NHPA	National Historic Preservation Act
NMDS	National Missile Defense System
NMFS	National Marine Fisheries Service
no.	number
NO_x	nitrogen oxides
NO_2	nitrogen dioxide
NO_3^-	nitrate
NOA	Notice of Availability

NOAA	National Oceanic and Atmospheric Administration
NOD	Notice of Disposal
NOI	Notice of Intent
NORM	naturally occurring radioactive material
NP	national park
NPDES	National Pollutant Discharge Elimination System
NPP	national park and preserve
NPR	National Petroleum Reserve
NPR-A	National Petroleum Reserve-Alaska
NPS	National Park Service
NRA	national recreation area
NRHP	National Register of Historic Places
NS	North Slope
NSB	North Slope Borough
NSC	National Safety Council
NSPTS	North Slope Production and Transportation System
NTP	Notice to Proceed
NWR	national wildlife refuge
NWS	National Weather Service
O_3	ozone
O&M	operation and maintenance
OCC	Operations Control Center
OCS	Outer Continental Shelf
ODC	ozone-depleting chemical
ODP	ozone-depleting potential
ODS	ozone-depleting substance
OMB	Office of Management and Budget
OMS	operational material site
OPA	Oil Pollution Act
OPS	Office of Pipeline Safety (U.S. Department of Transportation)
ORC	oxygen-releasing compound
ORV	off-road vehicle
OSHA	Occupational Safety and Health Administration
OSHTF	(Alaska) Oil Spill Health Task Force
OSPPR	Oil Spill Prevention, Preparedness, and Response
OSV	oil spill volume
P	phosphorus
PA	Programmatic Agreement
PAH	polycyclic aromatic hydrocarbon
PAI	Phillips Alaska, Inc.
Pb	lead
PBT	persistent, bioaccumulative, and toxic
PCB	polychlorinated biphenyl
PDF	pipeline design flood
PELs	permissible exposure limits
PF	Permanent Fund
PG	Pasquill-Gifford
pH	hydrogen ion concentration
P.L.	Public Law
PM	particulate matter
$PM_{2.5}$	particulate matter with a diameter less than or equal to 2.5 micrometers
PM_{10}	particulate matter with a diameter less than or equal to 10 micrometers

PMP	probable maximum precipitation
PO_4^{3-}	phosphate
POP	persistent organic pollutant
POTW	publicly owned treatment works
PPE	personal protective equipment
PPV	peak particle velocity
PRT	prevention and response tug
PS	pump station
PSD	Prevention of Significant Deterioration
PWS	Prince William Sound
QA	quality assurance
RAC	Resource Advisory Council
RCAC	Regional Citizens' Advisory Council
RCM	reliability-centered maintenance
RCRA	Resource Conservation and Recovery Act
REAA	Regional Educational Attendance Area
RGV	remote gate valve
RMP	Resource Management Plan
ROD	Record of Decision
ROS	recreation opportunity spectrum
ROW	right-of-way
RRO	residual-range organics
RSC	reduced sulfur compounds
SARA	Superfund Amendments and Reauthorization Act
SCADA	supervisory control and data acquisition
SD	standard deviation
SDWA	Safe Drinking Water Act
SERVS	Ship Escort/Response Vessel System
SHPO	State Historic Preservation Officer
Si	silicon
SIC	Standard Industrial Classification
SIP	state implementation plan
SO_2	sulfur dioxide
SOSC	State On-Scene Coordinator
SO_x	sulfur oxides
SPC	State Pipeline Coordinator
spp.	species
SRS	state recreation site
Stat.	statute
SWDS	solid waste disposal site
SWPPP	Storm Water Pollution Prevention Plan
SWTP	sanitary waste treatment plant
TAPAA	Trans-Alaska Pipeline Authorization Act
TAPS	Trans-Alaska Pipeline System
TAGS	Trans-Alaska Gas System
TCA	1,1,1-trichloroethane
TCC	Tanana Chiefs Conference
TCP	traditional cultural property
TEEL	temporary emergency exposure limit
TEF	toxic equivalency factor

TFE	tetrafluoroethylene
TLV	threshold limit value
TPQs	Threshold Planning Quantities
TRI	Toxics Release Inventory
TSDF	treatment storage and disposal facility
TSP	total suspended particulates
TSS	total suspended solids
TVB	transient volume balance
TVR	tanker vapor recovery
UAA	University of Alaska-Anchorage
UC	Unified Command
UIC	underground injection control
USACE	U.S. Army Corps of Engineers
USC	United States Code
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UV	ultraviolet
VAHS	Valdez Air Health Study
VHF	very high frequency
VHS	viral hemorrhagic septicemia
VMT	Valdez Marine Terminal
VOC	volatile organic compound
VRM	visual resource management
VSM	vertical support member
VTS	Vessel Traffic Service
WSR	Wild and Scenic River
ZRAs	Zone of Restricted Activities

Units of Measure

acre-ft	acre-foot (feet)
bbl	barrel(s)
Btu	British thermal unit(s)
°C	degree(s) centigrade
cm	centimeter(s)
cm^3	cubic centimeter(s)
cSt	centistoke(s)
d	day(s)
dB	decibel(s)
dBA	A-weighted decibel(s)
°F	degree(s) Fahrenheit
ft	foot (feet)
ft^2	square foot (feet)
ft^3	cubic foot (feet)
g	gravitational acceleration
gal	gallon(s)
GW	gigawatt(s)
h	hour(s)
ha	hectare(s)
hp	horsepower
in.	inch(es)
$in.^2$	square inch(es)
j	joule(s)
K	kelvin degree(s)
kg	kilogram(s)
km	kilometer(s)
km^2	square kilometer(s)
knot(s)	nautical mile(s) per hour
kW	kilowatt(s)
L	liter(s)
lb	pound(s)
m	meter(s)
m^2	square meter(s)
m^3	cubic meter(s)
mg	milligram(s)
mi	mile(s)
mi^2	square mile(s)
min	minute(s)
mL	milliliter(s)
mm	millimeter(s)
mmole	millimole(s)
mph	mile(s) per hour
MW	megawatt(s)
MYA	million year(s) ago
ng	nanogram(s)
pCi	picocurie(s)
ppb	part(s) per billion
ppm	part(s) per million
psi	pound(s) per square inch
psig	pound(s) per square inch gauge
rpm	revolution(s) per minute
s	second(s)
scf	standard cubic foot (feet)
scfm	standard cubic foot (feet) per minute
wk	week(s)
YA	year(s) ago
yd	yard(s)
yd^3	cubic yard(s)
yr	year(s)
µg	microgram(s)
µg-atoms	microgram-atom(s)
µm	micrometer(s)
µmoles	micromole(s)
µR	microroentgen(s)
$/bbl	dollar(s) per barrel

Index to Comment Documents

Introduction

This Volume 6 of the Final Environmental Impact Statement (FEIS) for the Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way contains public comments on the draft environmental impact statement (DEIS) and Bureau of Land Management (BLM) responses to those comments. The BLM prepared the DEIS, which was published on July 5, 2002, in accordance with Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of the National Environmental Policy Act (NEPA). These procedures include a period of public comment on a DEIS prior to publication of an FEIS.

The comment documents are presented in numerical order by document number. Each comment document is immediately followed by the responses to those comments, except for comments presented at the public hearings (see below). To view a specific comment document and its associated responses, the reader should consult the following index to determine the document number. Two indices are provided: (1) the Individuals index contains all of the comment documents received and (2) the Agencies, Organizations and Tribal Governments index contains a subset of the Individuals index, to aid readers who may not know the names of specific people affiliated with those organizations.

The transcripts of the public hearings are presented in this volume as a set of comment documents; therefore, instead of the response immediately following the comment document, the response follows in numerical order immediately after the entire transcript document. To aid the reader, the following lists the comment documents associated with the transcripts of each public hearing. Responses to those comments follow the last document number listed for each set (e.g., responses to document number 00115 would follow document number 00140, the last comment document for the Cordova hearing).

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1 This listing of agencies, organizations, and Tribal governments was compiled on the basis of comment documents submitted on official letterheads. It is not necessarily a complete list of all agencies, organizations, and Tribal governments that commented on the Draft EIS. This listing does not include any organization that provided verbal testimony, but did not submit written comments. The Individuals index for specific speaker names can be consulted to find testimony that may also be affiliated with specific agencies, organizations, or Tribal governments.

COMMENTS AND RESPONSES

00001

Thomas R. Marshall, Jr.
1569 Birchwood Street
Anchorage, AK 99508

I would like to comment for the 30 year Renewal of the Trans Alaska Pipeline.

With oil fields producing on the North Slope and the chance of other fields being found it seems just a sensible thing to keep the only avenue for the sale of that production viable. To do otherwise would leave much oil in the ground and this would be contrary to the Alaska Oil and Gas Conservation Commission Title 33 Statute against waste. Thank you very much for this opportunity. 1-1

Responses for Document 00001

00001-001: Thank you for your comment.

00002

James F. Clark
Robertson, Monagle, & Eastaugh
P.O. Box 21211
Juneau, Alaska 99802
(907) 586-3340 **Fax (907) 586-6818**

July 29, 2002

BLM TAPS Renewal EIS, Argonne
National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

Re: Trans Alaska Pipeline System (TAPS)
Right-of-Way Renewal Draft Environmental Impact Statement (DEIS)

Dear Sir/Madam:

This comment letter is in response to the 30-year renewal of the trans-Alaska pipeline right-of-way DEIS. The renewal period should be for 30 years as any period shorter would reduce growth rates in population, gross state product, employment, and income, as well as tax revenues, likely increasing annual state budget deficits and jeopardizing services and programs. A renewal period shorter than 30 years would adversely affect domestic oil production, national energy security, balance of trade and overall economic activity. TAPS' overall performance reliability rate is in excess of 99% since start-up. 2-1

Alyeska's corrosion control program, valve maintenance program and spill response plans are the leaders in the industry. In addition, over twenty State and Federal agencies regulate the pipeline and millions of dollars are spent each year on its upkeep. 2-2

Some members of the public raised the need for a citizen's advisory group to oversee pipeline operations. This concept is not appropriate for evaluation in the DEIS as the cost for this would be significant and would reduce the economic viability of remaining North Slope reserves which, in turn, reduces State revenues. 2-3

For the foregoing reasons the preferred alternative should be to renew TAPS right-of-way for 30 years.

Very truly yours,

James F. Clark

801 W. 10th Street, Suite 300 **Juneau, Alaska 99801**

Responses for Document 00002

00002-001: Thank you for your comment.

00002-002: APSC's corrosion control program, valve maintenance program, and spill response plans, along with the government oversight of TAPS operations, were considered in the preparation of the EIS.

00002-003: The reader is directed to Section 2.5, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

Barbara Brown

357-8855

I don't really have an opinion on that but soon there will be something that a lot of people will have an opinion on, the DFYS the Department of Family Youth Services; their report, their review is coming out the end of this month on the 23rd of August and we, the parents, are going to have a lot to say about this so I suggest you might do a public opinion poll on the DFYS federal reviewers report that's due August 23 this month. 3-1

I have more information if you would like to call. I am the founder of the Mud Squad (phonetic) There are at least 70 of us that I am sure are not going to like that report. If you want to interview us call us back.

Responses for Document 00003

00003-001: Thank you for your comment.

Gary Hutchison
140 Falcon Drive
Fairbanks, AK 99712

I would like to comment on the proposed Trans-Alaska Pipeline impact statement and give you my perspective of the pipeline having witnessed the construction of the pipeline with the development of the oil fields more than 25 years ago. It is truly the greatest thing that has happened to the State of Alaska, development of the oil and the pipeline development; and I'm amazed at the success of the pipeline and the care that the oil companies have taken to make sure over the years that the pipe maintains its integrity and that it produces the transportation value that it is capable of without environmental damage. And as we look now to extend the lease for some additional years, it is just as important now as it was 25 years ago that this pipeline be allowed to function. I think more importantly now is the need to have operating costs kept to a minimum because of competition worldwide for oil services and oil products and because of the declining throughput from the oil fields. Of course, the oil fields are so important to the State of Alaska and its ability to provide important education, health and social services to the people of the state and because of the employment opportunities that the development of the pipeline provides. I am concerned that we don't do anything unusual or out of the ordinary with this pipeline given its track record of success and given the attention and the expertise that the industry has given and provided to the function of the operation of this pipeline. Now there are some folks that want to give some sort of citizen's oversight to it. I think that this is ridiculous given the history of the pipeline and as I look at the individuals behind this, these are the same folks that come in and testify against every development, **against every development,** project in this state. So I am very much opposed to following their lead on this pipeline. I hope those 2 beeps have not erased my last [end of message]

4-1

4-2

Responses for Document 00004

00004-001: Thank you for your comment.

00004-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00005

August 6, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439
Fax: 866-542-5904

Gentlemen:

I am a senior citizen who fifty-six years ago chose Alaska as a place to get my G.I. Bill Education and to live, work and raise my family. Alaska has been very good to me and to all of my family and we are all very appreciative of the blessings we have received.

The development and production of the Prudhoe Bay Oil Field has been one of the greatest economic benefits to Alaska and the TransAlaska Pipeline System is an integral part. 5-1

The engineering design and construction wisdom that resulted in the nearly perfect performance of one of the worlds greatest, and most efficient, transportation systems is a point of pride for our whole Nation as well as Alaskans and all those involved.

This engineering marvel is the result of careful planning, overall efficiency in construction and adaptation to natural hazards of tundra, permafrost, mountains and weather, as well as careful consideration of environmental concerns. 5-2

I strongly support a renewal period for the TransAlaska Pipeline System of the full thirty years. The system has worked wonderfully well and the BLM and State authorities are to be commended for their professional advisory role in providing counsel and guidance in the administration of the right of way permit.

I would strongly oppose the inclusion of citizen advisory groups as part of an oversight team because this would open the door to self-proclaimed expert types with all kinds of non-professional agendas. My firm belief is "if its not broken – don't invite amateurs to try to fix it." 5-3

In closing I would like to say that in spite of a few relatively minimal problems the right of way permit has served the United States of America, Alaska and Alaskans, and the shareholders in the TransAlaska Pipeline System very well. Please renew the permit and let all these beneficiaries enjoy the full potential of our great resource. 5-4

Thank you,

Conrad G.B. Frank, P.E.

Responses for Document 00005

00005-001: Thank you for your comment.

00005-002: Thank you for your comment.

00005-003: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00005-004: Thank you for your comment.

My Name is Bob Reynolds, Manager of Alaska Tax & Royalties for BP Exploration Alaska, Inc. (8/5/02)

I have been with BP for over 20 years and in Alaska for over 16 of these years.

I am here tonight to support testimony supporting a 30-year extension of the Trans Alaska Pipeline Right-of-Way. I support this for many of the reasons cited in other testimony such as:

- The importance of certainty of economic pipeline transportation to future investments in Alaska especially for...
- Developments such as the gas line, exploration for new prospects, and the development of known reserves such as Pt Thomson. 6-1
- Note that all of these unsanctioned investments have 10-30 development and production windows that will be adversely impacted by uncertainties associated with frequent ROW renewals.
- In addition, I would note that BP remains committed to the safe and environmentally secure operation of TAPS and that renewal for less than 30 years will not, in and of itself, assist in achieving these objectives.

On a more personal note, I have watched the Alaska production decline by 50% since 1989 and witnessed, first hand, the impacts of the cost increases accompanying this decline. In addition, I have seen Alaska compete for capital and, as a result, urge everyone here tonight to look for ways to make the Alaska oil infrastructure more competitive, lower cost, and more certain. Therefore, I urge the Bureau of Land Management to grant a 30-year renewal of the TAPS right-of-way under its current terms.

Thank you.....

EXHIBIT
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Responses for Document 00006

00006-001: Thank you for your comment.

State of Alaska Dept. of Natural Resources

Comment Mailer Form

Commissioner's Statement of Reasons and Proposed Written Determination for the Trans-Alaska Pipeline System Right-of-Way Lease Renewal

Use this self-addressed form to submit your comments on the DNR Commissioner's Statement of Reasons and Proposed Written Determination for the Trans-Alaska Pipeline System Right-of-Way Lease Renewal. Please give this completed form to one of the meeting hosts or take it with you and mail it. Write your comments, fold the form, tape it shut, place a stamp on the outside and drop it in the mail.

FOLD HERE Comments must be postmarked no later than August 20, 2002. FOLD HERE

Please provide this information:

Name Pete A. Kompkoff Jr

Title/organization Chenega IRA Council Vice President/Chairman

Mailing address Box 8045 Chenega Bay

State AK Zip+four 99574-8045

Comments:

For the Safty of Oil transportation Lets make Sure the System will always be Safe & not harm or hurt Subsistence users Through out Alaska - As well As the environment. Promises made before have been dishonored and not complied with. Native cures involved in the beginning But are slowly phased out. Lets all live together unified. I am a very avid subsistence user and does not want to lose my rights. I Support a 30 year renewal but a longer Response period for DEIS

7-1

7-2

EXHIBIT 41

Responses for Document 00007

00007-001: Thank you for your comment. Subsistence has received considerable attention in the EIS, and is discussed in various contexts in Sections 3.24, 4.3.20, 4.4.4.14, 4.5.2.20, 4.6.2.20, 4.7.8.1, and Appendices D and E.

00007-002: Although 45-days is understandably a short time to review a document of this size, it is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration for the review well in advance. The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

Testimony Before Bureau of Land Management-Joint Pipeline Office
Right of Way Renewal for Trans Alaska Pipeline System
Provided by Carolyn Smith, NANA Development Corporation
Monday, August 5, 2002

My name is Carolyn Smith, and I am the Manager of Shareholder Development for NANA Development Corporation, a wholly owned subsidiary of NANA Regional Corporation.

NANA Regional Corporation is one of 13 Native Corporations formed by passage of the 1971 federal Alaska Native Claims Settlement Act, or ANCSA. I appreciate the opportunity to provide testimony on the development of the Environmental Impact Statement for continued operation of the Trans Alaska Pipeline System or TAPS. My comments will focus specifically on Section 29 of the Right of Way Agreement, which requires Alyeska Pipeline Service Company to offer special educational and employment opportunities for Alaska Natives.

My job at NANA involves developing internship experiences for shareholders and providing information on various scholarship programs available to Alaska Natives. NANA has over 10,000 Inupiat Eskimo shareholders, many of whom still reside in our region that encompasses 11 communities and 38,000 square miles in the Northwest portion of Alaska.

NANA's leaders are working to create job opportunities for our shareholders. I administer a company-wide mentoring program that trains shareholders to one day manage the corporation. At NANA, we have had real success promoting shareholder employment within many of NANA's 35 subsidiaries or partnerships and especially at Red Dog Mine, the largest zinc mine in the western world. NANA owns the land and helps operate Red Dog Mine with our partner Teck Cominco, an international mining company, Sixty percent of the almost 500 workers at the mine are NANA

EXHIBIT
43

shareholders and we and our partner hope to raise that number to 100 percent through education and training.

Education, training, and work experience is the best answer to increasing Native hire throughout the oil industry and I have been involved with Alyeska on promoting this initiative and offer my continued support. NANA believes that Section 29 of the Right of Way Agreement must be included in the renewal stipulations for the TAPS. This mandate is intended to compensate Alaska Natives, the "First Alaskans," for providing access to oil and gas, and in the case of the oil pipeline, for the opportunity to cross Native lands. NANA would even support increasing the Alaska Native workforce mandate beyond 20 percent. 8-1

To help Alyeska implement the Alaska Native hire program, I am a part of "Team 2000," a group that involves many Native Corporations with the goal of developing scholarship and internship programs for Alyeska and its contractors. The program has successfully placed 50 Alaska Natives in internships or job training programs. We also developed a grant program for contractors to incorporate Alaska Natives into their operations by providing educational opportunities that would qualify them for jobs associated with the TAPS. Individuals receiving scholarships are studying engineering, business management, accounting, chemistry, process technology, and environmental science just to name a few.

Two of NANA's businesses that are contractors for Alyeska, NANA Management Services and Houston NANA, were recipients of funding. The grants to NANA support interns in areas where the businesses specialize, such as facility maintenance and food service as well as health, safety, and environmental fields. We are even sending a shareholder to culinary school to be a chef. This individual will one day head a first class food service operation of one of NANA's top clients.

In closing, Alyeska has shown a strong commitment to hiring and developing an Alaska Native workforce. NANA supports renewal of the TAPS Right of Way not only to allow Alyeska to continue supplying a significant percentage of the nation's domestic crude oil, but also because of the continuation and even enhancement of the requirement to hire and develop Alaska Natives. The involvement of Alaska Natives at every level of Alyeska's operations and in the oil industry in general overall will benefit our shareholders and all Alaskans in the future. 8-2

Thank you for the opportunity to provide comment on this important issue.

Responses for Document 00008

00008-001: The BLM strongly supports Section 29 hiring goals. Section 4.8.4, mitigation of adverse impacts, explains the BLM approach to ensure that Section 29 employment goals will be met.

00008-002: Thank you for your comment.

Alaskan Realty

RECEIVED
JOINT PIPELINE OFFICE
02 AUG 21 PM 1:22

From: "Alaskan Realty" <alaskan@ctcak.net>
To: <ADNR_Administrative_Record@jpo.doi.gov>
Sent: Tuesday, August 20, 2002 2:28 PM
Subject: Fw: BLM TAPS Renewal

---- Original Message ----
From: Alaskan Realty
To: tapswebmaster@anl.gov
Sent: Tuesday, August 20, 2002 2:25 PM
Subject: ATTN: BLM TAPS Renewal

Did anyone track down the person who wrote in the report that "the oil spill was an economic boon"? Can anyone be more cynical, can anything be more hideous to contemplate? The insensitivity and wrong thinking in that report is insupportable. Shame. 9-1

My family has been involved in the commercial life of Cordova since my grandfather, Ben Osborne, arrived here in 1908.

My family and community is still reeling from the aftershocks of the Exxon Valdez oil spill 13 years ago.

The TAPS leases should **not** be renewed unless an citizens oversight committee is established, meaningful fines are implemented, and safeguards imposed that offer meaningful protection for the drainage of the Copper River tributaries. A spill from the aging pipeline would be an epic disaster. 9-2

Also, the comment period is way too short.

Mark Steen
Box 1310
Cordova, Alaska 99574
907.424.5445 9-3

Please don't sell Cordova and the wonders of the Copper River watershed out to the oil companies — Do the right thing 9-4

Mark Steen

8/20/02

Alaskan Realty

From: "Alaskan Realty"
To: <tapswebmaster@anl.gov>
Sent: Tuesday, August 20, 2002 2:25 PM
Subject: ATTN: BLM TAPS Renewal

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Also, the comment period is way too short.

Mark Steen
Box 1310
Cordova, Alaska 99574
907.424.5445

Mark Steen

8/20/02

BLM TAPS Renewal EIS
Argonne National Lab EAD/900
9700 Cass Avenue
Argonne, Illinois 60439

RE: Comments on Application of the Trans-Alaska Pipeline System Owners for Renewal of the
F Federal Grant and State Lease for the TAPS Right-of Way

My name is Mark Steen. My grandfather, Ben Orborne, moved to Cordova in 1908. He manufactured gold jewelry and was deeply involved in the commercial life of Cordova. My uncle, Bjorn Osborne, was a commercial fisherman. My brother, Karl O. Steen, is a commercial fisherman, as is my nephew, Karl A. Steen. My mother, Gail Osborne Steen, was born in Cordova in 1918, and is retired here now. She had a furniture store on First Street. My sister-in-law, Ruth Steen, has a gift shop on First Street. I have a real estate office, and my wife Lynne runs a teashop, SerenipiTea, also on First Street. My family has been involved in the city of Cordova for almost one hundred years.

My family and my community are still reeling from the aftershocks of the *Exxon Valdez* oil spill 13 years ago. The emotional and financial devastation this terrible event brought on Prince William Sound, and Cordova, is impossible to describe.

We are VERY concerned that the next major spill will be along the overland portion of the TAPS. The risk for my community - 20% of the 800-mile pipeline is within the Copper River Watershed and the main pipeline crosses 76 tributaries of the Copper. While spill prevention and response measure have improved significantly since the 1989 spill - almost all due to citizen oversight and pressure - most of those changes are at the Valdez terminal and in Prince William Sound. On the pipeline, reliable spill prevention and response measures still do not exist. The problem is particularly acute at river crossings. TAPS crosses 800 streams and sections of pipeline over rivers have reached design capacity for sag - there is nothing left to give. This seems like an accident waiting to happen.

My comments are based on my experience living in a community that the oil company and government representatives visited in the early 70's and promised there wouldn't be an oil spill in Prince William Sound. The oil companies made many other promises such as tankers would have double hulls and we would have a state-of-the-art traffic control system in the sound. Had these promises been kept, we might not have had *the Exxon Valdez* oil spill.



BLM TAPS Renewal EIS
Argonne National Lab EAD/900
9700 Cass Avenue
Argonne, Illinois 60439

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Some, but not all, of the oil companies' promises were stated as a set of conditions and stipulations in the original agreements and right-of-way grants. The Interior Department and its designees were assigned the job of ensuring those promises to the American people were kept. Even a brief review of history shows that many of these promises were broken and that the companies were allowed to operate for literally years in noncompliance with their federal grant and state lease. 9-7

For example, the ballast water treatment (BWT) facility at the tanker terminal has not been reviewed at least once every 5 years to ensure state-of-the-art equipment and technology as promised the federal grant and state lease. Some improvements at the BWT facility occurred only recently and through citizen involvement and oversight. 9-8

The vapor recovery system at the tanker terminal didn't work for decades--since startup until 1998 when vapor controls were built into two of the four berthing docks. When it didn't work it dumped literally tons of benzene into the air and jeopardized public and worker health and safety in violation of the federal grant, state lease, and operating permits. 9-9

In 1993, concerned industry employees testified in Congress that the quality control program was nonexistent--since startup--and, as a result, the entire TAPS had been so poorly maintained that it posed an imminent threat to the public, workers, and the environment. Subsequent audits validated the whistleblowers' concerns. Operating without an independent quality control program is in direct violation of the federal grant and state lease. 9-10

More recent examples occurred after the *Exxon Valdez* oil spill. Still now over 13 years later, most of the species studied by the Trustee Council have not recovered from the spill. Yet the federal grant and state lease promise that damages to public lands will be promptly repaired or replaced and that damages to public fish and wildlife resources, and their habitat, will be rehabilitated. This has not happened. 9-11

The oil companies also promised in stipulations attached to the federal grant and state lease to "take all measures necessary to protect the health and safety of all persons affected by their activities..." (Stipulation 1.20.1). I believe this promise includes taking care of residents and cleanup workers after a spill. Yet, after the *Exxon Valdez* spill, Tatitlek villagers observed that Exxon was willing to spend $800,000 on each sea otter for rehabilitation, but nothing or very little on mental health care for people traumatized by the spill. Further, thousands of cleanup workers got sick during 1989, despite Exxon's worker safety program. I am just learning that hundreds of people may still be sick from overexposure to oil vapors, fumes, and aerosols during the cleanup. All the oil companies promised to "immediately abate any health or safety hazards" (Stipulation 1.20.1): it seems all the companies, not just the spiller, are responsible to ensure that people don't get sick during the cleanup--and to take care of the ones who do as per the original promise. 9-12

I think that the oil companies are now currently in noncompliance with the federal grant and state lease. For example, the fire-fighting ability at the tanker terminal is virtually nonexistent. Oily sludge (hazardous waste) has collected several feet deep in tanks at the BWT facility--and the sludge incinerator was never built as per the original facility design. There is still no independent quality assurance program. The contingency plans for river spills are grossly inadequate--drills show the plans won't work to contain and cleanup oil spilled into rivers. I'm sure this list is incomplete and pipeline regulators could add to it if they were to seriously look for problems and not just respond to ones brought to their attention by citizens or concerned employees. 9-13

In light of these past and still ongoing problems, I strongly disagree with statements made by both the state and federal regulators in the draft EIS documents. The Alaska Department of Natural Resources found the oil companies to be in compliance with the state lease. This determination is obviously a requirement for reauthorization as it has nothing to do with reality. 9-14

Federal and state regulatory agencies also stated that the aging 800-mile pipeline and its support systems that were originally built to last 30 years *"can be sustained for an unlimited duration"* with minimal costs and change in the operating and maintenance procedures. This statement demonstrates a lack of credibility--and no grasp of reality. The recent spate of accidents including the failed response to the Livengood bullet hole spill, and the 21-inch shift in a section of pipeline that went undetected for several months show that both industry and the regulators are ill-prepared for serious problems along the overland section of TAPS. The 3 spills at pump stations on pipeline startup after routine maintenance last fall clearly demonstrate this pipeline is aging and not aging well as frequent spills on startup are one sign of increasing problems that should be anticipated--not ignored--in an aging pipeline. 9-15

I was further shocked and offended by the following statement in the draft EIS. "While the *Exxon Valdez* oil spill was a significant event in the operation of TAPS, creating significant benefits to the state and local economy that more than offset the economic damage to the fishing and tourism industries in Prince William Sound, it is unlikely that a spill of such magnitude, even if it occurred again would create the same level of economic activity" (DEIS, page 4-7-116). 9-16

This offensive statement clearly shows that the government regulators have a completely different perspective of their job of pipeline oversight than we were all lead to believe by the federal grant and state lease. The original right-of-way documents do not mention that economics of spill cleanup would be weighed against economic damages to the few communities at risk. Instead the oil companies promised to protect, repair, replace, rehabilitate, etc. fish and wildlife resources, and their habitat--and the regulators are supposed to hold the companies to this promise. Specifically, the

companies also promised to protect subsistence resources, lands, and users, which have a zero dollar economy and can't be compared to economics of spill cleanups at all.

Oil spills are expensive to clean up--I'm sorry that I can't see this as good for the economy, but that's really irrelevant. Even if there was zero economy as measured by exchange of dollars, the oil companies are authorized to operate only if they take steps to minimize risk of oil spills and damage from spills. It's the government regulators' job to see the oil companies are held to this standard--the statement in the draft EIS seems to indicate that the regulators are not doing their job and are out of compliance themselves with the federal grant and state lease. 9-16 (Cont.)

Finally, I must state that I feel this 45-day public comment period for a project of such national and state significance is counterproductive at best and a sham at worst. I did not have time to thoughtfully review the 1,700 page draft EIS because I have been busy trying to earn a living and put up winter food in Alaska's short summer. It appears from statements in the draft EIS that the government regulators did not have time to thoughtfully review nearly 30-years of TAPS history and compare performance with promises, conditions, and stipulations in the federal grant and state lease. Why the rush on a project of such significance? Over a year ago, the Joint Pipeline Office stated that the comment period would run from July to September, but in keeping with 25 years of broken promises by TAPS operators and government regulators, the regulators have broken that promise too. 9-17

Despite all the obstacles for public testimony, I offer the following recommendations for improving TAPS operations for the next 30 years--and I believe all my comments are well within the scope of this National Environmental Policy Act hearing process. I can only support reauthorization for another 30 years if these recommendations are fully addressed and included in the next federal grant and state lease.

#1 Stiff meaningful penalties for failure to comply.

All the laws, regulations, stipulations, and oversight in the world are forever inadequate without meaningful penalties and enforcement. Monetary fines are dwarfed by enormous profits, and the regulators are certainly not going to shut down the oil flow as a penalty for noncompliance--the nation has become too dependent upon this energy source. The track record of the oil companies show that it has acted like a child who knows it is never going to be disciplined. This was not what the American public was originally promised or led to believe would happen.

Some possibilities for meaningful penalties for noncompliance by the oil companies include requirements for: 1) reporting the circumstances of noncompliance to their shareholders in quarterly newsletters as the events unfold (not after the fact); 2) CEOs 9-18

and other responsible officers of oil companies to conduct public service in the TAPS corridor communities most at risk from the consequences of the noncompliance; 3) accruing penalties with interest on a daily basis as long as the infraction occurs; and tying penalties in with the cost of the fixing the problem so that penalties are 10 times the money saved by failure to do the maintenance work in a timely manner. This latter would force owners to change perspective and view maintenance as a *cost savings* compared to prospective penalties. 9-18 (Cont.)

#2 Establish a TAPS Citizens' Oversight Group.

Following the *Exxon Valdez* tragedy in 1989, the State of Alaska created the Alaska Oil Spill Commission to investigate the root causes of the spill and recommend changes to the oversight system. One of the Commission's central findings was that institutional complacency, both in industry and government, was a root cause of the spill. The Commission found that citizens were essential to an effective oversight system because they bring urgency to protecting the resources they care about and depend upon for their livelihoods. Distant bureaucrats, despite their best efforts, do not share this local perspective. To prevent future complacency, and thereby prevent future disasters, the Commission recommended creation of citizens' advisory councils for the marine and overland segments of Alaska's oil transportation system. We only have citizen oversight of the marine portion of TAPS--the tankers and tanker terminal--and it has proven the wisdom of the Commission's finding. It is time to apply the lessons learned to the overland pipeline.

As a requirement of renewal, the grant and lease should establish a TAPS COG that would operate completely independently of government regulators and industry: incorporating government and industry into "citizen oversight" creates an oxymoron. The TAPS COG should make recommendations directly to the Department of Interior (DOI) and to the Department of Natural Resources (ADNR) or their designees. The COG should be funded through the DOI by the permittees as part of the cost of TAPS operations, and all members of the TAPS COG and their staff should be paid for their services. The COG contract should be negotiable on the same timeframe as the right-of-way permit; i.e., 30 years. 9-19

#3 Charge penalties if more than 10% of employees are afraid to speak out.

Industry employees are the public's front line of defense in reducing oil spills. The workers know what is wrong and how to fix it. They need to be allowed to do their jobs free of harassment and intimidation. All personnel--and particularly the quality control inspectors--need to be independent of pressure from Alyeska and its owners to provide the reliable comprehensive quality assurance program promised to the public. Such a 9-20

program is critical to TAPS integrity as the pipeline ages, because increased maintenance costs will compete with oil company profits: workers need to be able to report maintenance problems without fear of reprisal.

The nuclear regulatory industry closes facilities if more than 10% of plant employees are afraid to speak out because of reprisals, harassment and intimidation. A similar standard should be adopted for TAPS operations, with annual independent surveys of workers to determine work conditions. Instead of closing facilities, stiff penalties should be applied, and public service by company officials and reporting of noncompliance to shareholders required (see Rec. #1, above). 9-20 (Cont.)

#4 Require independent, long-term epidemiology studies, and short- and long-term treatment of physical and mental health effects, for workers and affected residents after major TAPS spills.

Oil spills were--and still are--an anticipated side effect of TAPS construction, operation, maintenance, and termination. That's why there are oil spill contingency plans; that's why the oil companies promised, as a condition of operating, to protect public and worker health and safety. But a promise is worth nothing without follow through: after the *Exxon Valdez* spill this promise was ignored. There was inadequate financial support to meet increased needs of mental health facilities in affected communities and short- and long-term physical health care needs of cleanup workers were unmet. This is simply unacceptable--and in noncompliance with permits.

TAPS owners should be required to pay for increased mental health care in the years during and immediately after a spill in all affected communities. This care should include focused peer listening circles to mitigate community-level emotional trauma. Since oil spill cleanups are considered a hazardous waste cleanup, long-term health care studies should be required as the health symptoms associated with crude oil exposure (long-term respiratory damage; disorders of the central nervous system, liver, kidney, blood, and skin; endocrine disruption; and immune suppression) could take years to manifest as physical health problems. Oil companies should also be required to provide chemical decontamination treatments for individuals with acute health symptoms from high body levels of crude oil and other substances present during the cleanup. Individuals who become disabled from overexposure to chemicals present during the cleanup should be compensated by the oil companies, as should the estate of individuals who die from overexposure to chemicals present during the cleanup. 9-21

#5 Require independent verification of spill volume as a condition of lease renewal. 9-22

Spill penalties for damages to natural resources such as fish, wildlife, public lands held in the public trust are based on the volume of oil spilled--as reported by the spiller. One way to reduce the risk of spills and resulting damage to the environment and worker and public health and safety--one of the promises of the original agreement and right-of-way leases--is to penalize TAPS owners, or responsible parties in the case of a TAPS tanker spill, for the correct amount of oil spilled. 9-22 (Cont.)

For example, Exxon underreported how much oil it spilled. In an unpublished investigation on file at the Alaska Resources Library and Information Services, the State of Alaska found Exxon spilled about 35 million gallons. Exxon paid the American public one billion dollars for damage to public resources from a supposedly 11 million-gallon spill: by underreporting its spill by one-third, the company only paid for one-third of the damages and essentially saved itself two billion dollars.

Independent verification should be required as a new condition of lease renewal. Further, stipulation should specify that government regulators and citizen oversight councils, either separately or jointly, conduct the assessment and agree upon the volume spilled before spill penalties are assessed. 9-23

#6 Thoroughly review and update the original right-of-way grants and stipulations in light of past experience, current science, new technology, new laws, and public comments.

The federal grant and state lease are three decades old and no longer reflect current science, technological advances, and law changes. For example, global warming and melting permafrost threaten to make at least one-third of the 77,000 vertical support members of the TAPS unstable with potentially catastrophic effects on the pipeline. Studies from the *Exxon Valdez* spill show that oil is 1,000 times more toxic previously thought, and that it can cause long-term environmental damage. Federal laws are still based on outdated research from the 1970s and 1980s and are grossly under-protective of fish and wildlife. This makes the original promises to protect fish, wildlife, and habitat even more important as basically these promises mean the owners and TAPS regulators will take measures *beyond existing laws* in order to protect fish and wildlife, habitat, and other subsistence needs. 9-24

Further, the original grant and lease agreements were signed by some companies that no longer exist because of mergers and buyouts. I assume, but would like proof, that the new companies are signatories to the current right-of-way grants and leases. 9-25

#7 Grant and lease renewals should be made conditional on satisfactory completion--within 12 months of the renewal--of an independent field-based evaluation of the entire TAPS including hardware and management.

In 1993 a series of independent and industry audits found TAPS was in an imminent state of collapse with several major system wide problems including hardware problems, technical issues, and management issues. 1994 was proclaimed to be the "year of fixes" by the Alyeska president at the time, but fixes proved elusive. For example, the highly touted fiber optics cable, which was supposed to replace the old communication system, didn't work as planned and was quietly shelved. 9-26

No one knows how many problems were actually fixed of those disclosed in 1993, or what new problems remain unfixed because there has not been any independent audits of the TAPS since 1993. This is not acceptable for a system that provides a significant portion of the nation's energy demands and the bulk of the state's operating revenues, and can wreak environmental, social, and economic havoc on Alaska's communities, residents, and federally recognized tribes.

#8 Grant and lease renewals should be made conditional on satisfactory completion of annual independent audits of TAPS operations and management and 5-year in-depth independent field-based evaluations of the entire TAPS, including hardware and management. 9-27

I am concerned that the recommended alternative--to renew the permits for another 30 years--is way to long for this particular pipeline: it is essentially double its design life. If reauthorization is granted, it should be made <u>conditional</u> upon satisfactory completion of independent audits every year with in-depth audits every 5 years as stated above. The Prince William Sound Regional Citizens' Advisory Council has to pass an annual audit and review of operations to be recertified. Nothing less should be expected for the entire TAPS, which has much more at stake than the advisory council!

#9 Immediately escrow TAPS DR&R funds and use interest to finance the TAPS COG and other measures to improve protections for environment, fish and wildlife, and worker and public health and safety. 9-28

Funds intended for future dismantling, restoration, and removal of the TAPS have been collected from TAPS oil companies and passed through to parent companies, resulting in enormous profits--and no pot of money for future DR&R. This is a breach of public trust--and yet another example of corporate irresponsibility and accounting fraud. Government regulators need to take immediate action to remedy this problem.

I want these funds to be escrowed now--before any grant and lease renewals--as a sign of good faith efforts and intention by oil companies and government regulators to the American public. The public was promised this once: we don't need to be promised it twice. Further, earnings from the funds can be pledged towards payment for fulfilling other stipulations under the original agreements--such as protecting the environment, public resources, and worker and public health and safety.

#10 Transfer of TAPS operations to single source with no North Slope production.

The oil company owners consistently cut costs on TAPS operations and maintenance to increase their profits. This dynamic has created an internal conflict of interest, essentially, between the owners and the public interest. While the oil company permittees promised in the right-of-way leases to take all 'reasonable' or 'appropriate and adequate' steps to protect the environment, fish and wildlife, and public and worker health and safety, these adjectives are relative when viewed from different perspectives. What seems reasonable to the oil companies, who measure the cost of prevention against their profits, may not seem reasonable to the public, especially those who measure the cost of spills against their livelihoods and health. The track record shows that the oil companies have profited handsomely at the public's expense.

By transferring the operation, maintenance, and termination of TAPS to a single source with no North Slope production, the internal conflict of interest is broken. This operator would take more 'reasonable' steps, from the public perspective, to reduce its liability from spills by attention to TAPS operations and maintenance. Performance bonds could be required for additional protection of the public interest. 9-29

Summary of Concerns

We are going to have to get very creative to prevent a pipeline spill. We can't keep doing the same thing we have done in terms of TAPS operations and maintenance for the past 25 years. To continue past practices is to virtually guarantee a major spill in the TAPS corridor. 9-30

I ask that you give serious consideration to my comments. And I restate my position: I can only support TAPS reauthorization for another 30 years if these recommendations are fully addressed and included in the next federal grant and state lease.

Sincerely,

Mark A Stan

Responses for Document 00009

00009-001: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

00009-002: The FEIS contains information on spill planning, response, and mitigation for the Copper River Drainage (see the text box in Section 4.4.4.3).

00009-003: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00009-004: The FEIS contains information on spill planning, response, and mitigation for the Copper River Drainage (see the text box in Section 4.4.4.3).

00009-005: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" (APSC 2001g) for the pipeline and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" (APSC 2001h) for the VMT. The Plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline or at VMT. They are available to the public through various libraries in several major cities in Alaska. Oil spill prevention and response capabilities and related activities specific to the Copper River Drainage area are discussed more fully in the text box, "Oil Spill Planning for the Copper River Drainage," in Section 4.4.4.3.

00009-006: Based on lessons learned from the Exxon Valdez spill, a number of improvements have been made (e.g., the creation of the Ship Escort Response Vessel System (SERVS) and phase-in of double-hull tankers) that will reduce the likelihood of a catastrophic tanker accident and the expected outflow given an accident.

Shortly after the Exxon Valdez oil spill, A National Transportation Safety Board report stated that had the Exxon Valdez been fitted with a double hull, "the risks of an oil spill owing to collision or grounding would have been significantly reduced."

00009-007: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00009-008: The JPO produced TAPS engineering report No. 00-E-018, Valdez Marine Terminal Ballast Water Treatment Plant: Compliance with Agreement and Grant Section 23 (May 24, 2000). The report satisfies the 5-year review process.

00009-009: Potential health impacts associated with ambient concentrations of benzene, toluene, ethyl benzene, and xylene (BTEX) in Valdez area under the proposed action (at the crude oil throughput levels of 0.3, 1.1 and 2.1 million bbl/day) and other alternatives were estimated on the basis of conservatively high ambient concentration estimates of BTEX and other toxic air pollutants emitted from the BWTF and other sources at the Valdez Marine Terminal (Sections 4.3.13, 4.5.2.13, and 4.6.2.13). These ambient concentration estimates are based on the ambient BTEX concentrations monitored during the 1990-1991 personal and ambient monitoring studies and the tracer studies conducted in the Valdez area when both the vapor emissions from tankers and the BWTF were released. Exposures to these concentrations during the 1977-2003 period were factored into estimating the lifetime residential cancer risks (Table 4.3-4).

00009-010: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent's office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00009-011: The federal action addressed in this EIS is renewal of the right-of-way for the TAPS. While renewal would result in continued operation of oil tankers in Prince William Sound, that activity is beyond the limits of the right-of-way corridor and is not under the jurisdiction of the BLM. Moreover, the BLM has no authority over oil spill cleanup and damage assessment within Prince William Sound. Regulation of activities associated with the transport of oil by tankers in Prince William Sound is under the jurisdiction of the U.S. Coast Guard and the U.S. Department of Transportation. Analysis of impacts to fish and wildlife in Prince William Sound is included in the EIS to provide a perspective within which the direct and indirect impacts of the proposed action and alternatives to it are addressed.

The BLM and member agencies of the JPO enforce a number of stipulations that are protective of fish and wildlife resources within the right-of-way corridor. The EIS analysis did not find any significant impact to fish or wildlife resources associated with TAPS operations and maintenance within the right-of-way corridor.

00009-012: As stated in Section 4.4.4.7 of the EIS, "Human Health and Safety," the assessment of impacts from spills is limited to the general public and does not include occupational exposures to cleanup workers generally or TAPS employees at the Valdez Marine Terminal. Protection of these workers is regulated under the Occupational Health and Safety Act and is beyond the scope of this assessment. Nevertheless, this section of the EIS discusses the concerns expressed in your comment about the allegations of workers who participated in the Exxon Valdez oil spill cleanup operations.

00009-013: Any information regarding potential hazards associated with TAPS should be provided to the JPO.

The Valdez Marine Terminal has a number of fire protection systems and fire protection capability was considered in preparing the EIS. See the text box in Section 4.3.13.1 for a description of fire detection and response features.

Build up of waxy solids in tanks at the Ballast Water Treatment Facility has received considerable attention by JPO and APSC, as well as citizens groups such as PWS RCAC. There is concurrence on an appropriate course of corrective action; see the text box in Section 4.3.13.1.3.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan." The Plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from anywhere along the pipeline, including the river crossings, or at the VMT. The Plans are available to the public through various libraries in several major cities in Alaska during the plan review period. These documents are updated and reviewed by various State and Federal agencies periodically ranging from every year to every 5 years. The substantive elements of the contingency plans are controlled by ADEC rules (18 AAC75), which include provisions for public review and comment as part of the plan update procedures. The lessons learned from occurrences such as EVOS and the MP 400 bullet hole incident are incorporated into the documents when they are updated.

00009-014: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00009-015: It is correct that the effects of aging have the potential to impact the integrity and reliability of any mechanical system. However, age alone does not dictate reliability or performance. Myriad factors can impact system performance. For example, the manner in which mechanical systems are operated and maintained can greatly influence their long-term integrity, reliability, and performance.

Utilizing its oversight authority, the JPO ensures that APSC's operating and maintenance procedures take all potential impacting factors into account and are sufficient and appropriate to maintain TAPS integrity. The JPO also has the authority to direct APSC to undertake changes, repairs, or upgrades when that is not the case. Under the reliability centered maintenance (RCM) program, all TAPS subsystems are being carefully evaluated for the consequences of their failure and will have maintenance regimens or remanufacture, overhaul, or replacement schedules established that preclude such failures from occurring, if they would have an adverse impact on public safety or the environment.

The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

Each of the three spills that occurred on start-up after a maintenance-related shutdown have been carefully evaluated, and causal factors have been identified. The JPO has required APSC to revise its shut-down and start-up procedures to prevent reoccurrence. APSC is also required to conduct drills on its procedures to ensure they are correct and complete. Also, APSC has made modifications to piping at pump stations to enhance cold restart capabilities. Summaries of the three incidents are included in CMP Report #11, issued in April 2002. See also Section 4.1.1.4.

00009-016: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

00009-017: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00009-018: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00009-019: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00009-020: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's employee concerns program (ECP) and that APSC has undertaken considerable efforts to improve and refine their ECP program.

The BLM and JPO expects to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public report issues and concerns about TAPS. Recorded messages are checked daily by BLM-Alaska Special Agent's office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protection and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00009-021: Section 4.4.4.7, Human Health and Safety, provides a detailed analysis of the potential effects of oil spills on human health. The BLM and member agencies of the JPO are committed to the protection of human health and the environment. The Federal Grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of TAPS) within the Federal Grant contain numerous provisions that are protective of human health and the environment. If new data or information emerge that point to the need for further studies on the health effects of TAPS operations, these studies will be initiated by JPO.

00009-022: The BLM and the member agencies of JPO investigate all significant spills to assess lessons learned and potential mitigation. There has been no evidence to date that past spill volumes have been reported inaccurately. If natural resource damage claims occur because of a spill, the U.S. Fish and Wildlife Agency or National Marine Fisheries Service conduct studies to evaluate damage to natural resources.

The BLM does not have the legal or regulatory authority to impose fines on the operator of TAPS; however, the DOI Secretary can impose fines up to $1000/barrel under OPA 90.

00009-023: The BLM and the member agencies of JPO investigate all significant spills to assess lessons learned and potential mitigation. There has been no evidence to date that past spill volumes have been reported inaccurately. If natural resource damage claims occur because of a spill, the U.S. Fish and Wildlife Agency or National Marine Fisheries Service conduct studies to evaluate damage to natural resources.

00009-024: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00009-025: Section 1.1 in the EIS lists the current owners of the TAPS in a discussion about the application for renewal of the right-of-way grant.

00009-026: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00009-027: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00009-028: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00009-029: The reader is directed to the discussion of escrow funds found in Section 2.5.

00009-030: The operational history of TAPS, maintenance activities, spill response capabilities, and the potential for spills associated with TAPS were considered in the analysis. Impacts associated with potential spills are discussed in Sections 4.4 of the FEIS.

The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" (APSC 2001g) for the pipeline and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" (APSC 2001h) for the VMT. The C-Plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline or at the VMT. They are available to the public through various libraries in several major cities in Alaska.

The C-Plans are updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline and at the VMT are incorporated into the Plans. See the text box in Section 4.1.1 for a discussion on how lessons learned in response to the vandalism incident near Livengood in October 2001 have resulted in modifications and improvements to the C-Plans for spills and releases along the pipeline. In addition, the C-Plans are reviewed periodically by the BLM, ADEC, DOT, and EPA. As part of this process, APSC and the federal and state agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment is made available along the TAPS.

August 16, 2002

Bureau of Land Management
TAPS Renewal
Joint Pipeline Office
Argonne National Laboratory
EAD/900
9700 S. Cass
Argonne, IL 60439

Port Graham Village Council comments regarding the Draft Environmental Impact Statement (DEIS) for Trans-Alaska Pipeline Right-of-Way Lease Renewal

To Whom This May Concern,

The Native Village of Port Graham submits the following comments regarding the TAPS ROW renewal Draft EIS. The Tribal Council has many concerns regarding the EIS, however it has been very difficult to review and thoroughly understand this lengthy document, our first comment is to clearly convey that the 45 day comment period is not acceptably by our Tribe to effectively review and comment on the draft EIS. The current 45-day comment period falls in the middle of our subsistence season and our Tribal members are especially busy with subsistence activities. This does not allow for full Tribal participation of affected parties and is unacceptable. 10-1

Tribal consultation, as required under Executive Order 13175 and the State of Alaska Millennium Agreement, by every federal and state agency involved in the Joint Pipeline Office, has not occurred. Section 8160 of the Bureau of Land Management's Manual addresses Native American Coordination and Consultation with respect to Native American cultural and religious concerns. The TAPS ROW renewal encompasses many issues (subsistence is but one example) that are inexorably tied to Tribal culture. The BLM Manual lists authorities of the policy that include the National Environmental Policy Act of 1969, the Federal Land Policy and Management Act of 1976 and the Alaska National Interest Lands Conservation Act of 1980 – all of which are directly involved in the TAPS ROW renewal process. 10-2

The Port Graham Village Council does not believe adequate consideration has been given to identify Tribal concerns, the approximately 2,000 plus pages that make up the draft EIS include a mere two and a half pages devoted to Consultation and Coordination (Chapter 5), of those two and half pages, a brief two page address Government-to-Government (Section 5.2). The draft EIS states that "BLM identified 21 affected villages within the TAPS corridor and developed a formal consultation process with those affected villages." The Native Village of Port Graham requests a copy of this "formal 10-3

consultation process" policy. All member agencies of the Joint Pipeline Office are bound by their own policies and Executive Order 13175.

The lack of BLM understanding of appropriate Tribal consultation is illustrated in the draft EIS with the statement: "The BLM will continue to conduct government-to-government interactions with Alaska Natives throughout the NEPA process." Consultation occurs between governments, not with individual Alaska Natives. If the BLM does not have a grasp of this basic premise of Government-to-Government consultation, it is clear that appropriate Tribal consultation has not occurred. 10-3 (Cont.)

There are numerous other sections of the Draft EIS that does not appropriately mention or respectfully recognized Tribes and their role in the TAPS ROW renewal. The Village Council would encourage these discussions with the appropriate BLM officials at a Government-to-Government Consultation process.

The issues of subsistence as defined by BLM officials in the draft EIS is clearly a lack of understanding as it applies to the Native American Cultural and traditional way of life. Since time immemorial, indigenous people that are the ancestors of Native Village of Port Graham devote time to seasonal salmon runs, gathering of native plants and berries and all of the cultural ceremonies that are included in the harvesting of these traditional resources, these practices have been passed down from generation to generation and is still honored by Tribal members today. These practices are a way of life for our Tribal people, it's not about choices or can it be substantiate by a western economic dollar value. The definition as defined in the draft EIS is unacceptable. 10-4

The specific language describing Port Graham as an early Russian Village is a false statement. There is evidence that inhabitants resided in the existing site of Port Graham pre-Columbus. This statement is clearly not accurate and we are skeptical regarding the accountability of the research data in the draft EIS. 10-5

This summarizes the comments of the Port Graham Village Council. As stated in the earlier paragraphs, the Village Council does not feel we have had the time or the resources to clearly understand and review this lengthy document. Please contact the Port Graham Village Council, Violet Yeaton/Environmental Planner or Jim Miller/Natural Resource Specialist if you have any further questions or comments.

Sincerely,

Elenore McMullen/First Chief
Port Graham Village Council

Responses for Document 00010

00010-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue a dialogue with the Bureau of Land Management

00010-002: Please see Section 5.3 of the FEIS.

00010-003: Please see Section 5.3 of the FEIS.

00010-004: Section 3.24 defines and discusses subsistence of rural Alaskans, including the Alaska Natives of Port Graham (see Section 3.24.2.4.4). Absolutely every major point made in the comment is supported by those portions of the EIS dealing with subsistence.

00010-005: Pre-contact settlement does not preclude Russian settlement at Port Graham, the presence of the latter is consistent with information maintained by the Alaska Department of Community and Economic Development.

00011

PETRO STAR INC.

Telephone: (907) 344-2661
Fax: (907) 267-6123

201 Arctic Slope Avenue, Suite 200
Anchorage, Alaska 99518-3030

August 5, 2002

Re: Trans-Alaska Pipeline System Right-of-Way Renewal, Draft EIS Testimony

Dear Sirs:

My name is Jim Boltz and I am the Chief Operating Officer for Petro Star Inc. I am here to give testimony on the TAPS Right-of-Way Renewal Draft EIS.

Petro Star is a wholly owned subsidiary of Arctic Slope Regional Corporation. We operate two oil refineries in Alaska, one in North Pole, and one in Valdez. From these refineries we supply in excess of 200 million gallons of finished petroleum products annually for the Alaska market. We also employ 325 Alaskans in our refineries and fuel distribution facilities. This is all made possible through the availability of ANS Crude Oil shipped on the Trans-Alaska Pipeline System.

The continued viability of Petro Star is absolutely contingent on the long-term economic operation of TAPS. With this in mind I would like to make two comments for your consideration.

First, a renewal period shorter than 30 years could adversely affect Petro Star's operations and our ability to continue to grow and meet Alaska fuel demands. The long-term availability of crude oil is essential to our business. 11-1

Second, the perceived need for a citizens advisory group to oversee pipeline operations is ridiculous and leads to a waste of time and money. Both of which negatively impact the economic operation of TAPS, which in turn impacts Petro Star's ability to provide value-added petroleum products to Alaska. There is more than sufficient oversight currently provided by the many State and Federal Agencies. 11-2

Thank you very much for your time.

Sincerely,

James F. Boltz
Chief Operating Officer

EXHIBIT
TESTER
47

Responses for Document 00011

00011-001: Thank you for your comment.

00011-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

BLM's Trans-Alaska Pipeline System Right-of-Way Renewal Draft Environmental Impact Statement

Public Hearing Comment Form

Use this self-addressed form to submit your TAPS Renewal Draft EIS comments. Please give this completed form to one of the meeting hosts or take it with you and mail it. Make your comments, fold the form, tape it shut, place a stamp on the outside and drop it in the mail. *Comments must be postmarked no later than August 20, 2002.*

Please provide this information:

FOLD HERE

Name

Title/organization

Mailing address

City

State _____ Zip+four _____-_____

FOLD HERE

E-mail (I wish to receive TAPS Renewal EIS information by e-mail at this address) _____

* I DO WISH BLM TO WITHOLD MY PERSONAL INFORMATION.

"THERE IS MORE TIME NEEDED BECAUSE THERE IS MUCH TO CONSIDER WITH THE E.I.S., SUCH AS:

—STATE'S INCREASED %AGE OF REVENUE NOW THAT THE LINE ITSELF IS AMORTIZED. 12-1

—WILL IT HOLD UP, OR NEED TO BE REBUILT, IN THE NEXT LEASE PERIOD. 12-2

—WHY COULDN'T A GASLINE BE BUILT ALONG THIS SAME PIECE OF INFRASTRUCTURE - REAL ESTATE? THE ENVIRONMENTAL IMPACT (STATEMENT) SHOULD ALSO ADDRESS THESE OTHER ELEMENTS OF PLANNING. 12-3

+ —ANOTHER COMMENTATOR MENTIONED EARLIER THAT 20% OF DOMESTIC OIL USAGE CAME THROUGH THE LINE. I SCOFF AT THAT FIGURE AS PROPAGANDA, NEVERTHELESS WE DO MOVE A LOT OF OIL FROM AND ACROSS STATE LANDS.., BUT THE STATE SHOULD NOT HAVE TO RENEW THE LIABILITIES. THANK YOU 12-4

FOLD HERE FOLD HERE

PLEASE EXTEND PUBLIC COMMENT PERIOD, INTO THE FALL. 12-5

EXHIBIT 46

WITHHOLDING OF PERSONAL INFORMATION

It is BLM's practice to make comments, including names and addresses of commenters, available for public review during regular business hours. Individuals may request that their home address be withheld from the public record, and BLM will honor such requests to the extent allowable by law. Circumstances may also arise in which BLM would withhold from the public record a commenter's identity, as allowable by law. If you wish BLM to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, BLM will not consider anonymous comments. BLM will make all submittals from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety. *

Responses for Document 00012

00012-001: Thank you for your comment.

00012-002: The EIS considers anticipated TAPS design, performance, and expected maintenance. The JPO and APSC have entered into memoranda of agreement committing APSC to using reliability centered maintenance (RCM) protocols to form the basis for APSC's maintenance decisions and clarifying expectations from the use of RCM. See Section 4.1.1.7 for additional discussions.

00012-003: Although no proposal is currently being considered for a gas pipeline, the EIS discusses that possibility as reasonably foreseeable in the cumulative analysis (see Section 4.7.4.4.2).

00012-004: The state has determined that it is the state's best interest to renew the TAPS right-of-way lease. The state relies on TAPS-related revenue for a significant portion of the annual operating budget. In addition, several communities along the right-of-way rely on taxes generated from oil industry activities. Moreover, jobs related to the oil industry play an important role in the economic base of many Alaskan communities. State regulators monitor the APSC to ensure compliance with state statutes, regulations, and right-of-way lease requirements. These activities are intended to reduce the likelihood of impacts to state lands and fish and wildlife resources.

00012-005: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

TAPS Right-of-Way Renewal

My name is Tom Maloney. I am a Vice President with VECO Alaska and have been a resident of the State of Alaska since 1989. My professional certifications include being a Certified Public Accountant (CPA), Certified Management Accountant (CMA) and Certified Financial Planner (CFP).

Alyeska has my 100% support to have a thirty-year TAPS right-of-way renewal for the following primary reasons:

1. Tremendous positive impact on the Alaska economy. Alyeska's support of Alaska Hire, Alaska contractors and Alaska suppliers is an important driver of economic performance. 13-1
2. Alyeska and their employee's commitments are outstanding. They are great corporate and individual participants in multiple community and charitable organizations. 13-2
3. Alyeska is operating what I believe is the safest, most reliable pipeline in the world. 13-3
4. In order to encourage long term North Slope exploration and development, Owners need to have confidence that their discoveries can be safely transported to markets. The TAPS ensures that this safe mode of transport will continue. We need new investments for new discoveries to keep our economy sound. 13-4

I will only focus my remarks on a segment of the number one item referenced above – Alaska Hire.

VECO is the 31st largest engineering company in the United States as referenced by a recent 2002 Engineering News Record (ENR) publication. VECO has been headquartered in Anchorage, Alaska since its founding in 1968. Since then VECO has seen the oil and gas industry go from expending virtually all of its engineering and construction dollars, with out-of-state contractors, to today where the majority of dollars are spent with Alaska companies.

13-5

Alyeska has led the way in Alaska Hire and Alaska Contracting opportunities for residents and companies alike. VECO has worked with Alyeska as an engineering contractor since 1994. A tremendously successful program during VECO/ Alyeska contracting period has been the VECO Alaska Native Utilization Program. This program has been in effect since 1996. How is the program going? In one word – GREAT!

In the past three year VECO Alaska has almost tripled our number of Alaska Native hires. We have consistently met and exceeded our set goals since the

program was established. Our goal this year is 17% Alaska Native Hire, and as of July 2002, VECO is at 19%.

The Alaska Native long term hire program encompasses not just outstanding engineering and design interns and employees but also individuals in multiple administrative and technical positions. VECO has been very successful in this effort through continuous support from Alyeska.

VECO has hired individuals from all 13 Alaska Native Regions. The colleges representative of our Alaska Native hires ranges from the fine engineering schools of UAA and UAF in Alaska, to MIT, Clemson, Texas A&M, Stanford and Colorado School of Mines to name but a few.

Without good Alaska job opportunities for these Alaska Native Hire youth, these outstanding individuals would be working in some other State. Alyeska has provided these great job opportunities for Alaska Natives and all other Alaskans.

Alyeska has encouraged great education by providing scholarships for promising Alaskans. At present, VECO Alaska Native summer interns are from UAA, Gonzaga, Purdue, Willamette and other Universities. Their majors include most engineering disciplines, accounting and law. VECO has a full time Alaska Native Hire Manager to ensure our overall program continues to improve. 13-5 (Cont.)

As I am writing this note, the July 14, 2002 Journal of Commerce was published. with an article titled "University to increase engineering graduates". Herb Schroeder a UAA associate professor in charge of the Alaska Native Science and Engineering Program was quoted as follows "The most notable accomplishment of the program, now 5 years old is that 70% of the students are still in the undergraduate engineering program, three and four years after starting, a striking difference with the national average of 27% for Native Americans and about 35% for all students in engineering".

In my opinion, programs like the one at UAA, internships and scholarships provided by VECO, Alyeska and other Alaskan firms are significantly contributing to the success referenced by Mr. Schroeder. Alyeska has been a positive catalyst to make this happen.

Give Alyeska another thirty years to continue its positive impact on Alaska's economy. They have consistently demonstrated their commitment to Alaskans. We need the safe operation of TAPS to ensure future opportunities for our kids and grand kids. 13-6

When people question, "why for 30 years", the answer is as simple as looking at the vast majority of mortgages. An investor needs confidence that it can pay off its committed obligations over the long term just like a homeowner.

13-6
(Cont.)

Should you have any questions on this subject, please contact me at (907) 762-1505.

Tom Maloney
Vice President, VECO Alaska

Responses for Document 00013

00013-001: Thank you for your comment.

00013-002: Thank you for your comment.

00013-003: Thank you for your comment.

00013-004: Thank you for your comment.

00013-005: Thank you for your comment. Positive impacts of the TAPS, currently and under the proposed action, and including access to wage employment, appear in Section 4.3.21.

00013-006: Thank you for your comment.

ENVIRONMENTAL DEFENSE

finding the ways that work

August 20, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

John Kerrigan
State Pipeline Coordinator
Department of Natural Resources
Joint Pipeline Office
411 West 4th Avenue, Suite 2
Anchorage, Alaska 99501-2343

RE: Comments of Environmental Defense on the Draft EIS, Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way, BLM/AK/PT-02/026+2880+990, U.S. Department of Interior, Bureau of Land Management (July 2002) and on the Commissioner's Statement of Reasons and Proposed Written Determination for the renewal of the Trans-Alaska Pipeline Right-of-Way Lease, ADL 63574 (July 5, 2002).

Dear Parties of Interest:

We are hereby submitting our comments on behalf of the 300,000 members of Environmental Defense on the Draft EIS, Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way, U.S. Department of Interior, Bureau of Land Management (July 2002) and on the Commissioner's Statement of Reasons and Proposed Written Determination for the renewal of the Trans-Alaska Pipeline Right-of-Way Lease, (July 5, 2002).

Environmental Defense stresses that the underlying imperative for this process must be one in which the living resources, human communities, wetlands, watersheds, and other important values of Alaska and its waters will be protected and managed in a sustainable manner as the federal grant and state lease for the right-of-way of the Trans-Alaska Pipeline System (TAPS) are considered for renewal.

We are concerned about deficiencies in the current DEIS under NEPA, including the need for the auditing of TAPS at five year intervals and the maintenance of an adequate dismantling, removal, and restoration escrow account to ensure that all future decommissioning and habitat restoration costs are met, and the demonstrated necessity for independent management of the TAPS system distinct from the ownership companies, with citizen oversight accompanied by whistleblower protection.

The DEIS fails to acknowledge that this pending decision to renew the TAPS right-of-way directly affects, for thirty years into the future, a vast geographic region which includes all North Slope drilling operations, the Valdez marine terminal, various river crossings, and also, as the still-lingering ecosystem effects of the Exxon-Valdez tankship accident so graphically demonstrate, all biological resources within the range of any spill originating from the marine transportation system. 14-1

California Office · 5655 College Avenue · Oakland, CA 94618 · Tel 510 658 8008 · Fax 510 658 0630 · www.environmentaldefense.org
New York, NY · Washington, DC · Boulder, CO · Raleigh, NC · Austin, TX Project Offices · Boston, MA · Los Angeles, CA

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Now is the appropriate time for a comprehensive NEPA analysis of each of these sources of environmental impact, as well as for a long-overdue evaluation of the cumulative impact of each of these system components considered in aggregate, particularly since the agencies of jurisdiction now have a real-world track record documenting the tragically-inadequate performance of this system and its components to date. 14-1 (Cont.)

Our specific comments follow herein:

1. Inadequacy of the Draft EIS:

The Department of Interior's Draft Environmental Impact Statement (DEIS) for the Trans-Alaska Pipeline System (TAPS) Right-of-Way Renewal is inadequate and fails to meet the requirements of the National Environmental Policy Act (NEPA). The focus of the current DEIS is inappropriately narrow, and fails to fully disclose the purpose and need for the preparation of a DEIS at this time. The DEIS also fails to provide the reader with an analysis of all direct, indirect, and cumulative impacts of the full TAPS system and all of its component parts. These identified deficiencies cannot be remedied by the publication of a draft supplemental document, but rather must be addressed by the scoping, preparation, and collection of public comments on a new, system-wide, DEIS document that discloses a full range of reasonable alternatives to the proposed action. 14-2

2. Failure of the DEIS to Provide a Cumulative Impact Analysis of the Project in Conjunction with Other Existing and Proposed Projects:

The current DEIS fails to provide a cumulative impact analysis of the present components of the TAPS project in conjunction with anticipated and proposed projects within the geographic scope of the entire TAPS system. This cumulative impact analysis must consider the impact of a new natural gas pipeline, now being proposed parallel to large portions of the existing oil pipeline, and the implications of such a gas line and its associated construction impacts and natural gas infrastructure on the safety and integrity of the existing TAPS oil line. The new DEIS should also evaluate the potential cumulative affects of all OCS offshore drilling activities currently in place or now being proposed by the Department of Interior under that agency's newly-adopted 2002-2007 Five-Year OCS Oil and Gas Leasing Program in federal waters offshore Alaska, as well as current and proposed state offshore oil and gas leases. In addition, future commercialization of subsea and permafrost methane hydrate deposits should be included as part of the complex of cumulative impact issues to be evaluated, considering the thirty-year timeframe being projected in the current TAPS DEIS process. 14-3

3. Inadequate Range of Alternatives to the Proposed Project Considered in the DEIS:

Given the poor performance record of U.S. electrical utilities with respect to end-of-economic-life decommissioning costs for existing light-water nuclear power generating stations, TAPS owners should be required to deposit into an escrow account funds for dismantling and removal of the pipeline and its infrastructure and for full restoration of the natural habitat along the route. Funding for such an escrow account should be a precondition of right-of-way renewal. In addition, the DEIS fails to evaluate the alternative of establishing an independent citizens' oversight council to ensure that the TAPS system and all components are operated and maintained in a manner that safeguards the natural resources of Alaska, that monitors the adequacy of spill cleanup preparedness, and that ensures the safety of continued oil shipment. Citizen oversight of emergency response preparedness is of particular concern as a result of the demonstrated failure of TAPS to maintain adequate spill response capability from the point of origin, along the terrestrial pipeline segments, and throughout the marine transportation component of the system to destination ports. 14-4

4. Inadequate Compliance with the Endangered Species Act:

The current DEIS fails to adequately evaluate the impact of the proposed action on the various endangered and threatened species whose habitat includes the North Slope, Interior Alaska, Southeast Alaska, Prince William Sound, and the North Pacific. Renewal of the right-of-way permit must be accompanied by the requisite Section 7 ESA consultation with the U.S. Fish and Wildlife Service to ensure protection of all species now listed under the ESA. 14-5

Thank you for this opportunity to provide comments on the Draft EIS, Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way, BLM/AK/PT-02/026+2880+990, U.S. Department of Interior, Bureau of Land Management (July 2002) and on the Commissioner's Statement of Reasons and Proposed Written Determination for the renewal of the Trans-Alaska Pipeline Right-of-Way Lease, ADL 63574 (July 5, 2002).

Sincerely,

Richard Charter

Richard Charter
Marine Conservation Advocate
Environmental Defense

Responses for Document 00014

00014-001: The TAPS EIS correctly identifies the area directly and indirectly affected by continued operations of the TAPS for the renewal period. The TAPS EIS also addresses the cumulative impacts of this proposed action together with other reasonably foreseeable past, present, and future actions for vast areas of Alaska, including the North Slope, Interior Alaska, and Prince William Sound, including impacts to biological resources. In addition, in response to comments on the DEIS, the impacts of tanker transportation through the Gulf of Alaska and the Pacific Ocean have been added to the Final EIS.

00014-002: The comment is too general for a specific response. The Bureau of Land Management believes that the EIS is in full compliance with NEPA and the CEQ guidelines.

00014-003: Section 4.7 of the EIS includes a natural gas pipeline from the North Slope as an action addressed in the cumulative impact assessment. This buried pipeline may occupy a separate right-of-way adjacent to the TAPS for some portion of its route. However, a safety analysis of a natural gas pipeline is not included in the TAPS EIS cumulative analysis, which is limited to environmental considerations.

The possibility of reasonably foreseeable petroleum development and production on the North Slope and Beaufort Sea is considered in Section 4.7, “Cumulative Impacts.” Actions included in this analysis include those for which definite plant exist. While leasing on the North Slope, Beaufort Sea, and elsewhere in Alaska will continue in the future, whether (or when) new developments will occur in these areas remains speculative, and will depend on the results of exploration, economics, and regulatory considerations, among others. The right to explore and develop an area is not considered evidence that such production is reasonably foreseeable within the TAPS renewal period.

Since research and development activities related to methane hydrates have recently been initiated on Alaska's North Slope, these activities have been added to the actions for which cumulative impacts are assessed. However, whether methane production by these resources becomes economically feasible and a viable option remains speculative at this time, and is not considered reasonably foreseeable for the purposes of this EIS.

00014-004: The reader is directed to the discussion of escrow funds found in Section 2.5.

00014-005: ESA Section 7 consultation between the BLM, U.S. Fish and Wildlife Service, and National Marine Fisheries Service has been completed for the TAPS ROW renewal project. The EIS has been updated for consistency with the Biological Evaluation prepared to support the consultation. Both the U.S. Fish and Wildlife Service and National Marine Fisheries Service concurred with the conclusion of the BLM that the proposed action was not likely to adversely affect any listed species or designated critical habitat.

00015

Peratrovich, Nottingham & Drage, Inc.

Engineering Consultants

1506 West 36th Avenue • Anchorage, Alaska 99503 • 907-561-1011 • Fax 907-563-4220

August 6, 2002

Project Manager
BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 Cass Avenue
Argonne, IL 60439

Dear Project Manager:

This letter is written in support of Trans-Alaska pipeline right-of-way renewal as currently in place.

We feel it is important for reviewers to fully understand the significance of this project as related to the positive impact on arctic engineering and the general advancement of engineering in general. In addition, the high standards to which the design of this project was held are even now above the standard of many other projects both public and private. These standards include ongoing maintenance.

I personally become involved with the TAPS project in 1971 while serving as a bridge engineer with the State of Alaska. The Yukon River Bridge design was my assignment and a new horizon opened in front of me as design criteria unheard of for bridges was required. Unknown seismic design 20 years ahead of its time was introduced working with such leaders as Dr. Newmark. Cold weather steel was introduced and the bridge was designed for an airplane strike cutting out one box girder without failure. Ice loads of 2600 kips, the highest known, were employed. In short, this early design on the project detailed the measure with which the entire project was designed. 15-1

Over designed – I think not, but prudently designed to last not only the surficial "30-year design life," but much longer.

Function and aesthetics where possible were built into the project as evidenced by the Gulkana Pipeline Bridge, concealing the pipeline, consideration for view planes and contingency planning.

Our company to this day provides engineering services to assure the best in condition of bridges including upgrading 46 access and contingency plan related bridges. All these structures are kept in top condition ready to be of service. The same applies to the main pipeline bridges and other structures.

We can see no reason that the entire system as we know it will not last another 30 years.

We have often commented that the Trans-Alaska pipeline project advanced the field of arctic engineering more than 20 years. This resulted in betterment for a host of other projects to follow, but more importantly assures the longevity of the key economic drive for the State of Alaska.

15-1
(Cont.)

We are available to provide additional technical comment if you have any questions.

Sincerely,

PERATROVICH, NOTTINGHAM & DRAGE, INC.

Dennis Nottingham, P.E.
President

Responses for Document 00015

00015-001: Thank you for your comment.

00016

dba **DELTA**
Thomas B. Wood
P. O. Box 14
Eagle River AK 99577
907.694.9430 Office
907.227.8844
akbucket@alaska.com

FAX TRANSMITTAL

Date:	August 08, 2002
To:	**Argonne National Laboratory EAD/900**
Fax #:	866.542.5904
Subject:	**BLM TAPS Renewal EIS - Testimony**
Pages:	1 including this page
From:	Thomas B. Wood
Fax #:	907.696.2782 Cell 907.227.8844

The Trans Alaskan Pipeline right-of way should be renewed immediately for thirty years. The system has been operating since July 21, 1977 without a hitch. The redundancies within the system to preclude any spillage are numerous and proven.

16-1

The reasons for the renewal abound, and I have listed three. The system (1) has proven itself for the past twenty-five years, (2) is required for the economic viability of the Great State of Alaska and (3) the country needs this alternate source of oil, which is not tied to the ragheads in the Middle East.

The naysayers are nothing more than a narrow focused group of minority fascists clerics that would like to close down Alaska to any economic opportunity in the name of whatever their narrow focus is for that day.

I am an Alaskan resident and a stakeholder of this State, that has lived and worked within the State of Alaska for the past 31 years. I am also an engineer with an advanced degree that knows much more about building and maintaining facilities in the Arctic and sub-Arctic than the sum of all the greenie clerics. My voice is that of a long time Alaskan, a voice that should be heard on this issue, as opposed to the narrow focused groups that are so vocal, but uniformed about Alaskan issues.

Please enter this fax into the public testimony on the issue.

Responses for Document 00016

00016-001: Thank you for your comment.

From: ADNR Administrative Record [ADNR#032#Administrative#032#Record@jpo.doi.gov]
Sent: Monday, August 12, 2002 10:10 AM
To: ffdrk@aurora.alaska.edu; RMCWHORT@jpo.doi.gov
Cc: ed@northern.org
Subject: Re: Trans-Alaska Pipeline permit review

Rob,

I am forwarding these comments to you because they speak to the DEIS.

Janetta

Mike Thompson
State TAPS Renewal Coordinator
411 West 4th Avenue, Suite 2
Anchorage, AK 99501
Phone: (907) 257-1330
ADNR_Administrative_Record@jpo.doi.gov

Fax: (907) 272-0690

>>> <ffdrk@aurora.alaska.edu> 08/09/02 09:20AM >>>
I am submitting the following comments regarding permit review for the Trans-Alaska Oil Pipeline:

1) The Bureau of Land Mangement Draft Environmental Impact Statement does not adequately address the consequences of global climate change which are accounting for global warming with greatest warming on the entire globe occurring in arctic and interior Alaska. The associated thawing of permafrost already occurring and projected to continue by all current climate models (Intergovernmental Panel on Climate Change and Arctic Climate Impact Assessment) will require much greater scrutiny of structural security of the support members in the above-ground sections of the pipeline as temperatures of permafrost continue to increase and thawing continues. New and expensive design modification will need to be developed to deal with this problem as is becoming the case with oil field infrastructure. This will require additional staffing of engineers with appropriate expertise to deal with this situation to insure structural integrity of the line. 17-1 17-2

2)A major shortcomming in the secure and safe opperation of the pipeline has been the inadaquacy of external oversight of Alyeska Service Company's operation and maintenance practices. Major failures in meeting safety-security standards have only been brought to the attention of government oversight and the public by "wistle blowers" working for Alyeska who's commitment to their responsibility for the security and safety of the pipeline was greater that their loyalty to Alyeska and concern for their own job security. This is a totally unacceptable system of assuring that standards for safety and security are met with, especially with the new threat of international terrorism. An external citizen oversight group is needed, composed of qualified representatives of the concerned public, including members of the press. 17-3

David R. Klein
Professor Emeritus
(cimate change scientist and member of the Arctic Environmental Council that existed as a citizen oversight cimmittee during the construction phase of the Trans-Alaska Oil Pipeline)

1662 Taroka Drive
Fairbanks, AK 99709

Responses for Document 00017

00017-001: VSM stability is obviously critical to TAPS integrity. As such, it is the focus of extensive monitoring and surveillance. Please see Section 4.3.2 of the FEIS (Soils and Permafrost) for additional information.

00017-002: The design basis for pipeline structural supports considered impacts such as those that might occur due to climate change. See Section 4.1.3.2.1 for a discussion of structural support design and monitoring.

00017-003: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

From: Sullivan, Robert G.
Sent: Monday, August 12, 2002 1:05 PM
To: Anast, Georgia A.
Subject: FW: General TAPS Question/Comment

Georgia,

Here is the e-mail comment I discussed with you this morning.

Bob

-----Original Message-----
From: Leah Gross [mailto:kleahgross@adelphia.net]
Sent: Tuesday, July 30, 2002 8:50 PM
To: tapswebmaster@anl.gov
Subject: General TAPS Question/Comment

Only YOU can help prevent an oil spill in the 800-mile pipeline region from the North Slope to Valdez, Alaska. I am asking you as a US voter to please pay careful attention to this matter and make sure that you have ALL of the information.

The Trans-Alaska Pipeline System (TAPS) right-of-way lease permits are up for renewal for the first time in 30 years.

The aging 800-mile pipeline and its support systems that were originally built to last 30 years cannot be sustained. According to media articles indicate that the government's plans leave the pipe to rot "for an unlimited duration" and potentially ruin natural habitats.

The fall 2001 spills on pipeline startup, the failed response to the Livengood bullet hole spill, and the 21-inch shift in a section of pipeline that went undetected for 3 months are just the tip of the iceberg. The TAPS 2002 STATUS REPORT lists 7 key recommendations to reduce risk of a TAPS spill from operational failure. Please make sure you consider them. 18-1

Many thanks.

Responses for Document 00018

00018-001: It is correct that the effects of aging have the potential to impact the integrity and reliability of any mechanical system. However, age alone does not dictate reliability or performance. Myriad factors can impact system performance. For example, the manner in which mechanical systems are operated and maintained can greatly influence their long-term integrity, reliability, and performance.

Utilizing its oversight authority, the JPO ensures that APSC's operating and maintenance procedures take all potential impacting factors into account and are sufficient and appropriate to maintain TAPS integrity. The JPO also has the authority to direct APSC to undertake changes, repairs, or upgrades when that is not the case. Under the reliability centered maintenance (RCM) program, all TAPS subsystems are being carefully evaluated for the consequences of their failure and will have maintenance regimens or remanufacture, overhaul, or replacement schedules established that preclude such failures from occurring, if they would have an adverse impact on public safety or the environment.

Each of the three spills that occurred on start-up after a maintenance-related shutdown have been carefully evaluated, and causal factors have been identified. The JPO has required APSC to revise its shut-down and start-up procedures to prevent a reoccurrence. APSC is also required to conduct drills on its procedures to ensure they are correct and complete. Also, APSC has made modifications to piping at pump stations to enhance cold restart capabilities. Summaries of the three incidents are included in CMP Report #11, issued in April 2002. See also Section 4.1.1.4. A summary of the pipeline shift at MP 170 is also included.

The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

Impacting factors such as those that may cause movement in the pipeline are identified in Section 4.2 and are incorporated in analyses presented in Section 4.3. Rather than address each historical event, the analyses used selected events to determine whether pipeline design parameters and ongoing monitoring programs are adequate to identify potentially destabilizing impacts on the pipeline.

00019

NORTHERN AIR CARGO

William Dix Fowler
President & C.O.O.

August 6, 2002

BLM TAPS Renewal EIS, Argonne
National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

Dear Sir or Madam:

The economic impact of TAPS and the 13 billion barrels of oil that have flowed through it are significant to both the public and private sectors in Alaska.

A few of the benefits resulting from TAPS are the thousands of jobs it has created for the people, the funding of state services and the fact that it transports nearly twenty percent of the U.S. domestic oil supply. 19-1

For these reasons, and many others, Northern Air Cargo takes a strong position in this project and would like to renew. 19-2

Sincerely,

William Dix Fowler

NORTHERN AIR CARGO, INC, 3900 W. INTERNATIONAL AIRPORT RD. ANCHORAGE, AK 99502,
DIRECT LINE (907) 249-5101 FAX (907) 249-5190 WWW.NORTHERNAIRCARGO.COM

Responses for Document 00019

00019-001: Thank you for your comment.

00019-002: Thank you for your comment.

☐ 400 WILLOUGHBY AVENUE
JUNEAU, ALASKA 99801-1796
PHONE: (907) 465-2400
FAX: (907) 465-3886

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

☐ 550 WEST 7th AVENUE, SUITE 1400
ANCHORAGE, ALASKA 99501-3650
PHONE: (907) 269-8431
FAX: (907) 269-8918

Natural Resource Conservation & Development Board

August 5, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

Dear TAPS Renewal Team:

The Natural Resource Conservation and Development Board is a five-member board appointed by the Governor representing the five major land areas of the state. The board advises the commissioner of the Department of Natural Resources regarding development of agricultural, forest and grazing land in the state, oversees the conservation of soil and water resources and acts in an advisory capacity to the soil and water conservation districts in the state. In addition, the board and the districts have a functional role in the development and settlement of land.

Alaska's Soil and Water Conservation Districts support the continued transport of Alaskan oil through the pipeline and beyond in a manner that both maintains the delivery system but also protects the environment on land and at sea. Safe operation of the pipeline is of concern to the districts since it runs, for its entire length, within district boundaries. In some areas, the pipeline represents a barrier that restricts access to lands with arable soils, timber, mineral resources and recreation opportunities. Consequently, the holder of this lease should not only manage this invaluable public resource in an efficient and environmentally sensitive manner, but also facilitate conservation and access to adjacent lands through the leased right of way.

During the last few years, we have been working with the Kenny Lake Soil and Water Conservation District and the Alaska Association of Conservation Districts to create access to state lands to the west of the Trans-Alaska Pipeline System at TAPS Milepost 704.2. Creation of access to these lands from the Richardson Highway involved construction of approach roads and a bridge over a segment of below ground pipe. This project required coordination and support from the Alyeska Pipeline Service Company. Alyeska worked with the project team on bridge design and performed a substantial amount of the bridge installation work. The support and cooperation provided by Alyeska during this project exemplifies the kind of stewardship that should be expected of the manager of the TAPS.

20-1

Our working relationship with the Alyeska Pipeline Service Company leads us to believe that this organization has the expertise, experience and attitude towards the state and its residents to successfully manage the TAPS for another thirty years. The Natural Resource Conservation and Development Board supports the Preferred Alternative described in the DEIS that would renew the Federal Agreement and Grant of Right of Way for 30 years. 20-1 (cont.) 20-2

Sincerely,

Art Weiner

Art Weiner. PhD
Executive Director

for

Dick Zobel
Chairman

Responses for Document 00020

00020-001: Thank you for your comment. Public access to the TAPS ROW is addressed in stipulation 1.12 of the Federal Grant and State Lease.

00020-002: Thank you for your comment.

00021

August 5, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 W. Cass Avenue
Argonne, IL 60439

SUBJECT: Comments on TAPS ROW Renewal DEIS

Dear Sir or Madam:

I am a Vice President of Lynden, Inc. Lynden has a long history in the state of Alaska providing logistics and transportation services to the oil and gas industry starting with Cook Inlet in the late 1950's. Lynden transported many of the materials used in the construction of the Trans Alaska Pipeline and has continued to provide services during the 25 years of operations.

I was personally involved in the construction of the pipeline starting in 1970 with the original survey of the route. I was a construction manager for Alyeska Pipeline Service Company during the construction phase between 1974 and 1977, as well as being the manager of the Project Management Department for the expansion of the pipeline in 1979 through 1981. As someone who was a part of the construction, I am well aware of the tremendous efforts that were applied to build a pipeline that would survive for many years beyond its initial thirty-year useful life. We spared no expense to insure that the pipeline would be capable of withstanding any of the operational requirements it would encounter. 21-1

I fully support the renewal of the Right of Way Lease for a full thirty-year term. My family, and myself have benefited tremendously from the economic impact of the pipeline on the State of Alaska. Without the pipeline, the State of Alaska would be dramatically less well off and many of the facilities and services we enjoy would never have been available. 21-2

The track record of Alyeska Pipeline Service Company in constructing and operating the Trans Alaska Pipeline System is well documented and beyond reproach. Alyeska has deserved the rights to operate this project for another thirty years.

Sincerely,

David W. Haugen
10300 Elies Drive
Anchorage, AK 99507

Responses for Document 00021

00021-001: The methods of construction and the TAPS operational history were considered in the analysis.

00021-002: Thank you for your comment.

00022

169 Wildflower Drive
Plymouth Meeting, PA 19462
August 8, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory
9700 S.Cass Avenue
Argonne, IL 60439

Dear Sir:

Even though I live in Pennsylvania, I have walked along portions of the pipeline that is accessible to the public from various highways in Alaska, and have flown over portions while on the way to backpacking on Alaska's north slope. I have also viewed some of the displays along the pipeline route. I also submitted earlier comments concerning the renewal of the pipeline permit.

There are a number of issues that trouble me. The mind set seems to be that since there really have been no *very serious* problems in the past decades with the pipeline, there won't be any problems in the future, so simply give the oil companies a 30-year renewal; just trust them.

Of course, the Exxon Valdez incident showed just what happens when one simply 'trusts' the oil companies to do what they pledged to do.

If the permit were to be renewed for another 30 years, the pipeline would be a 'senior citizen.' Decades of hot oil going through a pipeline in a time of changing climate conditions could pose some serious engineering considerations, considerations that the pipeline was never engineered to meet. The heat pipes on the VSM's show a blockage of 84% to some degree, yet there seems to be blanket assurances that everything will be all right. Climate changes in the permafrost could cause substantial shifting of VSM's, but only 300 are noted as moving, and might require action. What type of monitoring system will be in place to monitor this issue? Technology exists to monitor the shifting of entire mountain sides within fractions of a millimeter; shifting of VSMs should be simple to monitor on a continuous basis on a statistically relevant basis to determine problems in shifting before breaks occur. Exactly what type of monitoring system will be in place to do monitoring. Is it a continuation of the same system that was designed 30 years ago? Is pipeline monitoring based on GPS systems to detect any shifts and relay information in real time? At one location along the pipeline, it was noted on how much shifting that a specific portion of the pipeline could handle in the event of an earthquake. An earthquake shifting might be able to be statistically calculated. What would be the effect of subsidence in a non earthquake area due to permafrost melting? 22-1

I do have to question whether the statement of 'routine monitoring and maintenance' is a satisfactory response. There has been a steady decrease in staffing levels over the years. For a

pipeline that is aging, with corrosion problems and other problems a result of aging, this does not really indicate that now is the time to reduce the efforts. The situation of staff reductions and continued rotations of management is a recipe for failure and ideal for finger pointing in the event of problems.

In the time period of 1998-2000, there was a total of 29 restarts of the pipeline; a process that can result in serious problems if everything is not working properly. These numbers are substantially more than in a time period before then when staffing levels were higher. This seems to suggest an aging system with more problems developing. Rather than some congratulations for doing this process with fewer people and not having a catastrophic spill, it should demand closer scrutiny so that a spill will not occur in the future.

The oil spill from the rifle hole shot in the pipeline apparently went undetected for thirty-six hours. To a terrorist, it could suggest shooting bullet holes along a long portion would be an excellent way of disabling the pipeline for a considerable length of time, since it would be a long time before the collective loss might be detected with current monitoring systems in place.

22-1 (cont.)

The messages of the oil companies seem to be that since there have not been serious problems with the pipeline in the past decades, nothing will happen in the future decades, so simply give a rubber stamp for approval. Using that analogy, I guess I could save a lot of money be canceling all my insurance coverages – auto, house, health. After all, I haven't needed or used them, so why pay the premiums.

There are certain accounting procedures that some corporations have used that may have been acceptable once, but after bankruptcies and the loss of trillions of dollars to investors and pension holders, are looked upon in disfavor. I do not want to read of massive damage to the environment due to failure of certain maintenance that was once considered adequate but really were not once a problem arose, but was rubber stamped by officials at the time of the TAPS renewal for 30 years.

While I could footnote some of the specifics that I have cited, it all comes from public sources that should be readily recognized by reviewers if they are indeed looking over the comments provided, since some will footnote the specific information in their comments.

Sincerely yours,



Robert Franz

Responses for Document 00022

00022-001: Integrity of pipeline structural supports is closely monitored. See Section 4.1.3.2.1 for a discussion on the design, monitoring, and repair of pipeline structural supports and heat pipes. Ongoing monitoring of pipeline corrosion is also discussed in Section 4.1.3.2.1.

The warming in Alaska in the last several decades is recognized. Evidences of warming in areas surrounding Alaska, including the Arctic Sea, as well as air temperatures, permafrost temperatures, and field observations in thermokarst lakes and glaciers are presented in Section 3.12.7.

The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

The comment suggests that "routine" equates to minimal. As the term is used in the EIS, routine means something that continues over time on a deliberate schedule designed to preclude failure of critical subsystems. The maintenance activity itself is very deliberately developed and focused on the particular needs of the system being maintained or the particular threats or forces the system is subjected to. The only thing "routine" about it is that it occurs on a regular schedule.

BLM TAPS renewal EIS
Argonne National Lab EAD/900
9700 S. Cass Ave.
Argonne, IL 60439
To Whom It May Concern:

Let me tell you a story. Three years ago while driving along the Richardson Highway after a camping trip in the Alaska Range, we noticed that one of the pilings holding the pipeline above Upper Miller Creek was severely degraded because of recent flooding. On mentioning it to Alyeska, they pretty much blew us off. On reporting it to the Alaska Forum for Environmental Responsibility, they formally complained about it to Alyeska. It took a long time until Alyeska did anything about the failing piling(three months, in fact), but thanks to AFER something finally was done to save that stretch of the line and avoid a spill that would have polluted almost the entire Tanana and Yukon Rivers. This underlines the need to establish AFER as the citizens pipeline oversight group. This group should be funded by TAPS through the Dept. of the Interior, as is the oversight group in Prince William Sound. State and federal documents did not consider this need during scoping meetings last fall. 23-1

There are other needs/deficiencies that should be considered.

1. The comment period for reading and digesting the nearly 2000 pages of documents relating to the renewal of the TAPS lease should be increased by a minimum of 45 days. It is patently ridiculous that BLM and DNR expected these documents to be read with constructive scrutiny during the summer months, at least in the 45 days allowed. 23-2
2. The pipeline is now 25 years old and, like any aging mechanical equipment, will face major maintenance challenges as the years go by. The fall 2001 spills on pipeline startup, the failed response to the Livengood bullet hole spill, and a 21 inch shift in a section of the pipeline at Atigun Pass that went undetected for several months are just a few reasons why periodic technology and environmental reviews should be made mandatory as a condition of reauthorization of the TAPS. 23-3
3. TAPS dismantling, removal and restoration funds should be immediately placed in an escrow account to assure that, even with potential bankruptcy (a la Enron and World-Com) of the pipeline companies who presently own the line, money will be available to restore the environment. 23-4
4. Despite clear indications that Alaska faces multiple effects from global warming, the state and federal documents do not adequately address climate change and its impacts on permafrost and TAPS structural supports. 23-5
5. A TAPS Employee Concerns Program should be incorporated into lease and right-of-way renewal to ensure critical problems are adequately addressed to prevent spills. 23-6
6. To prevent confict-of-interest, TAPS should be transferred to a single responsible managing party with no North Slope production. 23-7

Since the TAPS right-of-way agreements will set the course for the operation and maintenance of TAPS for the next 30 years, and since this 800 mile line crosses some of Alaska's most beautiful wilderness, these considerations should be taken seriously. Thank you.

Frank J. Keim
2220 Penrose Lane, Fairbanks 99709

Responses for Document 00023

00023-001: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00023-002: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00023-003: At this time the BLM does not see a need to conduct an independent audit of TAPS facilities and the associated management and operation processes. However, audits are one of the tools used by the Bureau of Land Management (BLM) and the agencies of the Joint Pipeline Office (JPO) to evaluate and regulate TAPS operations and maintenance. Examples of audits conducted on TAPS facilities and management systems over the past 10 years include the Quality Technology Company audit of TAPS, Arthur D. Little Audit of TAPS, AKOSH electrical systems audit, BLM audit of TAPS Employee Concerns Program, JPO audit of Section 29 compliance, and various others. Past audits targeted areas that had insufficient information required to determine the adequacy of the conduct of operations.

In addition to formal audits, BLM and the member agencies of JPO conduct ongoing reviews of TAPS operations and maintenance. Examples include:

- Ongoing oil spill contingency planning (tri-annual) and response capability reviews (annual),
- Field surveys of stipulation requirements, such as fish passage inspections,
- Comprehensive Monitoring Program Reports (12 published since 1996), and
- Reliability Centered Maintenance (RCM) systems reviews (ongoing).

While targeted audits, inspections, field surveys, and monitoring programs provided useful information on the condition of TAPS, targeted assessments of specific activities do not generally provide the necessary framework to systematically address all critical TAPS functions and their associated reliability. Thus, the BLM and member agencies of JPO in close cooperation with APSC have begun a systematic process to identify the critical functional components of TAPS. The process, called reliability centered maintenance (RCM), is an ongoing system-by-system audit that determines function, failure modes, consequence and preventative maintenance of critical systems. The BLM is committed to RCM and believes that this process represents a pro-active approach to oversight and regulation of TAPS. In addition, RCM is widely used in the airline and other industries as the standard tool for reducing risk of failure to critical system components. Reducing risk in TAPS critical systems directly translates to reducing safety and environmental risks.

00023-004: The reader is directed to the discussion of escrow funds found in Section 2.5.

00023-005: Please see Section 4.3.2 of the FEIS (Soils and Permafrost) for additional information.

00023-006: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent's office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00023-007: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00024

LYNDEN LOGISTICS

August 5, 2002

6441 South Airpark Place
Anchorage, Alaska 99502-1809
(907) 245-1544
Fax: (907) 245-1744

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S Cass Avenue
Argonne, IL 60439

SUBJECT: Comments of the Draft EIS

Dear Sir or Madam:

I am a Vice President of Lynden Logistics, a subsidiary company of Lynden, Inc. Lynden has a long history in the state of Alaska providing logistics and transportation services to the oil and gas industry starting with Cook Inlet in the late 1950's. Lynden transported many of the materials used in the construction of the Trans Alaska Pipeline and has continued to provide services during the 25 years of operations.

Lynden fully supports the renewal of the Right of Way Lease for a full thirty-year term. 24-1
Lynden has benefited as a company from the transportation services it has provided but, in addition, all Lynden employees, including my family, and myself have benefited tremendously from the economic impact of the pipeline on the State of Alaska. Without the pipeline, the State of Alaska would be dramatically less well off and many of the facilities and services we enjoy would never have been available. 24-2

As a company that is in the transportation business, we appreciate doing business with well constructed and operated organizations. The track record of Alyeska Pipeline Service Company in constructing and operating the Trans Alaska Pipeline System is well documented and beyond reproach. Alyeska has deserved the rights to operate this project for another thirty years. 24-3

Sincerely,

LYNDEN LOGISTICS, INC.

Jeanine St. John
Vice President

AN EQUAL OPPORTUNITY EMPLOYER

Responses for Document 00024

00024-001: Thank you for your comment.

00024-002: Thank you for your comment.

00024-003: Thank you for your comment.

Mentasta Lake Traditional Council
P.O. Box 6019
Mentasta Lake, Alaska 99780-6019
(907) 291-2319 or (907) 291-2328

August 7, 2002

BLM/TAPS Renewal Scoping
Argonne National Laboratory, EAD/900
9700 South Cass
Argonne, IL 60439

Dear Sirs:

Mentasta Lake Village was not included in the Government-to-Government Consultation Process, yet as a village in the Ahtna region, we experience definite impacts from the TAPS/ROW. Executive Order 12898 (59 FR 7629) directs federal agencies to include environmental justice considerations as part of their missions, addressing the disproportionately high and adverse human health or environmental effects of their actions, programs or policies on minority and low- income populations. Section 4-4 of Executive Order 12989 identifies subsistence issues as a particular concern. Other effects discussed by EPA guidelines in particular impact areas including ecological, human health and socioeconomic analysis. Some impacts we face as tribal governments include being tasked with (and under-funded for) the disproportionately high and negative impacts to our lands and their ecosystems, not to mention the socio-cultural and socio-economic impacts that accompany. 25-1 25-2

Many communities should have received economic benefits that include improved education facilities, economic development, socio-cultural awareness, etc. But with the decline in Federal and State funding, the quest for improvements becomes increasingly difficult as we compete for limited and declining resources. Tribes, with less resources, bear a disproportionate share of negative environmental consequences.

The JPO agencies would continue to use risk-based approach to overseeing applications, whereas the familiarity of culture, historic uses, subsistence patterns and changes, and other terrain knowledge needs to be inserted in the risk-based method of thinking to estimate the true impacts of possible events. For example, an oil spill that reached the Copper River impacts the spawning habits of salmon at Batzulnetas on Tanada Creek, which is the main source of subsistence fishing for Mentasta residents. Section 3.24 discusses subsistence as "difficult to estimate relative impact of subsistence harvests because consumption and exchange of subsistence products do not occur in the marketplace". This shows the need for further study. Subsistence is discussed in Section 3.24 in figures, techniques, reasons and a brief discussion of harvest patterns, with old and inaccurate data. It is apparent that the study still does not grasp the full impact of subsistence. A history has been provided, but there does not seem to be an understanding 25-3

of the true impact a spill, for example, would have on one river. A failure to protect our Tribal members historical subsistence use and livelihood in this area and along the entire Copper River puts at risk a catastrophe that cannot be measured in dollars. BLM is authorized to fund any study it finds necessary in the course of its monitoring of TAPS and can oblige TAPS owners to fund studies, so a study on Tribal impacts should be funded that would present an updated and clearer picture of impacts on Alaska's Native population. The census figures used in the EIS were from 1990, and reflect "minority" figures that do not clarify Native figures. Since the ROW Agreement was with Alaska Natives and not any other ethnic or minority group, an updated census needs to be analyzed for Native benefit. The 20% Native hire figure by 2004 has not been met, and an adjustment for education and training was not the original intent of the figure agreed upon. Much has changed since the 1990 census figures that were used and old figures only present gross inaccuracies.

25-3 (cont.)

25-4

25-5

Many other issues need to be fully addressed and if BLM and ADNR were truly working to satisfy both federal and state requirements of Government Consultations, they would honor the tribe's requests to participate. There is still a need for Tribal participation on the Joint Pipeline Office and a "tribal" draft Environmental Impact Statement should be considered. Since Native land interests are at risk and need protection, Native oversight should be required. There should be consideration for reimbursing the expenses incurred in defense of subsistence and land rights during the establishment and continued use of the right-of-way, including legal and consulting expenses and issues associated with trespass enforcement.

25-6

The EIS discusses State and Local expenditures (3,23.3.5.3/4) but fails to consider the fact that the Glennallen area does not tax the pipeline and there is an impact in the level monies available for community programs and education spending in its surrounding communities, including Mentasta. Again, the level of expenditures per capita will only decrease and the Tribal Governments will again, unfairly, assume many responsibilities.

25-7

What the EIS did not do was address what will be done to correct the deficiencies, such as trespass concerns and land use issues. The EIS also suggests that sociocultural impacts would be negative but small, but the continued fragmentation of rural Alaska Natives and non-Native sociocultural conditions is important and needs further study.

25-8

Since the EIS was not received by the tribes in a timely manner, we can only continue to encourage the agencies to provide a "sufficient opportunity for productive participation". We expect to submit further comments as this lengthy document is reviewed further.

25-9

Sincerely,

Donna M. Pennington

Donna M. Pennington
Council Member

Responses for Document 00025

00025-001: In a letter dated July 16, 2001, Mentasta Village Council asked to be included as a "directly impacted tribe of Ahtna along the ROW corridor." The BLM responded in a letter dated August 7, 2001 that described the criteria for determining which tribes should be involved in the "fullest level of consultation." The BLM offered to add the Mentasta Traditional Council to the list of directly affected tribes "if you could provide us with written rationale related to the criteria above or other good reasons for including your tribe." The BLM did not receive a response to this request.

00025-002: Section 3.29 discusses the evaluation of environmental justice in the EIS, which is consistent with points made in the comment. Sections 4.3.25 (proposed action), 4.4.4.19 (spills), 4.5.2.25 (less-than-30-year renewal alternative), 4.6.2.25 (no-action alternative), and 4.7.8.7 (cumulative impacts), in turn, examine anticipated impacts associated with environmental justice. In the absence of anticipated high and adverse impacts, a precondition stated in Executive Order 12898, environmental justice impacts are not anticipated under any of the alternatives or cumulative actions considered in the EIS.

The flow of federal and state funds to tribal governments in general is beyond the scope of this EIS. Overall state expenditures are expected to increase slowly under both renewal and non-renewal alternatives (Tables 4.3.14 and 4.6.19). However, state budget problems call into question how these expenditures will be distributed, possibly putting certain expenditures that affect Alaska Natives and rural Alaskans in general at risk (see revisions to Section 3.25.1.3).

00025-003: The EIS team examined a broad range of information on eight Alaska Native sociocultural systems whose traditional areas intersected (or occurred near) the TAPS, in part to develop a better understanding of a range of potential impacts to Native peoples. The evaluation of subsistence employs the best available data to conduct a community-specific evaluation of subsistence. It also coordinated the evaluation of potential impacts with other sections of the EIS that examined impacts to important subsistence resources, such as the coordination of Section 4.4.4.14 (anticipated impacts of spills on subsistence) with Sections 4.4.4.3 (anticipated impacts of spills on surface water) and 4.4.4.10 (anticipated impacts of spills on fish). Instead of evaluating potential impacts of spills into each of the roughly 800 waterways that the TAPS crosses, the EIS looked at categories of waterways, identifying some situations (narrow, shallow, low-volume waterways with large spills) to be particularly serious.

Although additional data almost always are desirable, the information available on subsistence was adequate to evaluate likely impacts under all alternatives considered in the EIS. It is important to note that with respect to spills such occurrences are not part of the normal operation of the TAPS, owner companies make considerable effort to avoid spills, and the likelihood of a large spill into a specific waterway is extremely remote (see Section 4.4.1).

In the identification of subsistence concerns explored in this EIS, the document identified sociocultural and ceremonial roles of this activity for Alaska Natives in addition to economic roles—acknowledgment that negative impacts to subsistence indeed would extend beyond those that can be measured in financial terms. The discussions of subsistence and sociocultural systems (Sections 3.24 and 3.25) have been revised to present this position more clearly.

00025-004: The reader is directed to Section 2.5 of the EIS.

00025-005: The comment incorrectly states that the DEIS used 1990 census figures to identify minority status. As noted in Section 3.29, the document used data from the 2000 census (the most recent decennial census) to identify minority status. The census aggregates statistics for Native peoples (Native Americans, Alaska Natives, and Native Hawaiians) for presentation, although data are collected for broad groups of Alaska Natives (e.g., Athabascans). The DEIS did use 1990 data to identify low-income status for small geographic units (block groups), as the 2000 census data were not released at the time of document preparation (as noted in Section 3.29).

The FEIS includes the 2000 census data for low income, which have since been released (also noted in Section 3.29). Any adjustments in Section 29 of the Agreement and Right-of-Way for Trans-Alaska Pipeline in terms of education and training were not discussed in the DEIS. Most recent data on Alaska Native hires are presented in Section 4.3.21.1, as is the explicit assumption of APSC compliance with Section 29.

00025-006: Establishment of a Tribal oversight role for TAPS operations and maintenance, and tribal representation in the Joint Pipeline Office, are outside the scope of the environmental impact statement process for the renewal of the federal grant of right-of-way. In addition, legal and regulatory circumstances do not allow BLM to create a specific TAPS Tribal oversight group.

Although Executive Order 13175 requires BLM to consult with Tribal groups through government-to-government consultation, it does not exempt BLM from its statutory authority to provide regulatory oversight for all TAPS operations and maintenance. This authority cannot be displaced, shared, or abdicated. Agencies that operate within the framework of the Joint Pipeline Office (JPO) also derive their oversight responsibilities from specific statutes and regulations. As with the BLM, these authorities form a legally binding regulatory responsibility on the agency.

Tribal participation and Tribal input has and will continue to be a fundamental component of the government's responsibility to ensure safe and environmentally-protective TAPS operations. Many laws and regulations that direct specific TAPS oversight and compliance issues include mandated Tribal as well as public review and comment—for example, subsistence hearings and oil spill response planning. In addition, specific input has been sought from the 21 directly affected tribes—such as the request to contribute traditional ecological knowledge and information on traditional cultural properties, invited via certified mail in April 2002. In general, review and comment by Tribal groups and the public ensure full and open disclosure of the decision-making process. In addition, BLM-Alaska has a legally authorized Regional Advisory Council (RAC) that meets regularly to discuss land management issues in Alaska. The RAC is composed of a diverse cross-section of citizens, including Tribal representatives who provide advice to BLM-Alaska and who work together in a collaborative setting.

00025-007: The nature of the fiscal relationship between the City of Glennallen and the State of Alaska, levels of public expenditures, and any changes in such expenditures beyond impacts associated with the alternatives considered in the EIS, are beyond the scope of this document.

00025-008: Although Section 4.3.23.1 notes trespass concerns on Alaska Native lands, such impacts were not judged to be severe, and thus within the context of an EIS mitigation measures would not be required. The same general logic holds for sociocultural impacts associated with the TAPS, such as those discussed in Section 4.3.21.

This is not to say that either land use or sociocultural issues of the sort cited in the comment do not deserve attention, but rather that they should be addressed outside the EIS process -- particularly when they are not necessarily associated with continuation of the TAPS.

00025-009: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00026

RCW 8/20/02 9:09

CHENEGA CORPORATION

Phone: 907.277.5706
Fax: 907.277.5700
e-mail: chenega@chenegacorp.com
Aleut Plaza, 4000 Old Seward Highway, Suite 101, Anchorage, Alaska 99503

August 20, 2002

Joint Pipeline Office
411 West 4th Avenue, Suite 2
Anchorage, Alaska 99501

TAPS RIGHT OF WAY RENEWAL: COMMENTS ON DRAFT EIS

Thank you for the opportunity to comment on the Trans-Alaska Pipeline System (TAPS) Right-of-Way (ROW) Draft EIS. Following are general comments submitted on behalf of Chenega Corporation.

1) CHENEGA CORPORATION BELIEVES THE PAYMENT OF PUNITIVE DAMAGES BY EXXON MUST BE MADE PRIOR TO ANY RE-ISSUANCE OF RIGHT-OF-WAY PRIVILEGES

As one of the owners of the Trans-Alaska Pipeline System, Exxon stands to greatly benefit economically from any re-issuance of right-of-way privileges. It is our firm belief that Exxon should be made to pay all outstanding punitive damages arising from the 1989 Exxon Valdez Oil Spill, damages that have been pending for more than a decade, prior to being allowed to receive any additional economic benefit as a result of right-of way renewal.

26-1

We request that Section 30 of the Code of Federal Regulations be implemented to provide for coverage of cumulative damages to the subsistence economy of Prince William Sound.

We have attached a document indicating Congressional intent for Alaska Natives to be provided with restoration if the TAPS ROW should result in negative impacts to subsistence resources. This matter was addressed as a part of the initial pipeline approval process, and if these regulations are not followed, it casts doubt upon the ultimate effectiveness of the current renewal process.

2) CHENEGA CORPORATION BELIEVES THE RESOLUTION OF PAST PROMISES MADE BY TAPS OWNERS TO THE CHUGACH PEOPLE MUST BE RESOLVED PRIOR TO ANY RE-ISSUANCE OF RIGHT-OF-WAY PRIVILEGES

In return for its withdrawal of claims to lands in the vicinity of Valdez, Chugach Alaska Corporation and its people were promised the provision of employment and training opportunities, as well as the protection and conservation of the natural resources of the lands and waters for subsistence and other uses.

26-2

To date, nearly 30 years following the original TAPS ROW Agreement, the

promises for employment and training opportunities have yet to be meaningfully fulfilled and the promises of environmental conservation and protection were irreparably broken at the time of the 1989 Exxon Valdez Oil Spill.

It is Chenega Corporation's firm belief that meaningful, preferential contracting, employment and training opportunities must be included, monitored and enforced as part of any ROW renewal to assure the promises made nearly 30 years ago are upheld and implemented and that the accountability of those responsible for the 1989 Oil Spill are rendered prior to any re-issuance of ROW renewal. 26-2 (cont.)

3) CHENEGA CORPORATION BELIEVES THE POTENTIAL NEGATIVE IMPACTS OF THE TAPS MUST BE ACKNOWLEDGED AND PREPARED FOR PRIOR TO ANY RE-ISSUANCE OF RIGHT-OF-WAY PRIVILEGES

While Chenega Corporation fully recognizes the great benefits brought about by the existing TAPS, as one of the most affected landowners in the 1989 Exxon Valdez Oil Spill, we also recognize the severe and long-lasting damage that such a system can create as well. Chenega lands continue to be affected by damaging levels of residual oil, as shown by the attached map and tables, which indicate that the impact of oil on our subsistence use areas will last for many decades to come. The Chenega people's subsistence way of life and psychological well being are still heavily impacted by the Spill's harm. Only by acknowledging and preparing for such potential future harm can we be assured of greater future security for our lands and our people. 26-3

We feel this goal can best be accomplished by implementing and operating a First Responder System at the Village of Chenega Bay. Not only will the security of our environment be enhanced by such a facility, but by maintaining such a Response System at Chenega, necessary equipment and trained manpower will be ready at a moment's notice to provide required response services.

A detailed baseline study that addresses the on-going impacts of the Chenega people's subsistence way of life as a direct result of the Oil Spill would also be a positive starting point for recognition of harm and a beginning point for healing. 26-4

The existing communication and outreach program has not been effective in addressing our needs in terms of oil spill response, environmental issues, and promises made to the Native people of the Chugach Region. 26-5

4) CHENEGA CORPORATION BELIEVES INCREASED CONTRACTING AND EMPLOYMENT OPPORTUNITIES MUST BE INCLUDED AND ENFORCED IN ANY TAPS ROW AGREEMENT PRIOR TO ANY RE-ISSUANCE OF RIGHT-OF-WAY PRIVILEGES

While efforts to live up to their Section 29 commitments by the TAPS owners have increased in recent years, it is our firm belief that even greater improvements need to be made and that some enforceability mechanism should be added to the ROW grant to ensure such improvements occur, as no enforcement mechanism beyond closure of the pipeline 26-6

presently exists. This mechanism should incorporate realistic compensation for damages and noncompliance.

Additionally, the increased capabilities of the Corporations within the pipeline and marine corridors must also be recognized and acknowledged as part of reaching Section 29 and contracting commitments. Using Chenega Corporation as an example, our capabilities for manpower and contracting have vastly increased over the past 30 years and there are now several contracting and employment opportunities associated with the TAPS that can be effectively provided by our Corporation that did not exist at the time of original ROW creation nearly 30 years ago. 26-6 (Cont.)

The TAPS ROW agreement should incorporate first right of refusal and sole source rights for the above mentioned services to Chenega. We would like to point out that this right should have been provided to us over the first 30 years of TAPS according to the promises made to tribes prior to and during the process of building the pipeline in exchange for right of way easements. We expect Alyeska to fulfill the obligation to provide minority contracting opportunities as required in Section 28 and the Native contracting provisions of Section 29.

5) COMMENT PERIOD

Chenega Corporation would like to express our displeasure with the length of the comment period for responding to the DEIS. This document took over a year and several million dollars to develop, clearly it requires more than 45 days for a detailed public review. We believe the comment period ought to be extended for another 45 days. 26-7

6) VAGUENESS OF NATIVE SECTIONS

The sections of the DEIS intended to summarize impacts on Native communities (Section 3, Appendices D and E) were not developed with any input from anyone in Chenega. There are inaccuracies and missing information in the presentation of Chenega's current lifestyle and economy, and therefore the report does not accurately reflect the impact that TAPS could have on our community's socio-economic, cultural and psychological well-being. The people of Chenega are particularly qualified to provide input on this subject due to our ongoing experience with the impacts of oil contamination. 26-8

In conclusion, while Chenega Corporation supports the ROW extension for 30 years DEIS alternative, it remains gravely concerned with the primary issues highlighted above and optimistic that these recommended measures may be incorporated into any final Federal right-of-way grant. Again, because of the limited response time, we are not able to detail all of these inaccuracies. 26-9

Thank you again for consideration of our comments.

Sincerely,

Charles W. Totemoff
President & CEO

Attachments

Responses for Document 00026

00026-001: The reader is directed to the discussion of Exxon Valdez payments in Section 2.5.

The BLM recognizes that there may be interactions between the TAPS and subsistence resources. The BLM also notes that current information does not show a relationship between TAPS and subsistence impacts. The BLM and State of Alaska within JPO are currently working with industry and others to develop a science-based approach to determine how TAPS and subsistence resources interact.

00026-002: Section 29 issues have been a major component of the ongoing government-to-government process under TAPS renewal. BLM welcomes continued dialog with all affected Native Tribes related to Section 29 issues.

A copy of the 2001 Alaska Native Utilization Agreement (ANUA) and its implementing plan have been added to the FEIS as Appendix F. These documents detail the Section 29 requirements, as agreed to by the company and BLM/DOI.

00026-003: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

The Oil Discharge Prevention and Contingency Plan (C-plans) for the pipeline, VMT and PWS provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill to the environment. Some of the oil spill response crews reside in local villages along the pipeline.

The C-Plans are updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline, VMT and PWS are incorporated into the Plans. In addition, the C-Plans are reviewed periodically ranging from every year to every 5 years by BLM, ADEC, DOT, EPA. As part of this process, APSC and the Federal and State agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment and personnel are made available along the TAPS. Recommendations concerning the spill response process, equipment and training are noted. However, recommending specific methods for mitigating future oil spills should be done as part of the C-plan review.

00026-004: The BLM recognizes that there may be interactions between the TAPS and subsistence resources. The BLM also notes that current information does not show a relationship between TAPS and subsistence impacts. The BLM and State of Alaska within JPO are currently working with industry and others to develop a science-based approach to determine how TAPS and subsistence resources interact.

00026-005: Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments," requires that the federal government consult with Tribal governments during the preparation of an EIS. Government-to-government consultation for this EIS is described in Section 5.3. As the lead federal agency associated with this EIS, the BLM established government-to-government exchanges with all tribal governments in Alaska and more focused exchanges with 21 tribes directly affected by the TAPS. Chenega Bay and other villages in the Chugach Region are included. These 21 communities received more detailed mailings explaining the proposed ROW renewal, the EIS process, and the various sources of additional information. Meetings were held with all Tribal organizations and Native groups that requested them to discuss the EIS process and related issues in greater detail. At the meetings, specific emphasis was placed on how Tribal organizations and Native groups can participate effectively in the EIS and ROW renewal processes. The BLM and member agencies of the JPO are committed to ongoing government-to-government consultations and welcome invitations to participate in meetings and dialogue with Tribal organizations and Native groups.

00026-006: Section 29 issues have been a major component of the ongoing government-to-government process under TAPS renewal. BLM welcomes continued dialog with all affected Native Tribes related to Section 29 issues.

A copy of the 2001 Alaska Native Utilization Agreement (ANUA) and its implementing plan have been added to the FEIS as Appendix F. These documents detail the Section 29 requirements, as agreed to by the company and BLM/DOI.

00026-007: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00026-008: Chapter 3 (Section 3.24.2.4.1) and Appendix D (Section D.2.3.4.1) discuss Chenega in particular, and have been revised to summarize characteristics of this community more thoroughly. Appendix E does not have a section discussing Chenega.

In April 2002, EIS preparers contacted the 21 directly affected villages by certified letter to invite additional participation in preparing this EIS, specifically focusing on traditional ecological knowledge and traditional cultural properties. Chenega was among the villages contacted; neither they nor any other villages have responded to this invitation.

00026-009: Thank you for your comment.

00027

ERIC TROYER
2011 RED BERRY ROAD
FAIRBANKS, AK 99709

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

To whom it may concern,

I am concerned about the renewal of the right-of-way agreements for the Trans-Alaska Pipeline System. There are two main things I am concerned about: sufficient oversight and proper maintenance.

I support the call for an oversight committee with strong citizen participation similar to what was formed in the wake of the Exxon Valdez oil spill of 1989. As citizens of Alaska we have the most to lose when the next oil spill occurs. Therefore, we should have a say in how the pipeline is being run. 27-1

Also, the pipeline is getting old and the climate is changing. Despite all the maintenance that is done on the pipeline these things need to be taken into formal consideration. As time marches on maintenance, oversight and examinations of the pipeline need to be increased. 27-2

I am not soothed by the comments of TAPS administrators that it would be counterproductive for TAPS to not take proper care of the pipeline. I believe that TAPS employees are good people, however, recent events have shown us that it is foolish to completely rely on businesses to take care of themselves. While a few administrators may (or may not) pay the price for their mistakes, it's the little guy who really gets hurt.

Thank you.

Sincerely,

Eric Troyer

Responses for Document 00027

00027-001: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00027-002: The warming in Alaska in the last several decades is recognized. Evidences of warming in areas surrounding Alaska, including the Arctic Sea, as well as air temperatures, permafrost temperatures, and field observations in thermokarst lakes and glaciers are presented in Section 3.12.7.

The JPO and APSC have entered into an agreement to apply reliability centered maintenance methodologies to TAPS maintenance to ensure continued integrity. See Section 4.1.1.7, third paragraph.

From: "rick larimore" <rick@sunsetdigital.net>
To: <ADNR_Administrative_Record@jpo.doi.gov>
Date: 8/13/2002 3:02 PM

00028

The Trans-Alaska Pipeline sends one million barrels of oil each day across 800 miles from Alaska's North Slope to the port of Valdez. It crosses public land for almost the whole journey, thanks to a 1974 agreement. That land includes 80 rivers and streams, three mountain ranges, and some of Alaska's most spectacular locations.

If the pipeline is re-authorized, it must be accompanied by the strictest possible environmental standards. That means the following: - An independent environmental review should be conducted by the BLM and the State of Alaska. - Additional periodic reviews should be mandatory. - Citizen advisory councils, representing local people and interests, should be given a formal oversight role. 28-1 28-2

Thank you,
Richard Larimore
716 N. Ontario St.
Burbank, Ca 91505

****
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Responses for Document 00028

00028-001: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00028-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

From: "Jim O'Neil" <jimo@proaxis.com>
To: <ADNR_Administrative_Record@jpo.doi.gov>
Date: 8/13/2002 3:10 PM
Subject: Offical Comment on Trans-Alaskan Pipeline Re-authorization
CC: <jim_oneil@hp.com>

00029

Dear Sir or Madam -

I am opposed to Re-authorizing the trans-Alaskan pipeline, but if re-authorization does occurs it must be accompanied by the strictest possible environmental standards. That means the following: 29-1

- An independent environmental review should be conducted by the BLM and the State of Alaska. 29-2
- Additional periodic reviews should be mandatory.
- Citizen advisory councils, representing local people and interests, should be given a formal oversight role. 29-3

The Trans-Alaska Pipeline crosses public land for almost the whole 800 mile journey. That land includes 80 rivers and streams, three mountain ranges, and some of Alaska's most spectacular locations. Please do whatever you can to protect this national treasure.

Sincerely,

Jim O'Neil
136 NW 21st St. #2
Corvallis, OR 97330
(541)715-0647

Responses for Document 00029

00029-001: Section 4.4.4.7, “Human Health and Safety,” provides a detailed analysis of the potential effects of oil spills on human health.

The BLM and member agencies of the JPO are committed to the protection of human health and the environment. The Federal Grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of TAPS) within the Federal Grant contain numerous provisions that are protective of human health and the environment.

00029-002: The reader is directed to Section 2.5, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00029-003: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

Aug 9, 2002

Good day,

00030

I wish to make my opinion known concerning the renewal of TAPS for another lease. Many considerations must be taken into account. How long will this lease run? We are looking at a pipeline that was engineered to last 30 years. What safety measures must be implemented to prevent a spill and the importance of an adequate responce team if a spill should occur. As a resident of the Copper River Basin, my home, lifestyle and spiritual health depend upon a healthy, oil free Copper River. The pipeline crossis 76 tributaries of the Copper River. You must keep these oil free. 30-1

Walt Parker, who chaired the Oil Spill Commission and Stan Stephans, who has been a leader of the Prince William Sound Advisory Committee for many years along with other knowledgable Alaskans have come up with several practical, positive reccomendations which will work toward the only acceptable goal, of "no" oil spill and quick responce.

I endorse these reccomendations which are summarized as follows:

1. Establish a Citizen's Oversight group. 30-2
2. Changes to the way DR&R funds (for future dismantling, removal & restoration of the pipeline) 30-3

3) Require Alyeska to pass an independent evaluation every 5 years in order to keep its lease. 30-4

4) Set up an advisory panel to consider how to best provide a single responsible managing party and a stable source of funding for TAPS. 30-5

5) Establish an Employees Concerns Program (in the grant and lease) so that Alyeska employees can speak up about pipeline problems without fear of harassment, intimidation or retaliation. 30-6

6) Provide for a review of old lease stipulations to be sure that reflect the past 3 decades of A) scientific and technological advances B) and experiences in TAPS operation 30-7

7) Provide for an immediate North Slope to Valdez "audit" of the condition of the pipeline, based on employee knowledge. 30-8

I know you have these reccomendations and I pray to god that you will do what is right and implement these possitive steps. Profit margin, increased jobs, streamlining ect. mean nothing if the pipeline spills oil. We must protect and nurdure our Earth for future generations. I often look at my grandchildren and wonder what legacy we are giving them. Please consider all of the above criteria. 30-9

Sincerely,
Linda Rutledge
P.O. Box 91
Copper Center
AK 99573

Responses for Document 00030

00030-001: The preferred alternative presented in the FEIS is to renew the Federal Grant of Right-of-Way for 30 years. The text in the FEIS has been revised to address specific concerns regarding the Copper River. Please see the text box in Section 4.4.4.3.

00030-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00030-003: The reader is directed to the discussion of escrow funds found in Section 2.5.

00030-004: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00030-005: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00030-006: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent’s office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00030-007: The BLM and member agencies within the JPO utilize an adaptive management approach in the oversight of TAPS operations and maintenance. Adaptive management uses ongoing surveillance, monitoring and testing that provides APSC and JPO with the data and information necessary to evaluate and change, if conditions warrant, the operations and maintenance of TAPS. Examples include:

- Ongoing oil spill contingency planning (tri-annual) and response capability reviews (annual),
- Field surveys of stipulation requirements, such as fish passage inspections,
- Comprehensive Monitoring Reports (12 published since 1996),
- Issues raised by the public (e.g., the Thompson Pass slack line and the Valdez tugs) and by the APSC workforce (e.g., electrical),
- Inspections by the State Fire Marshal as part of the JPO, and
- Routine surveillance that is outside of formal audits.

In addition, the BLM and member agencies of JPO, in close cooperation with APSC, have begun a systematic process to identify the critical functional components of TAPS. The process, called reliability centered maintenance (RCM), is an ongoing system-by-system audit that determines function, failure modes, consequence and preventative maintenance of critical systems. The BLM is committed to RCM and believes that this process represents a pro-active approach to oversight and regulation of TAPS. In addition, RCM is the industry standard for reducing risk of failure to critical system components. Reducing risk in TAPS critical systems directly translated to reducing safety and environmental risks.

00030-008: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00030-009: Thank you for your comment.

00031

510-540-4163

August 15, 2002

Robin Colna

416 Durham Ct. , ♦ Mantua, NJ 08051

BLM Director Kathleen Clarke

Subject: Aging Pipeline Requires Environmental Safeguards

Dear BLM Director Kathleen Clarke:

Thank you for the opportunity to comment on this important Draft Environmental Impact Statement for the future safety of the aging Trans-Alaska Pipeline (TAPS). Before any pipeline renewal or lease agreement, government agencies must ensure critical safeguards are established.

The 25 year-old pipeline has suffered from serious operational and maintenance failures such as the delayed response to the Livengood bullet hole spill, and the 2 foot shift in a section of pipeline at Atigun Pass that went undetected for several months, corrosion and support instability from accelerated thawing of permafrost and future seismic activities. These are only some of the serious concerns that call for renewal conditions.

Spill prevention and response plans at the 800 river and stream crossings is one of the biggest failures of this aging pipeline lease and renewal contract. Any spill over an anadromous river, such as the Yukon, Copper, Gulkana, or Tanana, would be economically and environmentally devastating. Oil spill contingency plans are gravely inadequate and must be improved to the highest standards as a condition for the renewal. 31-1

Despite the fact that the pipeline crosses major fault lines, a complete new assessment on the seismic problems associated with pipeline is lacking. In all cases, contract conditions must require careful, periodic review to ensure that they reflect scientific and technological advances. Therefore, the renewed agreement needs to include an immediate comprehensive independent field audit, as well as an independent technical review and field audit every five years. 31-2

Funds for future pipeline dismantling, removal and restoration (DR&R) must also be immediately placed in an escrow account. 31-3

A long overdue citizens oversight group, funded by the pipeline owners through the Department of the Interior, must be added to the renewal agreement. To ensure critical problems are adequately addressed to prevent spills a pipeline Employee Concerns Program must also be incorporated. 31-4

The 45-day comment period must be extended. The 1,700 page environmental impact document glosses over vital environmental issues. Most Alaskans are too busy during the summer months, due to subsistence, commercial fishing and other activities in the area of the pipeline, to review such a lengthy and technical document. Public hearings nationally and in small communities downstream from TAPS must be added to an extension. 31-5

For the record, I am in complete and utter disagreement with the government's offensive assessment that in the operation of the pipeline, the Exxon Valdez oil spill was beneficial to Alaska: "creating significant benefits to the state and local economy that more than offset the economic damage to the fishing and tourism industries in Prince William Sound" (page 4-7-116). There is absolutely no benefit of toxic oil spills. 31-6

Finally, in view of the problems experienced on TAPS since inception, the renewal process must be used to consider means to assure stable and sufficient funding for TAPS, including transfer of ownership of the pipeline to a single owner with no connections to North Slope crude oil production. The conflict between resource stewardship and the desire for TAPS Owners to reduce costs is not in Alaska's best interest. Let's raise our performance standards for this aging pipeline, not lower them. We must not be complacent about oil spill prevention and response. 31-7

Sincerely,

Robin Colna

Responses for Document 00031

00031-001: It is correct that the effects of aging have the potential to impact the integrity and reliability of any mechanical system. However, age alone does not dictate reliability or performance. Myriad factors can impact system performance. For example, the manner in which mechanical systems are operated and maintained can greatly influence their long-term integrity, reliability, and performance.

Utilizing its oversight authority, the JPO ensures that APSC's operating and maintenance procedures take all potential impacting factors into account and are sufficient and appropriate to maintain TAPS integrity. The JPO also has the authority to direct APSC to undertake changes, repairs, or upgrades when that is not the case. Under the reliability centered maintenance (RCM) program, all TAPS subsystems are being carefully evaluated for the consequences of their failure and will have maintenance regimens or remanufacture, overhaul, or replacement schedules established that preclude such failures from occurring, if they would have an adverse impact on public safety or the environment.

The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

Impacting factors such as those that may cause movement in the pipeline are identified in Section 4.2 and are incorporated in analyses presented in Section 4.3. Rather than address each historical event, the analyses used selected events to determine whether pipeline design parameters and ongoing monitoring programs are adequate to identify potentially destabilizing impacts on the pipeline.

Oil spill contingency planning is extensively discussed. See Sections 4.1.1.7, 4.1.4, 4.4, and 4.7.10. The text box in Section 4.4.4.3 provides a detailed discussion on contingency planning in the Copper River Drainage.

00031-002: The assessment on the seismic design of the pipeline has been reviewed and updated several times (February 15, 1995, March 31, 1997, June 30, 1997, August 16, 1999, December 21, 2000 and February 14, 2001 by APSC) and is not within the scope of the EIS. BLM and JPO agencies oversee the assessment to ensure the integrity of the pipeline.

The reader is directed to Section 2.5 for a discussion on audits.

00031-003: The reader is directed to the discussion of escrow funds found in Section 2.5.

00031-004: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00031-005: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00031-006: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

00031-007: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00032

August 15, 2002
510-540-4163

BLM Director Kathleen Clarke

Subject: Aging Pipeline Requires Environmental Safeguards

Dear BLM Director Kathleen Clarke:

There is absolutely no benefit of toxic oil spills. 32-1

Yours truly,

Knute Horwitz
5249 N. Paulina
Chicago, IL 60640-2031

Responses for Document 00032

00032-001: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

RECEIVED
02 AUG 20 PM 4:28

STEVE MARSHALL
BP EXPLORATION (ALASKA) INC.
AUGUST 14, 2002

RIGHT OF WAY TESTIMONY

My name is Steve Marshall, and I am President of BP Exploration Alaska Inc.

My company has been active on Alaska's North Slope since the late 1950s, and we confirmed the discovery of the Prudhoe Bay oil field in 1969. Today, BP-operated fields on the North Slope account for 12% of all U.S. oil production. Since Prudhoe Bay production began 25 years ago, BP's oil production on the North Slope has reduced U.S. oil imports by more than $100 billion, and our North Slope production plays a prominent role in making us the largest oil and gas producer in North America.

I strongly support and urge the Bureau of Land Management to grant a 30-year renewal of the Trans Alaska Pipeline Right-of-Way under its current terms. 33-1

For the past quarter of a century, the Trans Alaska Pipeline has been a lifeline for domestic oil supplies, especially on the West Coast. At the peak of North Slope oil production in the late 1980s and early 1990s, TAPS carried 25% of all U.S. oil production from the north coast of Alaska to tidewater in Valdez. Today, despite declining production on the North Slope, it still carries 17% of all domestic oil production. As such, it is also a lifeline to the U.S. economy.

Since 1977, North Slope oil production has reduced the U.S. balance of trade deficit by nearly $300 billion. Over the next 30 years, according to data from the U.S. Department of Energy, it will account for another $370 billion worth of production. 33-2

Taxes and royalties on North Slope production have contributed more $40 billion to the federal treasury, and nearly $60 billion to the State of Alaska. Over the renewal period for TAPS, they are projected to contribute another $11 billion in 2000 dollars to the U.S. Treasury.

But none of these contributions would have been possible without the Trans Alaska Pipeline, and future contributions will be placed in jeopardy without a 30-year right-of-way renewal under terms that encourage ongoing investment and development on the North Slope.

The length and terms of TAPS renewal will send a clear message to oil and gas industry investors about Alaska's long-term business climate. And make no mistake about it – the oil and gas business on Alaska's North Slope has extremely long leads times and huge capital requirements. We plan our projects over years and even decades, and we invest in increments of tens, hundreds of millions of dollars ... sometimes billions of dollars.

Industry forecasts for new oil and gas development typically include a 10-12-year exploration and development cycle. Before beginning the process, companies must have a high level of confidence their investments won't be short-circuited by the loss of transportation infrastructure in the midst of the 15- to 20-year production life that's necessary to justify a project.

The North Slope still holds extraordinary potential for new oil and gas discoveries, development and production ... and for Alaska to play a pre-eminent role in satisfying America's energy needs for decades to come. According to the U.S. Geological Survey, it holds 5 billion barrels of booked oil reserves, 9 billion barrels of unbooked resources and 13 billion barrels yet to be found. The same USGS data suggest 35 trillion cubic feet of natural gas discovered and possibly another 100 trillion cubic feet yet to be found.

Transforming the North Slope's potential into production – into economic growth and safe, reliable energy to fuel America's future – will require tens of billions of dollars of new investments by companies like BP. But anything less than a 30-year renewal for TAPS would add enough uncertainty to negatively influence investment decisions. It would discourage investments in exploration for new sources of oil and gas, it would limit investments to expand fields that are already in production, and it would undermine construction of a North Slope gas line, which is contingent on a healthy oil business throughout the life of the project.

33-2
(cont.)

So, too, would onerous new terms jeopardize new investments and diminish the potential of Alaska's North Slope oil and gas to bolster the nation's economy and satisfy its energy needs.

The North Slope has yielded nearly 14 billion barrels of oil in the past 25 years, but today, it is producing at half the rate it was at its peak. Pressure to reinvest simply to sustain production at current levels is relentless. But so is the pressure on costs. Alaska is now a mature and much smaller oil province. Operating systems and infrastructure were designed for much higher volumes of throughput, and as production declines, unit costs increase.

The "easy" oil has been produced, and only tough barrels remain. At BP, we're doing everything we can to build a sustainable business on the North Slope.

Reducing costs and eliminating unnecessary spending are the cornerstone of efforts to refocus our business and make it competitive.

Midstream and transportation costs for our North Slope production already are four times higher than the global average for BP. Onerous renewal terms for TAPS will aggravate the cost burden and further impair our ability to compete for investment capital within the company.

33-2 (Cont.)

More important, there is no cause for a change in right-of-way terms. TAPS is operated and maintained in accordance with all laws and regulations, and its safety and environmental record sets a standard of excellence for the entire worldwide petroleum industry. Furthermore, the Joint Pipeline Office is doing an effective job of regulating TAPS, and the current right-of-way agreement can be changed as needed to ensure its continued safe operation.

33-3

After 25 years of production, Alaska's North Slope continues to have a pivotal role to play in America's energy future for decades to come. TAPS continues to be the lifeline to that potential. Ensuring safe, reliable and commercially viable transportation infrastructure is a critical first step toward turning opportunity into reality, and that can only be achieved through a 30-year renewal of the Trans-Alaska Pipeline System Right-of-Way under its current terms.

33-4

Thank you.

Responses for Document 00033

00033-001: Thank you for your comment.

00033-002: Thank you for your comment.

00033-003: Thank you for your comment.

00033-004: Thank you for your comment.

00034

August 7, 2002

Bureau of Land Management
BLM TAPS Renewal Draft EIS
Argonne National Laboratory, EAD/900
9700 South Cass Avenue
Argonne, IL 60439

Dear Sirs:

I wish to express my appreciation of the BLM's work to develop in my opinion a full and complete environmental assessment of a long establish and operating project within Alaska called the Trans Alaska Pipeline System (TAPS). TAPS has operated successfully for over 25 years and to put it in simple terms the pipe is fine. TAPS receives very detailed and adequate oversight by numerous experts in the regulatory, engineering and scientific field through the 13 Participating Government representatives in the Joint Pipeline Office (JPO). There is no justification for another oversight body such as is being called for by those who do not understand nor wish to remain aware of the facts of operations of the TAPS Project. If BLM or others believes JPO is not doing their job then hold hearings on that matter and resolve the issues. Do no add costs to an already costly regulatory process in both time and resources for no define regulatory or scientific reason. 34-1 34-2

I support the DEIS and the recommendation for renewal of the TAPS lease for the full 30 years. It should be apparent that this engineering marvel has meet every technical challenges and performed to the highest of standards. Yes, there have been events but there has been no event that has not been safely and adequately responded to with due corrective action taken both for the reliable operations of the pipeline and the least environmental damage. Remember, the most notable oil spill that ill informed detractors use as a public saber against the TAPS operations was done because of a drunk boat captain who allowed his vessel to hit a charted rock. Both of my grandsons know what a marine chart and navigational notes means and I believe could have done better. 34-3

Over 13 billion barrels of crude oil have been safely handled and delivered to American consumers. These are barrels of American oil, from American soil, handled by American workers, serving American families and businesses. I urge you to review the comments received and assess the facts of design, engineering, construction and operations of TAPS. From this assessment I also call upon you to conclude the only decision to be supported by these facts is one that says the TAPS Lease request be granted for another 30-year term and find the DEIS to be complete. The Public comment period is also adequate. 34-4 34-5

Respectfully submitted,

Jeffrey Anderson, owner
Chena Ridge Bed and Breakfast
1407 Chena Ridge Road
Fairbanks, Alaska 99709-2608

Cc:
U.S. Senator Ted Stevens
U.S. Senator Frank Murkowski

Responses for Document 00034

00034-001: Thank you for your comment.

00034-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00034-003: Thank you for your comment.

00034-004: Thank you for your comment.

00034-005: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

Diane Prier
President – Williams Alaska Petroleum, Inc.
Energy Services

August 13, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

Re: Trans Alaska Pipeline System Right of Way Renewal DEIS

Dear Sirs:

I am writing on behalf of the Williams Companies, Inc. (Williams) to provide comment concerning the above subject.

Through wholly owned subsidiary companies, Williams owns a 220,000 barrels per day crude oil refinery located outside Fairbanks in North Pole, Alaska. This refinery is the largest in Alaska and is located approximately two miles from and is connected to the Trans Alaska Pipeline System ("TAPS"). As the refinery is located inland, it is totally dependent upon TAPS for its supply of crude oil and has been since its initial start-up in 1977.

In addition to the North Pole Refinery, Williams owns the following additional assets located in Alaska:

- 29 company owned convenience stores marketing under the "Williams Express" brand;
- a 3.0845% interest in TAPS;
- a 50% interest in the Williams Lynx Alaska CargoPort, which is an air cargo handling facility at Ted Stevens Anchorage International Airport;
- a 700,000 barrel refined products terminal at the Port of Anchorage; and
- a 20,000 barrel refined products terminal located at the Fairbanks International Airport.

Without the secure source of crude oil supply that the North Pole refinery has enjoyed during the past 25 years, it would not have been possible to increase its capacity from the initial 45,000 barrels per day to its current level of 220,000 barrels per day. Over 170 Alaskans are now employed at the refinery and are dependent upon its continued operation for their livelihood.

The above-mentioned growth in the refinery's capacity has also enabled Williams to grow its retail presence in Alaska. Williams Express now employs approximately 350

Williams Alaska Petroleum, Inc.
3201 C Street, Suite 700
Anchorage, Alaska 99503-3960
Phone (907) 273-3300 Fax (907) 273-3333

Alaskans throughout the state and supplies roughly one third of the state's total retail demands for gasoline.

With the knowledge that the refinery's source of crude oil supply via TAPS was secure, Williams invested approximately $70 million in 1997/1998 to increase the refinery's production of jet fuel by 20,000 barrels per day. This investment enabled our company to meet the growing demand for jet fuel at Alaska's two key international airports: Anchorage and Fairbanks, as well as to decrease the state's dependency on imported jet fuel. These airports are key economic drivers for the Alaskan economy and directly or indirectly provide in excess of 10,000 jobs in the Anchorage and Fairbanks metropolitan areas.

More recent, Williams investments in Alaska include a $10 million expansion to its Anchorage terminal facility and $37 million to acquire a 3% interest in TAPS. Williams has also formed a joint venture with the Alaska CargoPort. This $23 million facility was built to provide additional cargo handling infrastructure and attract additional air cargo business to Alaska.

Our past investments in the refinery and associated assets have been based on a long time horizon for recovery of capital investment. Our estimated life projections for major capital improvements range from 15 to 30 years. The proposal of a renewal period of less than 30 years puts future projects at risk.

The Williams refinery project of the most significance to Alaska is a $40 million gasoline de-sulfurization project, currently in the planning stages. This modification is required for the refinery to meet the EPA's 2007 clean fuels guidelines. However, the project cannot be justified on a 5-year life. Thus, a 5-year renewal period puts this project at risk. If the project is not constructed, consumers in Alaska will pay more for gasoline. 35-1

Clearly TAPS has had and will continue to have a significant impact on the economy of our state both in the public and private sectors. It is our firm belief that a renewal period of less than 30 years would have a negative impact on any future capital investments in the energy sector and a subsequent negative impact on the state's economy.

I thank you for providing this opportunity to express our views.

Sincerely,

Diane Prier

Diane Prier

Williams Alaska Petroleum, Inc.
3201 C Street, Suite 700
Anchorage, Alaska 99503-3960
Phone (907) 273-3300 Fax (907) 273-3333

Responses for Document 00035

00035-001: Thank you for your comment.

Natural Resources Specialist
Native Village of Port Graham
P.O. Box 5510
Port Graham, AK. 99603

August 13, 2002
BLM TAP Renewal
Argonne National Laboratories EAD/900
9700 S. Caff
Argonne, Il. 60439

To Whom It May Concern:

I would like to make a few comments on the trans Alaska pipeline right of way renewal process and the draft environmental impact statement.

First, 45 days is just not adequate time to review and digest such a massive document, a 60 or 90 day extension would have been appropriate and in the best interest of all concerned parties. The average person could read the document in its entirety if that's all that they had to do for the forty five days, unfortunately most of the talented people representing the Native Alaskan interest also have jobs and other responsibilities. 36-1

I am aware that this is of national interest, however, it bothers me somewhat that a comment from someone outside of Alaska has as much consideration and consequence as Rural Alaska Natives who live along the pipeline corridor. The village residents are directly impacted spiritually, psychologically and financially in a very big way. Even very well intentioned people coming from a Western European worldview usually cannot grasp what subsistence, land, culture and extended family mean to Alaska Natives. I think it would be easy to "stuff the comment box" by outside corporate interests. 36-2

I would like to see stronger incentives for Alyeska and designated contractors to adhere to the contractual agreement to hire Alaska Natives at the pre-determined 20% ratio. Enforced penalties for non-compliance would be good. 36-3

Our village of Port Graham was one of the Exxon Valdez oil spill impacted communities, yet there has been no government to government meeting. 36-4

Sincerely,

James Miller

Responses for Document 00036

00036-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00036-002: The National Environmental Policy Act requires that all comments be considered equally, irrespective of the location of the commentor within the United States. In addition, comments are not votes, and the BLM does not make decisions based on the number of comments received on any particular issue.

Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments," requires that the federal government consult with Tribal governments during the preparation of an EIS. Government-to-Government consultation for this EIS is described in Section 5.3 of the FEIS. As the lead federal agency associated with this EIS, the BLM established government-to-government exchanges with all Tribal governments in Alaska and more focused exchanges with 21 Tribes directly affected by the TAPS. These 21 communities received more detailed mailings explaining the proposed ROW renewal, the EIS process, and the various sources of additional information. Meetings were held with all Tribal organizations and Native groups that requested them to discuss the EIS process and related issues in greater detail. At the meetings, specific emphasis was placed on how Tribal organizations and Native groups can participate effectively in the EIS and ROW renewal processes. While comments on the DEIS had to be received by the end of a 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native groups. The process of government-to-government consultation allows these organizations to continue dialogues with the Bureau of Land Management and for their comments to be considered in the Record of Decision.

00036-003: Thank you for your comment. Section 2.5 of the FEIS discusses other alternatives and issues considered but not evaluated.

00036-004: Section 5.3 of the FEIS provides background information on the government-to-government process and the development of the final list of affected Tribes. The 21 villages identified by the BLM as being directly affected by TAPS includes Port Graham. All 21 villages were invited to participate in government-to-government consultations associated with the TAPS right-of-way renewal process. Port Graham was represented at a government-to-government meeting in Cordova on June 4, 2002. The BLM is very willing to meet with any Native Village or Tribe that requires further information on the renewal process.

00037

During Session, January - May:
State Capitol, Room 115
Juneau, Alaska 99801
(907) 465-2095
465-3810 FAX

During Interim, June - December:
716 W 4th Ave, Suite 520
Anchorage, Alaska 99501
(907) 269-0240
269-0242 FAX

Senator Loren Leman

August 12, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S Cass Ave
Argonne, IL 60439

Submitted as public record for BLM TAPS Right-of-Way Renewal Draft EIS

I strongly support the proposed action by Alyeska Pipeline Service Company to continue operation of the Trans Alaska Pipeline System (TAPS) for 30 years. 37-1

TAPS is one of the most heavily regulated pipelines in the world—perhaps the most. As a member of the Alaska Legislature and its resource-related and finance committees I have had the opportunity to be briefed on pipeline issues and to view pipeline activities.

I am confident that with continued monitoring and maintenance the pipeline will last another 30 years. The Joint Pipeline Office, our elected officials and other Alaskans demand that the pipeline be operated safely and efficiently. We have everything to gain by ensuring that the contents of the pipeline arrive in Valdez without problems. 37-2

The TAPS pipeline and its related facilities already exist with known, observable impacts. Absent plans by the owners to radically alter the pipeline's route or operations, a 30-year extension is reasonable and prudent.

Sincerely,

Loren D. Leman

Loren Leman
Senate Majority Leader

Senator_Loren_Leman@legis.state.ak.us • www.akrepublicans.org/Leman.htm

Responses for Document 00037

00037-001: Thank you for your comment.

00037-002: Thank you for your comment.

00038



Northwest Technical Services

August 13, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 South Cass Avenue
Argonne, Illinois 60439

Subject: Draft EIS and Proposed Determination
Alyeska Pipeline Right-of-Way Renewal

Members of the Joint EIS and Proposed Determination Teams:

I am writing in support of the right-of-way renewal for the 800 mile trans-Alaska oil pipeline, not only as General Manager for Northwest Technical Services but also as a member of the Alaska community since 1972. I was here before the line was built and understand the difference it made to the development of Alaska and the security of our nation's energy resources.

The construction of the pipeline, at a monetary cost of over $8 billion, transformed our Nation's access to oil from the North Slope of its northernmost state from 0 to billions of barrels of oil. If the line had not been built when it was and where it was, our reliance upon imported oil would have placed us in an untenable bargaining position with the oil rich middle-east countries. Not repermitting the line would create the same problem now. 38-1

I am continually amazed by preservationists who believe importing oil from other areas of the world is a safer method of acquiring access to this invaluable commodity than developing our own petroleum resources and having a pipeline that can deliver them to either tidewater or the market itself. They seem to believe that oceangoing foreign ships, the construction of which we do not control, is a safer method of transportation than a pipeline upon land that is examined, monitored, permitted, and regulated by local, Alaskan and Federal rules and which is maintained by a company, Alyeska, that exists for that sole purpose. 38-2

3330 Arctic Blvd., Suite 201 • Anchorage, Alaska 99503-5943 • (907) 562-1633 • FAX (907) 562-5875 • www.nwts-ak.com



Having worked with Alyeska Pipeline Service Company for many years, I have been in a position to observe its commitment to safety, not only to the line but also to the men and women who work within the Alyeska system and the community at large. Under its auspices, a safety committee was formed which initially embraced only Alyeska and its contractors. Within months, this committee went from being the "Alyeska Contractors Alliance Safety Committee" devoted to workplace safety only, to becoming "The Denali Safety Council" which is dedicated to promoting safety at work, at home and in the community. The Denali Safety Council, with the continued support – both physically and monetarily – of Alyeska Pipeline Service Company has engaged the Alaskan community in a "Nobody Gets Hurt" philosophy and the Governor and Legislature of the State of Alaska have supported and annually proclaim the month of May as "Nobody Gets Hurt" month. 38-3

In this mode of thought, Alyeska continues to rigorously monitor the Trans-Alaska pipeline to insure its safe, reliable operation. The financial investment required is significant; direct Payroll costs hover around $422 million with $1.7 billion spent on goods and services in the state. This allows approximately 17% of our country's domestic oil supply to be safely transported with a reliability rate in excess of 99%. Adding an additional layer of regulatory oversight in the form of a citizens' advisory group to the existing federal and state agencies (13) would only serve to increase production costs and reduce revenue to the state of Alaska. 38-4

I will conclude by saying that as an individual who is very engaged in the community of our state and as General Manager for a company which provides services to Alyeska I urge you to renew/extend the Alyeska Pipeline rights-of way for an additional 30 years. 38-5

Respectfully submitted,

Mary E. Shields
General Manager

cc: State of Alaska, Department of Natural Resources

Responses for Document 00038

00038-001: Thank you for your comment.

00038-002: Thank you for your comment.

00038-003: Thank you for your comment.

00038-004: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00038-005: Thank you for your comment.

00039

August 16, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. CASS Avenue
Argonne, IL 60439

RE: Public Comment in Support of 30-year Right of way Renewal

If not for regulations already in place, I would argue there should be a fourth "over 30" alternative evaluated in the Trans Alaska Pipeline System (TAPS) Right of Way Renewal Draft Environmental Impact Statement (DEIS). Since an "over 30" alternative is not applicable without federal and state legislative changes, I urge you to support the 30-year renewal alternative. 39-1

A renewal period shorter than 30 years would be costly and risky. It could threaten investment in new North Slope production. It would create uncertainty within the business environment regarding the long-term viability of TAPS.

Consider the Alaska Railroad's leasing practices for example. Last year the state legislature authorized the Railroad to lease land for 55 years, up from a previous 35-year limit. The 35-year limit was an obstacle in leasing lands to large commercial and residential developers who needed to secure long-term financing for their investments. The Railroad and its potential lessees found that financial lenders were reluctant to invest in large-scale projects requiring substantial equity participation when there was no guarantee the land would be available beyond 35 years. The same premise could be argued for TAPS.

The economic impact of TAPS and the 13 billion barrels of oil that have flowed through it are significant to both the public and private sectors in Alaska. TAPS has supported thousands of jobs, funding of state services and programs through royalties. And beyond Alaska's borders, TAPS has provided nearly twenty percent of domestic oil supply and could play a significant roll in our national security. 39-2

Why, when measures are in place to ensure compliance and environmental stewardship and 20 state and federal regulatory agencies monitor TAPS, do we need to subject TAPS to a shorter renewal period?

Please support the 30-year right of way renewal alternative.

Wendy Lindskoog
Concerned Alaska Citizen

Responses for Document 00039

00039-001: Thank you for your comment.

00039-002: Thank you for your comment.

00040

August 15, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

RE: Renewal of the Trans-Alaska Pipeline System Right-of-Way

Good Day:

I would like to comment on the TAPS right-of-way renewal that is being currently proposed.

I have some serious reservations about renewing this agreement for 30 years. Our beautiful state and spectacular scenery and wildlife is in danger if there are no oversight committees in place to monitor this aging pipeline. While I understand the necessity of the renewal of the pipeline right-of-way, I am worried about the age and vulnerability of this pipeline. Also, it has been demonstrated in the past that if a spill occurs, the response is inadequate. Shifting of the pipeline that went undetected for months is yet another concern and demonstrates the type of safeguards that do not currently exist. 40-1

The oil industry is very rich and powerful and persuasive. There should definitely be a citizen advisory council where local people and their interests and concerns are represented fairly and oversight of the pipeline can be accomplished in a consistent and responsible manner with all issues addressed and resolved in a timely manner. I am formerly requesting that this be implemented before the renewal is granted. 40-2

Thank you for the opportunity to comment on this immensely important issue.

Sincerely,

Terry Cummings

Terry Cummings
6740 East 10th Avenue
Anchorage, Alaska 99504
(40 year resident of this great state)

cc: DNR/JPO
TAPS Renewal Team

Responses for Document 00040

00040-001: The age and vulnerability of the pipeline, spill response capabilities, and pipeline monitoring processes were considered in the analyses. The possible modes of pipeline failure were examined in detail in Chapter 4. Chapter 4 also highlights the JPO oversight activities. Included among these are the Comprehensive Monitoring Program wherein JPO investigates incidents and conditions such as those for which you have expressed concerns and issues formal reports. These reports are available to the public.

The BLM and member agencies of JPO in cooperation with APSC have begun a systematic process to identify the critical functional components of TAPS. The process, called reliability centered maintenance (RCM), is an ongoing system-by-system audit that determines function, failure modes, consequence and preventative maintenance of critical systems. The BLM is committed to RCM and believes that this process represents a pro-active approach to oversight and regulation of TAPS. In addition, RCM is widely used in the airline and other industries as the standard tool for reducing risk of failure to critical system components. Reducing risk in TAPS critical systems directly translates to reducing risks to public safety and the environment.

Section 4.1.3.2.1 discusses the design, monitoring, and maintenance of pipeline structural supports, including VSMs.

00040-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00041

August 14, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Class Avenue
Argonne, IL 60439

Re: Trans Alaska Pipeline System (TAPS)

To Whom It May Concern:

Given the fact that the Trans Alaska Pipeline System (TAPS) has had significant positive impact on all Alaskans, I urge the Bureau of Land Management to renew the TAPS Right of Way for 30 years.

There has been 13 million barrels of oil that has flowed through the TAPS. This oil has caused significant economic impact to both the public and private sectors in Alaska. Alaskans depend on the TAPS to provide thousands of jobs and to produce nearly twenty percent of the domestic oil supply. State services and programs rely on funding via royalties from the TAPS.

41-1

A renewal period of anything less than 30 years to the TAPS Right of Way would threaten the possibility of potential oil companies wanting to invest in North Slope production. Oil companies would have to gamble operating in a riskier business environment due to the throughput level of the TAPS being greatly reduced.

The State of Alaska would suffer from a reduction in population growth rates, employment and income, and also tax revenues if a renewal period shorter than 30 years was established. It also would negatively affect domestic oil production, national energy security, balance of trade, and overall economic activity.

Thank you for the opportunity to submit comments on the Trans Alaska Pipeline System Right of Way.

Sincerely,

Joe Sprague

Responses for Document 00041

00041-001: Thank you for your comment.

00042

BLM's Trans-Alaska Pipeline System
Right-of-Way Renewal
Draft Environmental Impact Statement
Public Hearing Comment Form

Use this self-addressed form to submit your TAPS Renewal Draft EIS comments. Please give this completed form to one of the meeting hosts or take it with you and mail it. Make your comments, fold the form, tape it shut, place a stamp on the outside and drop it in the mail. *Comments must be postmarked no later than August 20, 2002.*

Please provide this information:

FOLD HERE

Name: GREG GARCIA

Title/organization: GREEN PARTY OF ALASKA

Mailing address: P.O. Box 672425

City: CHUGIAK ~~AK~~

State: AK Zip+four: 99567 -

FOLD HERE

E-mail (I wish to receive TAPS Renewal EIS information by e-mail at this address) _____

1. THE COMMENT PERIOD IS FAR TOO SHORT. 42-1

2. Advertising for hearings is inadequate. This is important. It should be advertised as vigorously as the Alaska State Fair, which everyone knows is in August. 42-2

3. 30 years is far too long a period for the lease. Five-Ten would be adequate.

FOLD HERE 4. The use of inferior Japanese steel in the construction of the Pipeline makes future failure more likely. FOLD HERE 42-3

5. Better preparedness for spills along any portion of the Pipeline is needed. 42-4

6. A higher level of diverse citizen oversite of the pipeline is needed. 42-5

Thank you, Greg Garcia

WITHHOLDING OF PERSONAL INFORMATION

It is BLM's practice to make comments, including names and addresses of commenters, available for public review during regular business hours. Individuals may request that their home address be withheld from the public record, and BLM will honor such requests to the extent allowable by law. Circumstances may also arise in which BLM would withhold from the public record a commenter's identity, as allowable by law. If you wish BLM to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, BLM will not consider anonymous comments. BLM will make all submittals from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

Responses for Document 00042

00042-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00042-002: Please see Section 5.2 in the FEIS for information on the public notice and involvement implemented for review of the DEIS.

00042-003: Steel used in the construction of TAPS met all applicable standards specified in Federal Grant stipulations. Specifically, Stipulation 3.2.1.1 required the TAPS to conform to (1) U.S.A. Standard Code for Pressure Piping, ANSI B 31.4, "Liquid Petroleum Transportation Piping System," (2) Department of Transportation Regulations 49 CFR, Part 195, "Transportation of Liquids by Pipeline," (3) ASME Gas Piping Standard Committee, 15 December 1970: "Guide for Gas Transmission and Distribution Piping System," and (4) Department of Transportation Regulations, 49 CFR, Part 192, "Transportation of Natural Gas by Pipelines: Minimum Federal Safety Standards." (These last two standards apply only to the natural gas pipeline that runs roughly parallel to the crude oil pipeline from Pump Station 1 to Pump Station 4.) Also, Stipulation 3.2.1.2 suggests that the above standards should be construed as minimum requirements, indicating that the JPO Authorized Officer may impose additional requirements. The Design Basis for the pipeline incorporated all of the above standards where applicable.

00042-004: As part of the oil spill planning process, risks of pipeline spills are analyzed line-wide. Factors considered in the analysis include the vulnerability of TAPS to landslides and seismic events.

Should a leak occur, there are several mitigating measures in place to limit the environmental damage that may result. Based on US Department of Transportation regulations and the federal and state right-of-way authorizations, mainline valves are located near each major river crossing to limit the amount of oil released from a pipeline leak. All potential spill volumes are listed in the Oil Discharge Prevention and Contingency Plan.

The TAPS Pipeline Oil Discharge Prevention and Contingency Plan (APSC 2001g—see Section 3.30 of the FEIS for reference) provides for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline.

00042-005: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

Doyon, Limited

1 Doyon Place, Suite 300
Fairbanks, Alaska 99701-2941
(907) 459-2000
info@doyon.com

00043

Sent via fax (866-542-5904)

August 17, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

Ladies and Gentlemen:

The purpose of this letter is to provide comments on the Draft Environmental Impact Statement (DEIS) for renewal of the grant of rights-of-way for the Trans-Alaska Pipeline System (TAPS).

Doyon, Limited is the regional Native Corporation for interior Alaska established as a result of the passage of the federal Alaska Native Claims Settlement Act of 1971 (ANCSA). Doyon represents approximately 14,000 Alaska Natives and is the largest private landowner in the State of Alaska. Although TAPS does not cross any lands to which Doyon holds title, most of TAPS does traverse lands that have been used for generations by many of the people we represent and their ancestors. Doyon is a for profit corporation with operating business segments in the following industries: tourism, remote site catering, housekeeping and security, oil field drilling, real estate and natural resource development. The Doyon family of companies employs over 1000 individuals, and many are Doyon shareholders.

Doyon strongly supports a thirty-year renewal of the TAPS and related rights of way grants. Our support is similar to the DEIS recommended thirty year renewal as the preferred alternative to several possible actions studied. There are a number of topics in the DEIS which we believe need to be addressed further in the final EIS, including subsistence, Native employment and tribal governments. In these areas we have elected to defer to comments submitted by the Alaska Federation of Natives. 43-1 43-2

Doyon and over 900 employees in our family of companies have direct ties to the oil exploration, development and transportation businesses, including Alyeska Pipeline Service Company (APSC). Many of Doyon's successes in the business world, including training and employment of hundreds of Alaska Natives, would have been impossible without North Slope oil development. TAPS is more than a pipeline to another oil field. It is the essential link to the 43-3

improved human condition of most Alaska residents over the last 30 years, and will be essential for the coming 30 years.

We, within the Doyon, Limited family of companies, know well the operations of APSC, having provided oil field drilling on the North Slope and, catering, housekeeping and security services along the entire length of TAPS for many years. It is a professionally run company with focuses on Excellence, Efficiency. Safety, and Environmental Integrity. Aggressive preventive maintenance is a hallmark of operations, guided regularly by internal reviews, independent, third party studies, and the oversight of the Joint Pipeline Office in concert with numerous other federal and state regulatory agencies. 43-4

In conclusion, the state and federal governments need to proceed with the issuance of all rights-of-way related to continued operation of TAPS for another thirty years. Thank you for the opportunity to provide these comments.

Sincerely,

Orie Williams
President and CEO

Responses for Document 00043

00043-001: Thank you for your comment.

00043-002: Thank you for your comment.

00043-003: Thank you for your comment.

00043-004: Thank you for your comment.

510-540-4163

Edward Yarmak

5241 Taurus Circle , Anchorage, AK 99516

August 12, 2002

BLM Director Kathleen Clarke

Subject: Pipeline Permit Requires Renewal

Dear BLM Director Kathleen Clarke:

Thank you for the opportunity to comment on this important Draft Environmental Impact Statement for the future safety of the Trans-Alaska Pipeline (TAPS).

I believe that Alyeska Pipeline Service Company is doing a great job keeping TAPS operating at in an environmentally friendly manner. Other pipeline companies in the world could benefit by using TAPS as a model. 44-1

Sincerely,

Edward Yarmak

Responses for Document 00044

00044-001: Thank you for your comment.

00045

791 Redpoll Ln
Fairbanks, AK 99712
June 11, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Ave.
Argonne, IL 60439

Dear Sirs:

Please consider the following comments on the DEIS for re-authorization of the Trans Alaska oil pipeline right of way.

I am insulted that the BLM has determined that 45 days is enough time for public review and comment on a document of 1,700 pages covering an issue of vital importance to every citizen of Alaska. Something of this magnitude and the long time period this will cover should require careful examination by all concerned. It appears that the government and industry are trying to slide this through with minimal public review. We deserve better than this! 45-1

There is ample justification, based on past poor performance of Alyeska Pipeline Co. for additional provisions to assure safety, environmental integrity and fair treatment of workers. Over the years there have been repeated instances of irresponsible behavior on the part of Alyeska. We all remember the bungled delays on the part of Alyeska to respond to the Valdez oil spill. Last year it took an inordinate amount of time to get the proper equipment in place to seal off the bullet hole, resulting in a huge volume of oil sprayed out on the ground. What will it be next time there is a problem? We are not confident that things will be any different in the future unless better monitoring and controls are placed as a result of this action. 45-2

A great improvement would be to establish a citizen oversight panel to assure the best operation of the pipeline. These bodies have proven to be effective in Prince William Sound and Cook Inlet, and a citizen pipeline oversight group could be a significant improvement over "business as usual" on the line. 45-3 The re-authorization should establish a schedule for frequent reviews of the pipeline and its operation and maintenance by an independent body. 45-4 The re-authorization should also require that adequate funds be set aside by the owners to cover the reclamation and restoration costs when it comes time to remove the pipeline. Alaska should not be left holding the bag when the oil is gone. 45-5

As the pipeline ages further, and the climate warms, there is a great need for more research and monitoring for potential problems in the years ahead. The DEIS does not adequately addresses these issues. Considering that each year hundreds of millions of barrels of oil flow across Alaska in TAPS, over several mountain ranges, and nearly countless streams and rivers it makes sense that there be additional efforts to assure integrity of the line. 45-6

Please take these ideas to heart – I do not want to wake up some morning and learn that we were caught by surprise with a new break in the pipeline which could have been prevented. Thank you for the opportunity to comment.

Sincerely,

Fran Mauer

Fran Mauer

Responses for Document 00045

00045-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00045-002: Existing laws and stipulations provide BLM and JPO with sufficient authority to require corrective and preventive action. The "bullet hole" spill resulted in numerous initiatives.

The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

00045-003: The reader is directed to Section 2.5, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00045-004: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00045-005: The reader is directed to the discussion of escrow funds found in Section 2.5.

00045-006: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00046

Fairbanks Economic Development Corporation

August 15, 2002

BLM TAPS Renewal Scoping
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

To Whom It May Concern:

The purpose of this letter is to speak in support of the renewal of the trans-Alaska pipeline rights-of-way.

The owners of the trans-Alaska pipeline system (TAPS) and the Alyeska pipeline service company make a very positive contribution to Alaska. Alyeska and its contractors employ approximately 2,700 workers. The Capital and Expense budget for 2001 was over $600 million. The direct contribution to the Fairbanks economy by the Fairbanks Business Unit was $258 million. 46-1

In addition to the positive economic impact of TAPS and Alyeska, the workers and their families are positive additions to our communities. They volunteer in numerous organizations, they are generous in their support of non-profit and charitable organizations and their children are educated in our schools.

Alyeska and the owners of TAPS are serious and dedicated stewards of the environment. Their concern for the protection of our natural beauty is clearly evident to even the casual observer. They are ever vigilant in the prevention of leaks and spills, and their response to any emergency, large or small, is timely and thorough. 46-2

Speaking for the Board of Directors of the Fairbanks Economic Development Corporation, we are urging renewal of the permits for this very important transportation system.

Sincerely,

Dean M. Owen
Executive Director

515 Seventh Avenue, Suite 320, Fairbanks, Alaska 99701 (907) 452-2185 Fax: (907) 451-9534

Responses for Document 00046

00046-001: Thank you for your comment.

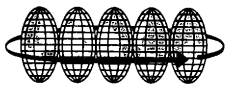
00046-002: Thank you for your comment.

TRANSPORTATION INSTITUTE

5201 Auth Way
Camp Springs, Maryland 20746
(301) 423-3335 (MD)
(202) 347-2590 (Wash., D.C.)
Telecopier (301) 423-0634

www.trans-inst.org

00047



Pacific Coast Office
World Trade Center - West
2200 Alaskan Way, Suite 110
Seattle, WA 98121
(206) 443-1738
Telecopier (206) 443-0917

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NIELS M. JOHNSEN
President
Waterman Steamship Corporation

August 15, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue, Argonne, IL 60439

RE: TAPS Renewal

Dear Sir/Madam:

I am writing to share the Transportation Institute's support for the approval of a 30-year right-of-way renewal for the Alyeska Pipeline Service Company, on behalf of the Trans-Alaska Pipeline System (TAPS) Owners, to be granted by the Bureau of Land Management for operation of TAPS. I share this request on behalf of the Transportation Institute. The Transportation Institute was established in 1967 as a Washington-based, non-profit organization dedicated to maritime research, education, and promotion. The Institute member companies participate in all phases of the nation's deep-sea, foreign, and domestic shipping trades, and barge and tugboat operations on the Great Lakes and on the 25,000-mile network of America's inland waterways. All are of U.S. Registry—manned by American citizen-mariners, operating under the world's highest safety standards, and proudly flying the American flag. Several of our member vessel operators are either in the TAPS tanker trade or involved in the transit of goods to and from Alaska's rail belt. As a consequence, the future of TAPS and the supply of Alaskan North Slope (ANS) crude are of critical importance to their success.

The TAPS has proven to be a reliable and safe method of transport for ANS crude since 1977. The total volume of spills attributed to the operation of the pipeline is little more than 31,000 barrels through 1999, with half of that from a single act of sabotage in 1978. Most significantly, and similar to our experience with marine oil spills, is the fact that the annual volume of spills is trending downwards. This is a clear indication that the enhanced protections, diligence, and technology have combined to afford us an improved environmental future for the TAPS. 47-1

Although the reasonable sounding notion of the pipeline being fatigued after over 25 years of operation has often been repeated, the fact is that studies, including one from Alaska's ever-vigilant Department of Environmental Conservation, conclude that age has little correlation with pipeline integrity. The studies find the key factor to sustaining a pipeline is maintenance and how operating conditions compare with design conditions. Not least of the accomplishments seen in this area is Alyeska's use of a "smart pig" to access and monitor the integrity of the pipeline. 47-2

In many ways the financial investment of a pipeline is similar to a ship; typically the investment horizon requires a many year approach (thirty or more) and significant financial risk. Therefore, it is critical for the private stakeholders of the pipeline and Alaska's public investment in related infrastructure to have the assurance their crucial capital investment will have a financial life of thirty or more 47-3

years. Without such a guarantee it is much more difficult to obtain reasonable financing for proper infrastructure enhancements. 47-3 (cont.)

The recent terrorist attacks on our nation, ever-increasing instability of the Mid-East, and the volatility of our other foreign producers of oil (i.e., Brazil, Venezuela, and Nigeria) make the need for a stable and environmentally sound source of domestic oil essential. The North Slope has the potential to continue to meet twenty percent or more of our domestic oil production quota. Moreover, the potential for gas development in conjunction with further oil exploration is a winning combination to help in our Nation's effort to rely less on foreign sources of energy. Having a 30-year renewal will enhance the financial, managerial, and infrastructure commitment needed to advance private-sector interest in sustainable energy exploration on the North Slope. After all, our energy security needs should remain a top priority for our country. 47-4

With respect to environmental and regulatory oversight, the Transportation Institute supports the continued regulatory jurisdiction of the Joint Pipeline Office. The thirteen federal and state agencies that serve as the regulatory supervisory body with authority over TAPS have demonstrated a determined commitment to protecting Alaska's precious environment while recognizing Alyeska's need to effectively manage the TAPS. It is our understanding that a specific request during the Environmental Impact Statement scoping period seeks to establish a citizens' oversight/advisory committee as an additional agency or group to the existing panoply of TAPS regulators. We would urge that this recommendation not be made a part of the conditions required for a TAPS right-of-way renewal. Our direct experience with the Prince William Sound Regional Citizens' Advisory Council (RCAC) is that their structures provide little accountability to those outside of their group and are not required to pursue the hearing and public review process that a government agency provides to all stakeholders. Moreover, a non-affiliated party to an RCAC accusation can be left without a responsible party to seek out for redress. For example, the Prince William Sound RCAC wrote to the Governor of Alaska and many other key officials claiming that one of our member companies interested in expanding their share of the TAPS tanker trade was offering pay scale differentials that would lead to experienced crew members leaving their employment in the Valdez trade. This accusation was entirely without merit and detrimental to the company's interest in expanding its service. Although a direct and formal request was made to the Executive Director of the PWSRCAC to rescind this charge, no action was ever taken to correct the record. The nature of the RCAC left little room for pursuing timely corrective action to this falsehood through their organization. 47-5

In addition, RCAC-type organizations have the potential to undermine authority of local regulators and to weaken the regulatory process of elected government where the decision making process is effectively relinquished to the citizens group. Another concern is the limited constituency an RCAC represents if staffed with people of extreme views, which drive issues as internal factions.

To reiterate, organizations that have minimal accountability beyond their own narrow interests and have the ability to set policy, serve to create a morass that would damage the success achieved through many years of resolute oversight and

reasoned cooperation found through the Joint Pipeline Office. Undoubtedly, independent citizen review groups, internal critics, and federal and state legislative oversight will continue to make TAPS the most audited and compliance driven organization in the country. 47-5 (Cont.)

We urge the BLM to provide Alyeska Pipeline Services Company with a 30-year renewal of their federal Agreement and Grant of Right-of-Way for the Trans-Alaska Pipeline. 47-6

Sincerely yours,

Richard Berkowitz

Richard Berkowitz
Pacific Coast Director

Responses for Document 00047

00047-001: Thank you for your comment.

00047-002: Thank you for your comments. You are correct. Age and integrity are not necessarily related.

However, TAPS is a complex mechanical system. As such, proper operation and maintenance are critical to longevity. The current grant stipulations anticipate various factors that may relate to aging which, if they were to occur to substantial degrees, could jeopardize pipeline integrity. These stipulations impose various monitoring and surveillance responsibilities on APSC to monitor and continually assess the condition of critical pipeline systems. The instrument pigs represent just one such assessment effort. In addition, JPO and APSC are now applying the practice of Reliability-Centered Maintenance on all of TAPS to ensure that consequences of subsystem failures are recognized and that appropriate maintenance of those subsystems is provided to maintain overall system integrity and avoid adverse consequences.

00047-003: Thank you for your comment.

00047-004: Thank you for your comment.

00047-005: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00047-006: Thank you for your comment.

00048

415 Hagelbarger
Fairbanks, AK 99712
August 14, 2002

BLM TAPS Renewal EIS
Argonne Nat'l Lab EAD/900
9700 S. Cass Ave.
Argonne, IL 60439

To Whom It May Concern:

The Trans-Alaska Pipeline System Environmental Impact Statement is inadequate because it doesn't:

1) address current or future maintenance on a pipeline whose life expectancy has been attained; 48-1

2) address the affects that global climate change & permafrost melting may have on the system; 48-2

3) provide for a planned periodic reviews of maintenance; 48-3

4) establish a citizens advisory council; 48-4

and

5) require an escrow fund to pay for the inevitable dismantling and removal of the system & restoration of the corridor. 48-5

I also urge you extend the comment period by at least 30 days so that agencies and individuals have the time to participate in this process. 48-6

Thank you.

Jeff Adams

Responses for Document 00048

00048-001: The age, condition, operation, and maintenance of TAPS were considered in the preparation of the DEIS and are described in the DEIS.

00048-002: VSM stability is obviously critical to TAPS integrity. As such, it is the focus of extensive monitoring and surveillance. Please see Section 4.3.2 of the FEIS (Soils and Permafrost) for additional information.

00048-003: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00048-004: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00048-005: The reader is directed to the discussion of escrow funds found in Section 2.5.

00048-006: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00049

Municipality of Anchorage

Office of the Mayor

George P. Wuerch, Mayor

Anchorage All-America City 2002

02 AUG 20 PM 2:13

July 16, 2002

BLM TAPS Renewal
411 West Fourth Avenue, Suite 2
Anchorage, Alaska 99501

To Whom It May Concern:

We have reviewed the Draft Environmental Impact Statement *Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way, July 2002.* The Right-of-Way renewal is important to the State of Alaska and the Municipality of Anchorage. The Municipality of Anchorage has no significant comments that would change the proposed action therefore we encourage the Bureau of Land Management to reauthorize the pipeline right-of-way for the full 30 years as expeditiously as possible. 49-1

Moreover, we believe that the Joint Pipeline Office has done an admirable job of management and do not believe that any other layer of oversight is needed or warranted. 49-2

We appreciate the opportunity to comment. If you have further questions please call Dr. Richard Dworsky at (907) 343-4487.

Sincerely,

George Wuerch
Mayor

P.O. Box 196650 • Anchorage, Alaska 99519-6650 • Telephone: (907) 343-4431 • Fax: (907) 343-4499

Responses for Document 00049

00049-001: Thank you for your comment.

00049-002: Thank you for your comment.

00050

Northern Alaska Environmental Center
830 COLLEGE ROAD, FAIRBANKS, ALASKA 99701
PHONE: (907) 452-5021 FAX: (907) 452-3100
http://www.northern.org • northern@northern.org

02 AUG 20 PM 1:37

BLM TAPS Renewal EIS
Argonne National Library EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

August 20, 2002

To Whom It May Concern:

On behalf of the Northern Alaska Environmental Center (Northern Center), I submit these comments on the draft Environmental Impact Statement (draft EIS) for the Trans-Alaska Pipeline System (TAPS) right-of-way renewal process. In addition to the comments below, the Northern Center fully supports both the legal comments submitted by Trustees for Alaska and the technical comments submitted by the Alaska Forum for Environmental Responsibility. 50-1

The Northern Center recognizes the importance of TAPS in the transportation of oil to market as well as to the strength and stability of the Alaska economy. In addition, we recognize that the renewal of the right-of-way permits for TAPS can realistically be expected to be granted. However, we believe that the Bureau of Land Management (BLM) has not adequately followed the National Environmental Policy Act (NEPA) process in developing this draft EIS – particularly in relation to an adequate public comment period as well as adequate discussions of cumulative effects, safety and monitoring. For these reasons, the Northern Center believes BLM/Argonne National Laboratories should rigorously revise this document prior to proceeding with a final EIS. 50-2

I. Inadequate Public Comment Period

BLM's refusal to extend this comment period to a reasonable length of time is completely unacceptable. Forty-five days is simply too short a time for members of the public to analyze all of the important issues and questions raised by a 1,700-page draft EIS that purports to justify the 30-year renewal of the federal right-of-way for TAPS. The public's opportunity to comment is further limited by the late summer time-period for comments – when most Alaskans are busy with a myriad of other activities crammed into our short summers. BLM and DNR should have facilitated public involvement in this process by extending the comment period. 50-3

II. Disregard for Scoping Recommendations

Last October, the Northern Center provided comments at the scoping meetings for this draft EIS. At that time we noted this renewal process provided an important opportunity for improvement of both the safety and the monitoring of the pipeline. We suggested three such improvements: 1) a more thorough independent environmental review, 2) a shorter, more reasonable renewal period, and 3) the establishment of a formal citizen's advisory council. Obviously, we are extremely disappointed that none of these recommendations were considered seriously in the draft EIS. In fact, only one of these suggestions was included in the draft EIS, that of a shorter renewal period which was quickly pushed aside due to potential economic impacts. 50-4

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Moreover, the Alaska Forum for Environmental Responsibility developed a list of six recommendations for the draft EIS that, again, would improve the safety and monitoring as well as the eventual dismantlement of the pipeline. The Northern Center fully supports these recommendations which include 1) establishment of a Citizen's Oversight Group (COG), 2) placement of dismantling, removal, and restoration (DR&R) funds into an escrow account, 3) renewal made conditional on satisfactory completion of an evaluation - including a technical review and audit every five years, 4) establishment of an advisory panel to consider how best to provide a single, responsible managing party and a stable source of funding for TAPS, 5) incorporation into the right-of-way renewal of provisions establishing and ensuring a viable Employee Concerns Program on TAPS, and 6) thorough review of stipulations attached to the federal and state Grant and Lease agreements to assure they reflect (a) scientific and technological advances during the last three decades in the disciplines relevant to the safe transport of crude oil across Alaska and (b) experience with the operation of TAPS. The first five recommendations were submitted as part of the scoping process last September; the sixth was added in the Alaska Forum's status report on TAPS, released in June of this year. None of these recommendations was given serious consideration in the draft EIS. We are very concerned with the increasingly obvious disinterest of both agencies and industry to use the EIS process as a means of improving the safety or monitoring of the pipeline. 50-4 (cont.)

III. Inadequate Discussion of Maintenance Plan for Aging Pipeline

When TAPS was originally constructed, component life expectancy was thirty years. Now, the owners propose to double that lifetime. We do not believe the draft EIS adequately addresses either current or potential future maintenance concerns associated with an aging pipeline. The pipeline owners are quick to state that the pipeline will last forever with proper maintenance. But *are* they providing proper maintenance? The renewal application assumes that they are, but certainly doesn't provide any proof. Yet, considering Alyeska's recent decision to lay off 140 employees due to budgetary concerns, proof should be absolutely mandatory as a condition of reauthorization – as should a periodic technology and environmental review of the pipeline. 50-5

IV. Need for Citizens Advisory Council

The Northern Center strongly believes that public participation is essential in natural resource management. Specifically, we believe that local people with an interest in the safety of their communities and their environment should have a formal *advisory* role in the oversight and management of industries which affect them. Oversight should not be left entirely to agencies and industries that own, oversee or operate the infrastructure. Following the Exxon Valdez spill of 1989, local citizens were given a formal role in oversight of the marine transportation of oil through "citizen advisory councils" that have been hailed by industry and government alike as essential to protecting the environment. We should establish a citizens advisory council on TAPS where local people and interests are represented fairly and given a formalized, advisory role in oversight of the pipeline. Such an advisory group is in the public interest; the absence of such a group is in the special interest of the petroleum industry. 50-6

V. Need for Placement of DR&R Funds in Escrow

Finally, a recent report by the General Accounting Office (GAO) identified important gaps in the procedures that govern the eventual DR&R of the oil field infrastructure in Alaska – including TAPS. GAO currently estimates that the total DR&R liability on the North Slope runs in the billions of dollars. However, oil companies active on the North Slope are not required to make any preliminary showing of adequate funding for DR&R of their Alaska operations. While the TAPS owners have collected DR&R funds from shippers, instead of placing them in an escrow account, these funds have been passed through as profit to the parent companies of the TAPS owners. The TAPS DEIS fails to consider these economic benefits to the pipeline owners as well as the potential adverse environmental consequences of the failure to escrow dismantling funds collected by the pipeline owners as part of TAPS shipping charges. 50-7

VI. Sectional Analysis of draft EIS

A. Climate Change

Climate change is addressed only briefly in this document in Section 4.3.1, Physiography and Geology. Here climate change is addressed in the form of permafrost melting and states that the pipeline is currently in adequate condition to withstand future problems stemming from permafrost melt. However, shortly following this statement in a sidebox the DEIS states, "With the continuous warming trend in Alaska, the risk of earthquake-triggered liquefaction and landslides would be expected to increase. These events, although very unlikely, could potentially threaten the integrity of the TAPS." (p. 91, Sec. 4.3.2). In addition the document states, " The resulting effects (of increased average temperature) would lower the mechanical strength of frozen to non-frozen soil and promote solifuction, debris flow, rock falls, potential landslides, differential settlement, liquefaction and alternation [sic] of local hydrology. These processes would continue to impact the integrity of the TAPS, if not carefully monitored and managed." (p. 91, Sec. 4.3.2). In 2001 Dr. Margaret Leinen of the National Science Foundation testified before Senator Ted Stevens and the Appropriations Committee. She stated that continued global warming is expected to impact the top 30 feet of discontinuous permafrost and that TAPS' structural supports could be dramatically affected. Despite clear, solid evidence of climate change affecting Alaska this DEIS does not address how the pipeline owners would plan and deal with these impacts. Nowhere in this document is there a specific plan for "carefully" monitoring the potentially significant impacts of climate change. We question whether the "Reliability Centered Maintenance" (RCM) procedure will prove to be an adequate safeguard – particularly given the stated interest of the TAPS Owners in reducing costs. 50-8

Additionally, this document states that not only are landslides likely as a result of warming temperatures, but also caused by earthquakes. It goes on to state, "The pipeline was not designed to withstand a landslide." (p. 94, Sec. 4.3.6). Once again, landslides and TAPS' vulnerability to impacts from them is not addressed later in the document, nor are any mitigation measures required for the pipeline owners to plan for landslides. 50-9

B. Surface Water

A more comprehensive evaluation of the vulnerability of waterbodies to potential spills at TAPS' crossings needs to be undertaken. Any leaks that reach our rivers or streams could be catastrophic – especially considering the pipeline owners have not proven that they can respond to leaks in a timely manner (Livengood 2001). The protection of Alaska's water quality is critical not only to the health of our fish, megafauna and birds, but also for subsistence. The Surface Water and Groundwater Sections of the DEIS do not address how these areas will be critically monitored in the future as wear, tear and corrosion effects the reliability of the pipeline. 50-10

C. Terrestrial Vegetation and Wetlands

The continued extraction of sand, gravel, and quarry, as well as disturbance of native vegetation will have substantial cumulative effects on the vegetation and terrestrial environment, particular in sensitive arctic areas. Effects we are already seeing from maintenance and those remaining from the construction of the pipeline include sedimentation, erosion, inadequate soil present for revegetation, exposure of permafrost and damage from vehicles. Again these impacts will only continue over the next 30-year period. More stringent requirements for immediate reclamation need to be required of the pipeline owners to avoid more devastating impacts over time. 50-11

D. Birds and Terrestrial Mammals

This section addressing impacts on birds and terrestrial mammals completely lacks any substantial information or analysis of cumulative affects. Rather than discussing how animal populations will be monitored to ensure that TAPS is not having long term, cumulative effects, the DEIS praises the use of animals of culverts and gravel pads for breeding and lodging. 50-12

E. Spills

With the Supreme Court's decision to overturn ADEC's best available technology criteria, Alaska's vulnerability to failed spill responses has increased. Alaska Statutes do not contain strong enough language requiring the pipeline owners to provide feasible, functional response plans. As demonstrated during the damage done by a bullet hole in fall 2001, even under BAT criteria pipeline owners did not respond quickly enough to prevent significant environmental damage to the surrounding vegetation. ADEC should use this renewal process to develop better criteria with specific technology requirements. The Draft EIS falls back on the newly developed three-tiered criteria that is not stringent enough in its requirements to guarantee timely and effective responses to spills. 50-13

F. Cumulative Effects

As noted in our comments above, the cumulative effects of the presence and maintenance of TAPS are not considered thoroughly enough throughout the document. This 1,700-page document is distinctly lacking in-depth analysis of the on-going environmental impacts of the pipeline. BLM-JPO and Argonne National Laboratory should initiate a separate, more thorough environmental review prior to issuing any permit. 50-14

VII. Conclusion

The Northern Center encourages BLM and DNR to rethink their reliance on industry assurances in regards to the safety and monitoring of TAPS. The public has repeatedly demanded – and has been repeatedly promised a safe pipeline. Measures such as a citizens advisory council, an independent analysis of the safety and environmental effects of TAPS and an adequate period for public comments are all critical to fulfilling this promise. 50-15

Sincerely,

Deb Moore
Arctic Coordinator

Responses for Document 00050

00050-001: Thank you for your comment.

00050-002: The DEIS followed Council on Environmental Quality guidelines in developing the cumulative analysis. In addition, the final EIS contains substantive improvements in the cumulative analysis, and the reader is referred to Section 4.7 of the FEIS for further information on cumulative analysis. Safety and monitoring are covered in several sections of the EIS, including Sections 4.1, 3.17, 2.2.2, and 2.2.3.

Although 45 days is understandably a short time to review a document of this size, it is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00050-003: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00050-004: The reader is directed to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00050-005: Maintenance is critical to the continued integrity of TAPS and received considerable attention by the JPO. The JPO and APSC have entered into Memoranda of Agreement committing APSC to using reliability centered maintenance (RCM) protocols as the basis for maintenance decision-making and establishing expectation for its use. See Section 4.1.1.7 for additional discussions on RCM.

Under the Federal Grant, APSC is responsible for maintaining and operating TAPS safely and in a manner that is sufficiently protective of public safety and the environment. (See Grant Stipulation 1.21.1.) Except for contingency planning where Alaska regulations specifically call for an evaluation of the adequacy of resources (equipment as well as personnel) by regulatory authorities, APSC alone has the responsibility for developing appropriate management practices and operating procedures and committing adequate resources to successfully implement those systems. However, in its oversight capacity, the JPO does have the opportunity to evaluate the adequacy of APSC's operating practices and does consider resource commitments (both equipment and personnel, including levels of training) as part of the root cause analyses it performs for all identified operational deficiencies. The JPO also has authority to require APSC to develop, and submit for JPO approval, a corrective action plan that may also include implementing resources. It is inappropriate for the JPO to direct the application of specific types and amounts of resources for TAPS operations. APSC retains the sole responsibility for committing sufficient and appropriate resources to meet its obligations under the Federal Grant and its stipulations.

00050-006: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00050-007: The reader is directed to the discussion of escrow funds found in Section 2.5.

00050-008: VSM stability is obviously critical to TAPS integrity. As such, it is the focus of extensive monitoring and surveillance. Please see Section 4.3.2 of the FEIS (Soils and Permafrost) for additional information.

A study to review and re-evaluate potential liquefaction hazards for the TAPS after 25 years of operation will answer many questions regarding the impact of the climate change and the TAPS on the permafrost. When the DEIS was prepared, the results of the study were not available.

00050-009: VSM stability is obviously critical to TAPS integrity. As such, it is the focus of extensive monitoring and surveillance. Please see Section 4.3.2 of the FEIS (Soils and Permafrost) for additional information.

00050-010: Because the TAPS pipeline crosses more than 800 rivers and streams, it is not possible or necessary to evaluate each potential crossing. Instead, six representative rivers were analyzed in detail in Section 4.4.4.3. For the Proposed Alternative, pipeline monitoring and surveillance will continue in order to minimize potential impacts of a spill. Details on appropriate responses for spills along the pipeline are provided in the Contingency Plans for the right-of-way; a typical response scenario is described in Section 4.4.4.3.2. Impacts to groundwater along the TAPS ROW are discussed in Section 4.4.4.4.

00050-011: The impacts identified in the comment are discussed in Section 4.3.15. The impact analysis took into consideration recently established restoration performance requirements which include the requirement that restoration of disturbed areas "be completed as soon as practical after the disturbance," and "restoration will be evaluated by the Authorized Officer and Pipeline Coordinator on a site-specific basis," considering, among other things, whether the disturbed site has been returned, to the extent possible, "to its original or normal physical condition and natural biological productivity and diversity with reestablishment of native plant and animal species" (Brossia and Kerrigan 2001).

00050-012: Section 4.7.7.3 provides a thorough analysis of cumulative impacts on birds and terrestrial mammals including habitat loss, alteration, or enhancement; disturbance or displacement; mortality; obstruction to movement; and spills. There are numerous stipulations in place for mitigating or preempting impacts to ecological resources (see Section 4.1.3.3). Also see Chapter 9 for a synopsis of laws, regulations, and executive orders with which TAPS must comply. A number of these require protection of ecological resources.

00050-013: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice. See Section 4.1.1.8 for an extensive discussion on the bullet hole incident in October 2001.

00050-014: Ongoing maintenance and operations of TAPS are considered in detail as part of direct impacts of the proposed action in Sections 4.1-4.6 of the EIS. In addition, the impacts of the proposed action together with other past, present, and reasonably foreseeable future actions are addressed in Section 4.7 of the EIS.

00050-015: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00051

Chugach Alaska
CORPORATION

August 20, 2002

02 AUG 20 PM 2:42

Via Hand Delivery
BLM TAPS Renewal
Joint Pipeline Office
411 W. 4th Avenue, Suite 2
Anchorage, AK 99501

Via e-mail
tapseis@anl.gov

Via Facsimile
(866) 542-5904

Re: Comments on Trans-Alaska Pipeline System ("TAPS") Right-of-Way Renewal Draft Environmental Impact Statement ("DEIS")

Dear Sir/Madam:

These comments are submitted by Chugach Alaska Corporation ("Chugach"), formerly known as Chugach Natives, Inc., the Alaska Native Regional Corporation established for the Chugach Region pursuant to the Alaska Native Claims Settlement Act of 1971, as amended, 43 U.S.C. § 1601 *et seq.* ("ANCSA"). These comments supplement the scoping issues Chugach submitted on October 19, 2001. Chugach appreciates this opportunity to comment on the DEIS and the proposed action to renew the Federal Agreement and Grant of Right-of-Way (referred to hereinafter as the "TAPS ROW").

As set forth in our scoping comments, Chugach supports renewal of the TAPS ROW on terms that will promote the security and safe operation of TAPS facilities in the Chugach Region, and provide sufficient protection and compensation to the Chugach Natives for the inherent risks associated with the operation of TAPS in the Region and on Chugach's lands. 51-1

In our view, the DEIS is a complex and lengthy document that, as currently written, has serious deficiencies that the BLM will need to address in order to accurately

560 East 34th Avenue Suite 300 Anchorage, Alaska 99503-4196 Phone 907-563-8866 Fax 907-563-8402

reflect both past and future impacts of the TAPS on the Chugach Region, and to develop appropriate mitigating measures. In this regard, the 45-day public comment period is inadequate and should be extended to allow additional time to review and evaluate the DEIS, as previously requested by Chugach and others. The BLM's failure to honor this request imposes a correspondingly greater burden on BLM to thoroughly review these and other comments received on the DEIS, and to give them greater consideration in the Final EIS than was given in the DEIS to the comments submitted during the scoping process. 51-2

The DEIS improperly minimizes and marginalizes the catastrophic impacts of the *Exxon Valdez* oil spill and other spill events as they relate to the past, present, and future operation of the TAPS in the Chugach Region. On a more general level, the DEIS fails to appreciate or adequately evaluate the significant and lasting impacts that the development and operation of TAPS has had and will continue to have on Alaska Natives, particularly on the Chugach Natives, their communities, and their cultural heritage and resources. The DEIS also fails to appropriately convey the extent to which Alaska Natives and their lands were implicated in, and were instrumental in facilitating, the orderly development of the TAPS. Lastly, few of the issues raised by Chugach in its scoping comments are adequately discussed or analyzed in the DEIS, and many are simply left unaddressed. The BLM must correct these deficiencies in the Final EIS and Record of Decision for the TAPS ROW renewal. 51-3

I. The DEIS Improperly Minimizes and Marginalizes the Impacts of the *Exxon Valdez* Oil Spill and their Relevance to the Renewal of the TAPS ROW and the Continued Operation of the TAPS

The DEIS's treatment of the *Exxon Valdez* oil spill is, in our view, a disservice to the Chugach Natives and others whose lives and livelihoods were forever changed by that tragic event, and must be substantially modified. The DEIS takes the implausible position that the marine transportation of oil through Prince William Sound from the Valdez Marine Terminal is not a component of the TAPS, and treats such marine transportation as a cumulative impact, rather than as a direct or indirect effect of the existence and operation of the TAPS. The DEIS then separates oil spills and cumulative impacts from what it characterizes as the "normal" or "routine" operation of the TAPS, and assigns probabilities to the reoccurrence of similar events of that magnitude that are wholly out of proportion to what, in reality, has occurred during the first 25 years of TAPS operations. 51-4

The DEIS's employment of these doubtful and unsupported distinctions has the aggregate effect of obscuring and grossly understating the actual impacts of the totality of TAPS operations, especially in the Chugach Region, and effectively prevents the public from understanding the nature of the impacts of renewing or not renewing the TAPS

ROW. The DEIS must facilitate, not obstruct, the public's awareness and understanding of the impacts associated with the proposed action. As currently written, the DEIS fails to describe and evaluate the full extent and impacts of the operation of the TAPS, which can only render suspect its predictions for the future operations of TAPS and the impacts associated with its renewal. The DEIS should be significantly modified to address these deficiencies.

A. The Operation of TAPS Includes the Marine Transportation of Oil, and the Effects of that Component of TAPS Operation Are Manifestly Related to the Proposed Action

The DEIS states that "the downstream end of the TAPS extends to the end of the loading arms for crude oil located at the tanker loading berths in the Valdez Marine Terminal." (DEIS Sec. 1.2). Defining the scope of the federal action to exclude the marine transportation of oil through Prince William Sound and its adverse effects is legally unsupportable and ignores a critical and inherent component of the operation of TAPS. 51-5

The TAPS ROW specifically prohibits the discharge of oil by the TAPS owners "into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone in violation of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §1321 *et seq.* and the regulations issued thereunder, or in violation of applicable laws of the State of Alaska and regulations issued thereunder." (TAPS ROW, Exhibit D, Sec. 2.13.1). The TAPS ROW further states that it is "the policy of the Department of the Interior that there should be no discharge of Oil or other pollutant into or upon lands or waters," and explicitly requires the TAPS owners to submit and annually update oil spill contingency plans and methods of implementing them, which are then subject to approval by the authorized officer of the Secretary of the Interior. (TAPS ROW, Exhibit D, Sec. 2.14).

Under these circumstances, the BLM cannot responsibly ignore what happens after oil is loaded onto tankers and transported through Prince William Sound in analyzing the impacts of renewing the TAPS ROW. According to the express terms of the TAPS ROW under consideration for renewal, the marine transportation of oil through Prince William Sound is squarely within the authority of the BLM to regulate and prescribe conditions for mitigating its adverse effects, and is therefore an appropriate and necessary subject of discussion and analysis in the DEIS. The BLM cannot disclaim its authority and responsibility to enforce the Department's stated policy, laws and regulations, or the explicit terms of the TAPS ROW being considered for renewal. It must comprehensively analyze the impacts flowing from marine transportation as impacts directly or indirectly related to the operation of the TAPS. 51-6

Practically speaking, if the effects of TAPS truly did come to an end at the Valdez Marine Terminal loading arms, the TAPS would have never been built. The BLM implicitly acknowledges this elsewhere throughout the DEIS by touting the undisputed economic benefits and importance of the TAPS to the Lower 48 states and to the nation's energy security and balance of trade, and by making the more controversial claim concerning the benefits that oil spills confer on Alaska Natives, Alaska communities and the Alaska economy. The BLM must redefine the TAPS to include the marine transportation of oil out of the Valdez Marine Terminal, and comprehensively analyze its effects, both positive and negative, on the people, land, and resources in the Chugach Region.

B. The DEIS Improperly Treats Oil Spills as Events Occurring Outside of the Normal Operation of TAPS

The DEIS divides the impacts of renewing or not renewing the TAPS ROW into "those associated with routine operations and those associated with spills." (DEIS Executive Summary Sec. 6.1). This artificial separation of oil spills into one category, and TAPS operations minus oil spills into another category, improperly suggests that oil spills are events that are somehow removed in time or place (or in some other unspecified manner) from the "normal" or "routine" operation of the TAPS. It also has the unacceptable effect of producing grossly inaccurate and misleading statements throughout the DEIS, and must therefore be abandoned. 51-7

Few who have lived or worked in Prince William Sound from the time of the *Exxon Valdez* oil spill to the present day would agree with the DEIS's statement that "[t]he most significant environmental impacts associated with the TAPS already occurred when the pipeline was constructed," (DEIS Executive Summary Sec. 8), or that the "transit of the tankers through Prince William Sound under normal operations has also not resulted in any observed impacts on physical marine resources." (DEIS Sec. 4.3.8.4).

Likewise, it is irresponsible to state, as the DEIS does, that oil spills "are essentially accidents that are not related to specific alternatives." (DEIS Sec. 2.6). The difference between an operating pipeline and a pipeline that is shut down is the difference between the regular and frequent transportation of oil out of Prince William Sound and its absence. Two alternatives propose renewal and continued operation of the TAPS after 2004, one does not, and the risks for a catastrophic oil spill of the *Exxon Valdez*-type are clearly not equivalent under each of these alternatives. 51-8

Surprisingly, the position taken in the DEIS on this issue conflicts with the TAPS owners' own characterization of oil spills and their effects, in their efforts to obtain

higher tariffs to recoup the costs of settling damage claims arising out of the *Exxon Valdez* oil spill, as the normal and inevitable result of being in the oil transportation business. (See David Whitney, *On Spills, Alyeska Wants It Both Ways: Company Wants to Raise Charges to Recoup Exxon Settlement Costs*, Anchorage Daily News, Oct. 10, 1994 at A1).

The treatment and analysis of oil spills as events outside of the normal operation of the TAPS simply does not reflect the reality of TAPS operations. Oil spills have occurred and will continue to occur during the routine operation of the TAPS; such spills and their effects on the environment are not divorced in time or place from the operation of the TAPS, but instead are the direct result of and occur during such operation.

Furthermore, it defies reason and reality to maintain, as the DEIS does, that an oil spill of the magnitude of the *Exxon Valdez* oil spill is predicted to occur no more than once every 1000 years, when in fact it has already occurred in the first 25 years of TAPS operation. The DEIS's failure to consider the spill events that have actually occurred in the first 25 years of TAPS operation in developing spill scenarios for predicting impacts of TAPS operations for the next 30 years is a fundamental error that must be corrected. 51-9

The BLM must acknowledge and address these issues in the DEIS and attach appropriate conditions to the renewal of the TAPS ROW that will adequately protect and compensate those who, like the Chugach Natives, bear a disproportionate share of the inherent risks associated with the operation of the TAPS.

C. The DEIS Fails to Analyze the Effects of Renewing the TAPS ROW Cumulatively with the Effects of Past Oil Spills and Future Oil Development and Production on the North Slope

The DEIS's analysis of potential impacts from TAPS operations fails to assess those impacts cumulatively with the impacts resulting from the *Exxon Valdez* oil spill and other significant spill events that occurred during the first 25 years of operation of the TAPS. The DEIS's analysis of potential impacts is also largely dependent upon the assumption that oil production will decrease over the remainder of the life of the TAPS. This assumption ignores the potential for additional oil production on the North Slope resulting from further development of existing fields, the discovery of new oil fields, and the opening and development of the Arctic National Wildlife Refuge. The BLM must consider the impacts of the *Exxon Valdez* oil spill and other prior spill events in analyzing the impacts associated with renewing or not renewing the TAPS ROW, and must address the potential for increased oil production under the renewal alternatives. 51-10

II. The DEIS Fails to Acknowledge the Unique Social, Cultural and Economic Status of Alaska Natives, their Special Relationship and History with the Oil Industry, the TAPS, and the Important Commitments of the TAPS Owners to Alaska Native Peoples

The DEIS's discussion and analysis of the sociocultural and socioeconomic effects of the past, present, and future operation of the TAPS on Alaska Natives is grossly deficient and must be expanded.

The sociocultural and socioeconomic status of Alaska Natives, born out of thousands-of-years-old traditions that inform today's modern corporate and tribal custodians of Native culture, heritage and resources, is entirely unique and without historic parallel. That the BLM fails to appreciate this fact is painfully apparent from the DEIS's discussions of impacts of the proposed action on Alaska Native sociocultural systems, ANCSA corporations, regional economies and subsistence: they take place almost entirely in isolation from one another, as if these aspects of modern Native life had nothing to do with each other.

For example, the DEIS improperly assumes that the unremarkable similarities that exist between Alaska Native corporations and corporations elsewhere in America provide the basis for analyzing the effects of the proposed action on Alaska Native corporations in a like fashion, i.e., on strictly economic terms. This type of analysis completely ignores the important social and cultural roles that Native corporations play in the daily lives of Alaska Natives, and the more significant differences that exist between Alaska Native corporations and other general corporations, such as the inalienability of Alaska Native corporations' stock, the unique services that they perform in providing their shareholders with homesites and their elders with benefits, in promoting their traditional culture and managing their cultural resources, and in otherwise striving to improve the condition of their people. 51-11

Clearly, the BLM must provide a more appropriate and meaningful discussion of Alaska Natives' social, cultural and economic condition in modern times, and then analyze anew the effects—direct, indirect, and cumulative—of the operation and renewal of the TAPS on Alaska Natives' present-day sociocultural and socioeconomic systems.

The development of the TAPS would not have been possible without the cooperative efforts of the oil industry and Alaska Native peoples to address Alaska Natives' aboriginal claims to lands, and the commitments undertaken by the TAPS owners to Alaska Native peoples that helped clear the way for the construction of the TAPS. The DEIS fails adequately to describe this unique historical circumstance, or to 51-12

evaluate the cumulative effects of this unprecedented and expedient settlement on Alaska Native peoples. 51-12 (Cont.)

Undeniably, the TAPS has had a profound effect on Alaska Native peoples. The interests of Alaska Natives have been inextricably tied to the interests of the TAPS owners and the oil industry in Alaska since before its construction, and will continue to be significantly affected by the operation of TAPS over the next 30 years. The commitments undertaken by the TAPS owners to Alaska Natives in Section 29 of the TAPS ROW to recruit, train and employ Alaska Natives in connection with the construction and operation of the TAPS, and their commitment in Section 30 to avoid damage to the resources relied upon by Alaska Natives for subsistence, are an explicit acknowledgement of the impacts that the TAPS has had and will continue to have on the sociocultural and socioeconomic systems of Alaska Natives, and the critical role that the TAPS must perform in improving the lives of Alaska Natives affected by its operation over the next 30 years. The BLM must provide a more comprehensive and relevant discussion of the unique historical circumstances and commitments that gave rise to the development of the TAPS, and analyze their effects cumulatively with other predicted impacts resulting from the operation of the TAPS. 51-13

The DEIS also must address and evaluate the specific commitments the TAPS owners made to specific Native groups for contracting opportunities related to the construction and operation of the TAPS, and the effects caused by their failure to fulfill those commitments. In our scoping comments we raised the concern that the commitments of the TAPS owners in 1969 to provide the Chugach Natives with negotiated contracting opportunities in exchange for the relinquishment of our claims to the land on which the Valdez Marine Terminal is now situated were never meaningfully fulfilled. The failure of the TAPS owners to satisfy their express obligations undertaken to the Chugach Natives in connection with the TAPS in 1969 cannot be omitted from any meaningful discussion of the impact of TAPS on the socioeconomic condition of the Chugach Region. The BLM, consistent with its obligation to assess the cumulative effects of its decision, and consistent with the proper exercise of its discretion to review all agreements that may be relevant to the decision to renew, should undertake to review and discuss the specific commitments of the TAPS owners to Chugach, and enforce them as a precondition to renewal of the TAPS ROW. 51-14

III. The DEIS Largely Ignores Chugach's Scoping Issues

In addition to the scoping issues already mentioned above, the following issues and concerns Chugach raised in its scoping comments are not adequately addressed in the DEIS. The BLM must give further consideration to these issues in the Final EIS and in the Record of Decision. 51-15

A. Alternatives for Regulating the Operation of the TAPS

Chugach raised several issues related to the shortcomings of the current regulatory regime for the TAPS, and identified a number of different measures for further consideration in evaluating reasonable alternative means for regulating the TAPS and for mitigating the adverse effects of its operation. These measures include: increasing the level of funds required to be available for paying damages associated with the TAPS; creating a separate fund for such purposes as a condition to renewal of the TAPS ROW; allocating funds to the Regions affected by the operation of TAPS in proportion to the respective risks borne by each Region; providing meaningful economic, social, cultural, spiritual and community benefits to Alaska Natives affected by the operation of TAPS through various means set forth in the scoping comments; ensuring the prompt payment of unpaid damage claims, and developing new, improved mechanisms for resolving and compensating those who are damaged as a result of the operation of TAPS; creating the means whereby Alaska Natives may directly enforce the terms of the TAPS ROW that affect their interests and the Alaska Native Utilization Agreement ("ANUA"), such as the establishment of an Alaska Native supervisory board to monitor and enforce compliance with Section 29, and individual enforcement of Section 30 by individuals who are affected by damage to subsistence resources, and other methods of bringing the benefits accruing to Alaska Natives into proportion with the risks borne by Alaska Natives through the continued operation of the TAPS. 51-16

Of these measures, the DEIS acknowledges only a handful, which are then summarily disposed of without detailed analysis. With respect to the payment of unpaid damage claims from the *Exxon Valdez* oil spill, the DEIS states that this issue "is not reasonably related to a decision on the application for renewal of the TAPS ROW." (DEIS Sec. 2.5). Yet, the decision to renew cannot be made without first determining that the TAPS owners are financially capable of operating, maintaining and terminating the TAPS, 30 U.S.C. §185(j), and the existence of extremely large, adjudicated, outstanding and unpaid claims for damages would seem to be relevant to a determination of financial capability. The EIS must provide a more detailed analysis and evaluation of the financial capabilities of the TAPS owners to meet their obligations under the TAPS ROW in light of these unpaid damage claims.

Regarding Chugach's proposal to establish the means by which Alaska Natives may directly enforce the terms of the TAPS ROW and ANUA, the DEIS does not directly address this issue, but obliquely states that the parties to the ANUA are Alyeska Pipeline Service Company and the Department of the Interior. The implication of this statement, which could be applied similarly to the TAPS ROW, is that Alaska Natives are not parties to the ANUA and therefore do not have enforceable rights under it. The BLM also states

that mechanisms currently exist for compelling TAPS owners to provide aid to those impacted by the TAPS. But these responses beg the question that our proposal seeks consideration of: the development and analysis of alternative means of enforcing the terms of the TAPS ROW and ANUA. Alaska Natives do not need the BLM to tell them that they cannot presently enforce the terms of these agreements, but instead that the TAPS ROW will be renewed subject to terms and conditions that enable such enforcement. 51-16 (Cont.)

As noted throughout the DEIS, the BLM has broad authority to modify the terms and conditions of the TAPS ROW at any time when deemed necessary in the public interest. Given this broad authority, it is unclear why so many of the alternatives and issues raised in the scoping process are deemed to be outside of the BLM's decision space, with no more explanation than that a separate process would need to be undertaken in connection with the implementation of a proposed alternative, such as the development of new rule-making regulations, a separate NEPA analysis, or a separate Federal Advisory Committee Act process. Nowhere does the DEIS explain why these additional processes are necessary, and if they are necessary, why their necessity somehow precludes further consideration of an alternative. It is not self-evident that because a proposed alternative or issue might require, for instance, a separate NEPA analysis, that it is not a suitable candidate for further discussion and evaluation in this process. The BLM must explain why additional, separate processes are required to implement certain proposals, and if required, why the BLM is somehow precluded from developing or considering alternatives that incorporate those proposals. The significant public interest expressed in this process and in the issues raised would seem to be sufficient justification for the BLM's development and consideration of alternatives that address these issues. 51-17

B. Subsistence Evaluation and Protection

In our scoping comments we raised a concern as to the long-term effects of the *Exxon Valdez* oil spill on the health of the Chugach Region's people and resources, and the effects of oil development on social and cultural aspects of community life in the Region. We requested that the BLM evaluate these issues in the DEIS, including the adverse physical and psychological effects of a TAPS-related oil spill on individuals and the environment, from actual oiling to perceived toxicity in subsistence resources, to the fear of future catastrophic oil spills in the Region. 51-18

The BLM fails to adequately address these concerns in its discussion of the subsistence and economic impacts to the villages and communities in Prince William Sound in the DEIS. The DEIS acknowledges that Alaska Natives have been found in studies to have three times the stomach cancer rates of Whites, but explains that the higher incidence of eating smoked meats and fish is the likely cause, not the toxins 51-19

present in subsistence resources as a result of the *Exxon Valdez* oil spill. While it may be true that smoking foods contributes more contamination than that associated with residual oil or oil products in the same food, this only underscores the increased threat that Alaska Natives face as a result of tainted subsistence resources. It does not, as the DEIS could be read to imply, eliminate the threat posed by the toxic oiling of subsistence resources through the assignment of culpability to Alaska Natives and their traditional cultural practices. 51-19 (Cont.)

The DEIS fails to consider the cultural importance of subsistence activities to the structure of Native communities and the maintenance of their cultural heritage. The equating of subsistence values with dollar amounts, as the DEIS does, demonstrates a sterile insensitivity to and unconcern for the culturally and socially significant values that subsistence practices have for Alaska Natives, and inevitably fails to appreciate or properly evaluate the impacts of the operation of the TAPS on these important values. The BLM must discuss and evaluate subsistence activities and how they are impacted by the operation of the TAPS from the perspective of their importance to Alaska Natives, not their perceived cash value. 51-20

C. Equitable Compensation for Lands Burdened by TAPS ROW

In our scoping comments we raised the concern that the current methodology of compensating private owners whose land is burdened by the TAPS ROW does not adequately reflect or compensate for the extent to which the TAPS ROW limits the use of the burdened land. That is, the rental is based on the assumption of a non-exclusive use of the land, when in fact the maintenance of pipeline integrity and security effectively prohibits other uses of the land, especially in light of ongoing and future terrorist and security threats.

Recently, the Alyeska Pipeline Service Company ("APSC") confirmed our assessment of the situation when it proposed an amendment to a bill (HR 3148) that would allow Alaska Native veterans of the Vietnam era to apply for Native allotments. The amendment would, for security reasons, prohibit allotments from being selected from lands within 300 feet of the TAPS ROW, which would effectively increase the width of the TAPS ROW to twelve times its original size. If, as Chugach believes, APSC's proposal reflects what is considered necessary to provide for the security of the TAPS, then a corresponding adjustment in the level of compensation paid to those burdened by the TAPS ROW is appropriate. The DEIS fails to consider and evaluate alternative and more equitable methods of compensating landowners such as Chugach for the increased burden imposed by the TAPS ROW. The BLM should address this issue and explore more equitable compensation methods in the Final EIS. 51-21

D. Archaeological and Cultural Resources Evaluation and Protection

In our scoping comments we raised the concern that the effects of TAPS-related oil spills on historical and cultural resources must be considered and evaluated, including both the immediate adverse physical impacts of oiling and the impacts of oil spill personnel locating, handling, removing and mishandling those resources.

The DEIS fails to adequately consider and evaluate the impacts of the *Exxon Valdez* oil spill, and potential future oil spills on cultural resources in the Chugach Region. While the DEIS notes that the potential exists for adverse impacts to historical and cultural resources as a result of oil spills, it determines that various factors make it impossible to establish the precise nature of those impacts, including significant deficiencies and gaps in the current data. (DEIS Sec. 3.26). Nevertheless, the DEIS goes on to state that the likelihood of any spills actually impacting cultural resources is very low, and that no cumulative impacts are anticipated for cultural resources. (DEIS Sections 4.4.4.16 and 4.7.8.4).

The DEIS must address and analyze the impacts—direct, indirect, and cumulative—of the *Exxon Valdez* oil spill and potential future oil spills on the historical and cultural resources in the Chugach Region. This discussion must address the impacts of oil spill cleanup personnel and activities on such resources, and evaluate ways of mitigating the adverse impacts on cultural resources. 51-22

The BLM must also address our scoping concern that the proposed action constitutes an "undertaking" within the meaning of the National Historic Preservation Act ("NHPA"), and that a Section 106 review process should be completed in coordination with the NEPA process. The DEIS states that the Joint Pipeline Office has begun negotiations with the Alaska State Historic Preservation Officer to establish a programmatic agreement for the protection of cultural resources along the TAPS. However, the BLM must explain how this meets its present obligation to comply with the requirements of the NHPA to identify, in consultation with Alaska Natives, all eligible and potentially eligible historic properties in the vicinity of the TAPS, determine whether the proposed action constitutes the type of activity that has the potential to cause effects on those properties, and if so, to evaluate those properties, in consultation with Alaska Natives, for their historic significance.

The DEIS reports that there are 294 identified archaeological sites within a 1-mile corridor along the length of the TAPS, but only 16 of them have been evaluated for eligibility for listing on the National Register of Historic Places. (DEIS Sec. 3.26.2) The BLM should seek to obtain and evaluate, through the Section 106 review process under the NHPA, additional information concerning archaeological, historical, and cultural sites

within the vicinity of the TAPS, not only along the pipeline corridor but throughout Prince William Sound where oil spills and their cleanup pose the greatest threat of adverse impacts to cultural resources. Such information is critical to understanding and evaluating the effects of the proposed action on cultural resources.

E. TAPS Access Roads

In our scoping comments we noted that the TAPS owners' application for renewal of the TAPS ROW also requested renewal of certain access road rights-of-way on Chugach's land (BLM-designated AA-8838 and AA-9462), and that the BLM had transferred exclusive administrative authority over these access roads, including the authority to renew them, to Chugach. Although the BLM has since requested that these access roads be removed from the TAPS owners' application in light of the transfer of their administration to Chugach, the TAPS owners have failed to amend their application to delete these roads. The BLM must clarify in the Final EIS and the Record of Decision that it does not have the authority to renew these access roads. 51-23

IV. Conclusion

Chugach supports renewal of the TAPS ROW. However, the DEIS as currently written is significantly flawed and requires substantial redrafting prior to a final decision on the renewal of the TAPS ROW. The BLM must fully consider and evaluate the issues and concerns raised in the NEPA process, and develop a full range of alternatives using all available information relevant to the proposed action, which includes the voluminous scientific literature relevant to assessing the impacts of the *Exxon Valdez* oil spill on the people, communities and resources of the Chugach Region, as well as the information and views expressed in this NEPA process. Chugach's proposals in these comments for BLM action prior to, or as a component of, its decision on the renewal of the TAPS ROW, can be summarized as follows:

- Redefine the scope and analysis of the proposed action to include the effects of the marine transportation of oil
- Recognize and analyze oil spills as events occurring during the normal operation of the TAPS
- Attach appropriate conditions to the renewal of the TAPS ROW that will adequately protect and compensate those bearing a disproportionate share of the risks associated with the operation of the TAPS
- Analyze the cumulative impacts of past spill events and potential future increases in oil production under the renewal alternatives

- Provide a more appropriate and meaningful discussion and analysis of Alaska Natives' social, cultural and economic status and the effects of the operation and renewal of TAPS on that status
- Provide a more comprehensive and relevant discussion of the unique historical circumstances and commitments that gave rise to the development of the TAPS, and analyze their effects cumulatively with other predicted impacts resulting from the operation of the TAPS
- Review, discuss and evaluate the specific commitments of the TAPS owners to the Chugach Natives, and enforce them as a precondition to renewal of the TAPS ROW, and
- Adequately address, in the Final EIS, the issues Chugach raised in the scoping phase of this process, including:

    - Analyzing the numerous alternative proposals put forth for regulating the operation of TAPS
    - Analyzing the long-term effects of the *Exxon Valdez* oil spill on the health of the Chugach Region's people and resources, and the effects of oil development on social and cultural aspects of community life in the Region
    - Evaluating alternative and more equitable methods of compensating landowners such as Chugach for the actual burden imposed by the TAPS ROW on their lands
    - Obtaining and evaluating additional information, in compliance with the requirements of the NHPA and its implementing regulations, to fill the significant information gap that currently exists concerning cultural sites and resources along the TAPS and in the Chugach Region, and by extension the potential impacts of the proposed action on those sites and resources, and
    - Clarify in the Final EIS and the Record of Decision that BLM does not have the authority to renew the access roads the administration of which was transferred to Chugach

The significant public interest expressed in the renewal of the TAPS ROW and in the terms and conditions of its operation present a unique opportunity and challenge for the BLM to hear and understand what is important to Alaska Natives, Alaska communities, and other individuals and entities having an interest or stake in the renewal of the TAPS, and to evaluate the proposed action in light of these concerns in a responsible and balanced manner. That the BLM has the authority to modify the conditions of the TAPS ROW at any time matters little if the issues and concerns expressed throughout this, the most significant forum for public comment that is likely ever to occur during the life of the TAPS, are not sufficient to compel the BLM to act.

Chugach greatly appreciates the opportunity to participate in the TAPS right-of-way renewal process, and we look forward to establishing strong and productive working relationships with the Joint Pipeline Office federal and state agencies, the TAPS owners, and Alyeska as we work to resolve these important issues.

Sincerely,

Sheri Buretta,
Chairman

Barney Uhart,
President

cc: Chugach Region Village Corporations
Chugach Region Tribes
Alaska Regional Corporation CEOs
Julie Kitka, Alaska Federation of Natives

Responses for Document 00051

00051-001: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide the BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the grant and lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 ("Adaptive Nature of the Grant in Compliance Monitoring"), 4.1.1.3 ("Risk-based Compliance Monitoring"), 4.1.1.4 ("JPO Comprehensive Monitoring Program"), and 4.1.1.8 ("Coordinated Planning and Response to Abnormal Incidents") for more information on the role of adaptive management as a JPO business practice.

The issue of financial compensation for use of Tribal lands is outside the scope of this EIS, which addresses the use of lands under the jurisdiction of the BLM.

00051-002: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule, and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00051-003: Comments received during scoping are aggregated into a record of public scoping and are used to frame the issues and the analyses in the EIS. All scoping comments were considered in preparing the DEIS. Scoping comments are not listed and identified individually or responded to in the EIS. Comments received on the quality of the analysis in the DEIS are addressed specifically in the FEIS and may result in text changes in the FEIS, as well.

00051-004: Thank you for your comment. Please see Section 1 and Section 4.7.

00051-005: Thank you for your comment. Please see Section 1 and Section 4.7.

00051-006: Prince William Sound and the Physical Marine Environment are addressed in the FEIS in Section 4.7.6.6, under Cumulative Effects. Other aspects of marine transportation are also addressed elsewhere in the FEIS; for example, in Section 4.7.10.5, which discusses potential spills and accidents that could affect Port Valdez and Prince William Sound.

00051-007: The Executive Summary has been extensively modified to reflect changes in the FEIS. Many of these changes have been made to reflect responses to comments received by BLM from the public. The FEIS has developed an extensive analysis of spill scenarios and impact analysis of spills (Section 4.4). This section was developed in response to overwhelming comments received during public scoping clearly indicating a need for explicit analysis of oil spill scenarios. These scenarios reflect both normal operating conditions, as well as spills that could result from accidental releases.

00051-008: The text in Section 2.6 has been revised.

00051-009: Spill scenarios considered along the pipeline and at the VMT are discussed in Section 4.4.1 of the EIS. Similarly, the scenarios considered in PWS and at the North Slope are given in Section 4.76.4.10. In estimating the frequencies and spill volumes for future spills, both the historical data from past spills and the potential for catastrophic spills of large consequence were considered. As indicated in Section .4.7.4.10, the types of events that could lead to releases in PWS, similar to the Exxon Valdez oil spill (EVOS) incident in 1989, have been studies extensively. The published results from such risk assessments were used to estimate the frequencies and spill volumes from such catastrophic events.

Events such as the EVOS accident are considered rare events. Rare events, although would have a low probability of occurrence, could happen anytime. Simply because a rare event has occurred over a time span in the past, is no guarantee that it will occur again over the same time period in the future. The probabilities of rare events are estimated based on a consideration of a single or a series of smaller occurrences that lead to the final accident. The probabilities of intermediate occurrences are estimated based on historical data, engineering design specifications of the equipment involved, experience with similar industries or designs, and in some cases expert judgment, and are combined to come up with the probability of the overall event.

After the EVOS spill incident, numerous improvements have been made to reduce the likelihood and/or expected outfall from a catastrophic tanker spill. These measures include the creation of the Ship Escort Response Vessel System (SERVS) and phase-in of double-hull tankers. Double-hull tankers alone are expected to reduce spills by more than 80%. Other key spill prevention measures include provision of tanker escorts, more stringent weather constraints on tanker operations, use of ice routing measures, and mandatory alcohol testing of tanker officers.

00051-010: The EIS used generally accepted throughput estimates for the renewal period. BLM cannot legally analyze ANWR as a potential source of domestic oil production without explicit authorization by Congress. Exxon Valdez is covered in Section 4.7.

00051-011: The text in Section 3.23.7 of the EIS has been changed to reflect information provided in the comment.

00051-012: Section 3.25.1.2 has been expanded to discuss the developments leading to the Alaska Native Claims Settlement Act in greater detail. Section 4.7.8.2, in turn, has been revised to discuss cumulative impacts to sociocultural systems more thoroughly. The EIS does not explore impacts of settling Native land claims on Alaska Natives, which is beyond its scope.

00051-013: The purpose of the EIS is to evaluate anticipated impacts of a proposed action (30-year renewal of the Federal Grant of ROW for TAPS) and alternatives to that action. Included in that evaluation are presentations of background on several issues, including Alaska Native sociocultural systems (Section 3.25.1), and aspects of the current state of these systems (Sections 3.25.1.2 and 3.25.1.3). These three sections, along with the evaluation of cumulative impacts to sociocultural systems (Section 4.7.8.2), have been revised to ensure thorough coverage of the topics contained therein.

00051-014: Thank you for your comment.

00051-015: BLM has revised the DEIS to incorporate numerous suggestions received from the public during the public comment period.

00051-016: Please see the revised Section 2.5 of the FEIS.

00051-017: Please see the revised Section 2.5 of the FEIS.

00051-018: Sections 4.4.4.13, 4.4.4.14, and 4.4.4.15 have been revised to more clearly state the concerns raised by this comment.

00051-019: The reference to eating smoked meats and fish in Section 4.4.4.7.4 does not imply that other issues related to health and safety are not important.

00051-020: The EIS estimated the monetary value of subsistence harvests in one brief subsection of the economic affected environment (Section 3.23.5), solely for the purposes of comparing this source of resources with various sources of state revenues. In contrast, the EIS examines subsistence in a number of sections and appendices devoted solely to that topic (Sections 3.24, 4.3.20, 4.4.4.14, 4.5.2.20, 4.6.2.20, and 4.7.8.1, and Appendices D and E) in which the cost value of subsistence resources is not mentioned. Sections.3.25, 4.3.21, 4.4.4.15, 4.5.2.21, 4.6.2.21, and 4.7.8.2, which discuss Alaska Native sociocultural systems, frequently mention subsistence as well, again without a discussion of the cash value of subsistence resources.

00051-021: Compensation of landowners is outside the scope of the EIS.

00051-022: Section 4.7.8.4 has been revised to discuss impacts to cultural resources due to the Exxon Valdez oil spill. Section 4.4.4.16 references a programmatic agreement that is in place for protecting historic properties during emergency spill responses. This agreement requires that contingency plans be in place for the entire pipeline; the APSC maintains these plans.

The Section 106 process has been coordinated with the NEPA process in preparing this EIS (see Section 5.6 of the FEIS). A programmatic agreement is currently being developed between the BLM, the Alaska State Historic Preservation Office, and the Advisory Council on Historic Preservation to streamline the Section 106 process for addressing cultural resource concerns in the vicinity of the TAPS.

00051-023: Even though the TAPS owners have included access roads AA-8838 and AA-9562 in their federal renewal application, BLM cannot and will not renew them, because BLM waived administration of the roads to Chugach Alaska Corporation in 1991.

00052

PETRO STAR INC.

Telephone: (907) 344-2661
Fax: (907) 267-6123

201 Arctic Slope Avenue, Suite 200
Anchorage, Alaska 99518-3030

August 19, 2002

BLM TAPS Renewal Scoping
Argonne National Laboratory
EAD/900
9700 South Cass
Argonne, IL 60439

BLM TAPS Renewal
Joint Pipeline Office
411 West 4th Avenue, Suite 2
Anchorage, AK 99501 (by hand delivery)

Petro Star Inc. ("Petro Star") thanks you for the opportunity to submit these comments on the renewal of the Trans Alaska Pipeline System ("TAPS") Right-of-Way Renewal and Draft Environmental Impact Statement. Petro Star is a wholly-owned subsidiary of Arctic Slope Regional Corporation ("ASRC"), one of the thirteen Alaska Native Regional Corporations created by the Alaska Native Claims Settlement Act to administer lands and other assets received from the United States when Congress extinguished aboriginal land claims in Alaska. ASRC is the largest private landowner on the North Slope of Alaska and has royalty interests in significant crude oil reserves on the North Slope. Petro Star operates small petroleum refineries at North Pole, Alaska, and near Valdez, Alaska. Both refineries depend on crude oil received from TAPS and have no feasible alternative crude supplies. They produce fuels primarily for consumption in Alaska, both by the civil sector and the Armed Forces.

Petro Star strongly supports renewal of the Right-of-Way Agreement for another thirty-year term. We believe that a long term is necessary to provide the regulatory stability that is necessary to encourage the development of North Slope crude oil (and possibly natural gas, if a gas pipeline route within the TAPS right-of-way is selected) reserves. Long term planning and investment seems most likely to lead to the best production decisions. While we think that it is unlikely that shorter renewal periods would lead to premature cancellation of the right-of-way, they almost certainly would lead exploration and production companies to alter their business strategies to guard against premature cancellation. This would not be in the best interest of North Slope production. In addition, we believe that the administrative burden and expense associated with more frequent renewal proceedings would be pointless and wasteful. 52-1

Petro Star strongly opposes the establishment of a Citizens' Advisory Group to oversee pipeline regulation. TAPS already is subject to scrutiny by a host of Alaska and federal regulatory agencies, and they are adequate to the task of regulating TAPS. We do not believe that a Citizens' Advisory Group would add any significant measure to the technical quality of TAPS regulation – all that it would do would be to inject a political element that we feel is out of place in the day-to-day operations of a crude oil pipeline. 52-2

Please contact me at the above address or telephone number, or at jfboltz@petrostar.com if you have any comments or questions.

Sincerely,



James F. Boltz
Chief Operating Office
Petro Star Inc.

Responses for Document 00052

00052-001: Thank you for your comment.

00052-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00053

Faxed 4:40 1/14 8-20-02

FROM: Bob LaChaussee
P.O. Box 146, Ester, AK 99725
ph. (907) 479-5525

8-20-02

TO: J.P.O. Anchorage, AK

RE: Public Comment on TAPS R.O.W. Renewal
1-866-542-5904

Dear Sirs:

I am against the T.A.P.S. Renewal unless a Citizens Oversight Committee is required in the permit. 53-1

I worked as a cleanup laborer on the Valve 23 spill in January 1981. We suffered from a glaring lack of the right equipment on-site at that time.

Apparently, no improvement in the OSCP has occurred in the past twenty years, because just last September, the Livengood oil spill response was characterized by the same lack of the right equipment on-site in a timely manner. 53-2

I just looked through the current OSCP today at the library — and there is still the same lack of the right equipment north of Brooks Range.

Please call or write if you are interested in improving Alaska spill response.

Sincerely,

Bob LaChaussee

Responses for Document 00053

00053-001: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00053-002: The TAPS Oil Discharge Prevention and Contingency Plan (C-Plan) is updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline are incorporated into the Plan. In addition, the Plan is reviewed annually by BLM, every three years by ADEC, and every 5 years by DOT. EPA also reviews the plan as it applies to pump stations. As part of this process, APSC and the Federal and State agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment is made available along the TAPS. Any information on specific spill response issues should be provided to the JPO.

00054

RESOURCE DEVELOPMENT COUNCIL

Growing Alaska Through Responsible Resource Development

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August 20, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

To Whom It May Concern:

On behalf of the Resource Development Council for Alaska, Inc. (RDC), I am writing to offer our strong support for a 30-year renewal of the Trans Alaska Pipeline System (TAPS). In addition, I would like to discourage the creation of a citizens advisory group.

RDC is a private, non-profit, trade association representing individuals and companies from Alaska's mining, timber, tourism, fisheries, and oil and gas industries. Our membership also includes business associations, labor unions, Native corporations, local governments and hundreds of individuals. Our mission is to grow Alaska's economy through the responsible development of our state's natural resources.

A 30-year renewal of TAPS will ensure continued positive economic impacts on the State of Alaska and the nation. The 13 billion barrels of oil that have flowed through TAPS since 1977 are significant to both the public and private sectors in Alaska. The pipeline supports thousands of jobs, funds state programs and services through royalties from the oil that flows through it, and provides nearly twenty percent of domestic oil supply. In addition, TAPS directly and indirectly helps fund non-profits like RDC, the Alaska Mineral and Energy Resource Education Fund (AMEREF), the United Way, and the Nature Conservancy. 54-1

The 25-year oversight and maintenance history of TAPS has proven that a 30-year renewal is appropriate. In fact, Alyeska's corrosion control program, valve maintenance program, and spill response plans are the leaders in the industry. Over twenty State and Federal agencies regulate the pipeline. The owners of the pipeline and Alyeska are committed to exploring new technologies to improve TAPS. In the past 15 years alone, the owners have invested more than $9 billion in pipeline maintenance and upgrades, more than the original cost of the system. 54-2

121 West Fireweed, Suite 250, Anchorage, Alaska 99503-2035
Phone: 907/276-0700 Fax: 907/276-3887 Email: Resources@akrdc.org Website: www.akrdc.org

The addition of a citizens advisory group to oversee pipeline operations is not warranted and RDC urges BLM to refrain from including such a group in the Final Environmental Impact Statement. Additional regulation resulting from the reauthorization should be supported by clearly defined benefits to safety and the environment—such an advisory group does not accomplish this and was not deemed appropriate for evaluation in the DEIS. In addition, as stated earlier, over twenty public agencies—including the joint state and federal pipeline office—exercise jurisdiction over TAPS and regularly invite public comment on their programs and requirements. RDC believes the current oversight is more than adequate and the process now in place provides sufficient opportunity for public input. 54-3

One alternative recommends a renewal period of less than 30 years. The impact of a shorter renewal period would be significant on the State of Alaska and the nation. It could threaten investment in new North Slope production and subsequently decrease throughput levels. In addition, a renewal period shorter than 30 years could reduce growth rates in population, gross state product, employment, income and tax revenues leading to increased annual state budget deficits and jeopardizing services and programs. Nationally, a renewal period shorter than 30 years would increase our reliance on imported oil, subsequently impacting our national energy security. 54-4

Finally, the DEIS addresses climate change and its possible effect on the pipeline. TAPS' design represents state-of-the-art engineering for cold climates. The design was based on protecting the permafrost from pipeline impacts and the pipeline from permafrost problems. The notion that some soil conditions may change over time is built into this design. Alyeska monitors these conditions and maintains heat protection systems. Alyeska's ongoing monitoring approach (with JPO oversight) is more than sufficient to provide adequate response time. 54-5

In conclusion, I would like to reiterate RDC's strong support for a 30-year renewal of the Trans Alaska Pipeline System. 54-6

Thank you for the opportunity to comment.

Sincerely,

RESOURCE DEVELOPMENT COUNCIL
for Alaska, Inc.

Jason W. Brune
Projects/AMEREF Coordinator

121 West Fireweed, Suite 250, Anchorage, Alaska 99503-2035
Phone: 907/276-0700 Fax: 907/276-3887 Email: Resources@akrdc.org Website: www.akrdc.org

Responses for Document 00054

00054-001: Thank you for your comment.

00054-002: Thank you for your comment.

00054-003: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00054-004: Thank you for your comment.

00054-005: Natural factors such as climate strongly influenced the original design basis for the pipeline and are addressed at some length in the Stipulations to the original Grant. Just as circumstantial factors presented an initial engineering challenge, changes to those factors may also represent significant challenges. APSC’s monitoring and surveillance responsibilities under the Grant as well as JPO’s oversight activities are designed to track changes to ambient conditions (whether they be natural or man-made), evaluate their potential impact to pipeline integrity, and initiate the appropriate changes to engineered systems or operating procedures to prevent adverse consequences to public health and safety or the environment.

00054-006: Thank you for your comment.

00055

P.O. Box 69
Barrow, Alaska 99723
☎ 907 852-2611 or 0200
Fax: 907 852-0337
email: gahmaogak@co.north-slope.ak.us

August 20, 2002

State of Alaska
Department of Natural Resources
Joint Pipeline Office
411 West 4th Avenue, Suite 2C
Anchorage, Alaska 99501
ADNR_Administrative_Record@jpo.doi.gov

Argonne National Laboratories
Toll-free fax: 1-866-542-5904

Re: TAPS Right-of-Way Reauthorization

Attached is a copy of North Slope Borough testimony which I delivered at the Bureau of Land Management's (BLM's) August 9 Barrow public hearing on the Draft Environmental Impact Statement (DEIS) for the Trans-Alaska Pipeline System (TAPS) right-of-way reauthorization. We ask that you fully incorporate here that testimony as comments on the State's consistency review of the TAPS reauthorization. The testimony describes the key points which the Borough sees as being at issue with respect to the reauthorization proposal. To the extent that the Borough's positions on these points is supported by the provisions of the Alaska and North Slope Borough Coastal Management Programs (ACMP and NSBCMP), the applicable enforceable policies are referenced below.

NSBCMP Policy 2.4.3.(d) states:
Development shall not preclude reasonable subsistence user access to a subsistence resource.
The combination of TAPS and the Haul Road have already restricted caribou movement to a degree such that animals are no longer regularly found in certain traditional subsistence harvest areas. The deflection of migrating herds away from these areas has caused hardship in affected communities. Reauthorization of the pipeline, in combination with the state's continued allowance of public access to the Haul Road, will likely result in continuing and increasing hardship within subsistence communities unable to reliably find caribou in traditional harvest areas. 55-1

NSBCMP Policy 2.4.3.(e) states:
Development which is likely to disturb cultural or historic sites listed on the National Register of Historic Places; sites eligible for inclusion in the national Register; or sites identified as important to the study, understanding, or illustration of national, state, or local history or prehistory shall 1) be required to avoid the sites; or 2) be required to consult with appropriate local, state and federal agencies and survey and excavate the site prior to disturbance.
NSBCMP Policy 2.4.3.(g) states: 55-2
Development shall not cause surface disturbance of newly discovered historic or cultural sites prior to archaeological investigation.
Appropriate surveys were not conducted prior to construction of TAPS and the Haul Road. Ongoing operations and maintenance, and potential incident responses, could damage important sites. Reauthorization of the TAPS right-of-way must include a requirement for a full inventory and designation where appropriate of historic, archeological, and cultural sites within the TAPS/Haul Road transportation corridor.

NSBCMP Policy 2.4.4.(d) states:
Development and commercial development must be served by solid waste disposal facilities which meet state and federal regulations.
The pipeline and Haul Road were constructed and intended to operate as a unit. The state's opening of the road to public access without the placement of sufficient waste disposal facilities has resulted in the improper disposal of human waste and garbage not only along the road, but also in expanding areas of the North Slope now more easily accessed by travelers utilizing the road. 55-3

NSBCMP Policy 2.4.5.1 states that development of the following categories will be allowed only if...the developer has taken all feasible and prudent steps to avoid the adverse impacts the policy was intended to prevent. 55-4
Policy 2.4.5.1(b) Development which restricts subsistence user access to a subsistence resource. See **2.4.3.(d)** above.
Policy 2.4.5.1(f) Transportation development, including pipelines, which significantly obstructs wildlife migration. See **2.4.3.(d)** above. 55-5

NSBCMP Policy 2.4.6.(e) states:
A means of providing for unimpeded wildlife crossing shall be included in the design and construction of structures such as roads and pipelines that are located in areas used by wildlife. Pipeline design shall be based on the best available information and include adequate pipeline elevation, ramping, or burial to minimize disruptions of migratory patterns and other major movements of wildlife. Aboveground pipelines shall be elevated a minimum of 5 feet from the ground to the bottom of the pipe, except at those points where the pipeline intersects a road, pad, or caribou ramp, or is constructed within 100 feet of an existing pipeline that is elevated less than 5 feet. 55-6
See **2.4.3.(d)** above. It is not our intention to unreasonably restrict operations of TAPS or the Haul Road by reference to NSBCMP policies. We recognize that these assets are uses

of state concern. Their operation, however, can and should still be conducted in a manner that minimizes impacts to subsistence users. Reauthorization should require operations, including any maintenance, repair, and retrofitting which is proposed to consider and pursue measures which will lessen the impacts on wildlife movements which have already occurred and are ongoing. 55-6 (cont.)

In addition, questions have been raised following the August 9 hearing regarding the Borough's endorsement of the concept of a TAPS citizens oversight group. We have been asked to clarify our position concerning the structure, function, and authority of the panel that we and others have proposed. We have made reference to the Prince William Sound and Cook Inlet Regional Citizens Advisory Councils (RCACs) as models for a new TAPS group. We have been encouraged to retreat from that position by some who have argued that the authority and expense of the RCACs is too great to apply in the context of TAPS oversight.

Rather than saying here what we believe the group *should not* be, we feel it is more productive to define what a meaningful TAPS oversight panel *must be*. These attributes include the following:

1. It must be inclusive, rather than exclusive. It must at a minimum have representation from each of the potentially affected communities along the pipeline/Haul Road corridor.
2. It must meet two or more times a year initially, with the long-term frequency of meetings to be determined based on need and experience. 55-7
3. The group itself must set the agenda for the meetings.
4. Meetings and other group functions must be funded by the TAPS owners and operators.
5. All meetings must be open to the public, and periodically held in member communities.
6. Each meeting agenda must at a minimum include the following:
   - Overview of ongoing operations, including maintenance, monitoring, security, incident reviews
   - Owner/operator written response to concerns raised at previous meeting
   - Oversight agency reports
   - Research priorities, study designs, study results
   - Community concerns, including cumulative impacts related to the Haul Road
   - Public concerns

I hope this clarifies the North Slope Borough position regarding the need for an independent TAPS citizens oversight group.
Thank you for your attention to these comments.

Sincerely,

George N. Ahmaogak, Mayor

cc: BLM/Argonne National Laboratories
Senator Ted Stevens
Senator Frank Murkowski
Representative Don Young
Eli Nukapigak, Mayor, Nuiqsut
Harry K. Hugo, Mayor, Anaktuvuk Pass
George T. Tagarook, Mayor, Kaktovik
Senator Donny Olson
Representative Reggie Joule
Rex Okakok, NSB Planning
Charles D.N. Brower, NSB Wildlife
Dennis Roper, NSB Government Affairs

Responses for Document 00055

00055-001: The comment points not to restricted subsistence user access to resources due to the TAPS and the Haul Road (Dalton Highway), but rather to possible restrictions in caribou movement due to the these two pieces of infrastructure. The issue of modified caribou migrations due to the TAPS or the Dalton Highway is mentioned frequently by Alaska Natives and other rural Alaskans along the pipeline, and is presented in Section 3.24 for several communities (including Anaktuvuk Pass and Nuiqsut). Those possible impacts are considered under both the proposed action (Section 4.3.20) and cumulative impacts (Section 4.7.8.1). As discussed in Section 4.7.7.3.2, structures within the North Slope may delay or deflect the movement of some caribou, but have not impacted the herds overall. A text addition has been made to Section 4.7.7.3.2 that addresses the fact that no single factor is responsible for either changes in caribou herd sizes or dispersal patterns. With regard to restricted access of subsistence users to subsistence resources (which appears to be the focus of the referenced coastal management plan), the DEIS concluded that this would be a consideration (particularly on the North Slope) but the restriction would not be great. The point here is that traditional harvest areas for caribou are quite large (see Sections D.2.3.1.1 and D.2.3.1.2 for Anaktuvuk Pass and Nuiqsut) and the restricted areas relatively small.

00055-002: Section 3.26 acknowledges shortcomings of prior archaeological projects, and the data that resulted from them. Much of the corridor has subsequently been resurveyed for other projects, as revealed by research for this EIS. That research, coupled with access to the State Historic Preservation Office cultural resources database, provides an improved ability to identify potential impacts on cultural resources under the proposed action and other alternatives.

TAPS activities are completed in compliance with Section 106 of the National Historic Preservation Act. This act requires consideration of the effects of an undertaking on cultural resources. A programmatic agreement is currently being developed between the BLM, the Alaska State Historic Preservation Office, and the Advisory Council on Historic Preservation to streamline the Section 106 process for addressing cultural resource concerns in the vicinity of the TAPS.

00055-003: As the comment suggests, the solid waste problems along the Dalton Highway appear to be related to tourism or other activities not directly related to the TAPS. The Dalton Highway is under the control of the Alaska Department of Transportation and is not part of the TAPS.

00055-004: The comment points not to restricted subsistence user access to resources due to the TAPS and the Haul Road (Dalton Highway), but rather to possible restrictions in caribou movement due to the these two pieces of infrastructure. The issue of modified caribou migrations due to the TAPS or the Dalton Highway is mentioned frequently by Alaska Natives and other rural Alaskans along the pipeline, and is presented in Section 3.24 for several communities (including Anaktuvuk Pass and Nuiqsut). Those possible impacts are considered under both the proposed action (Section 4.3.20) and cumulative impacts (Section 4.7.8.1). As discussed in Section 4.7.7.3.2, structures within the North Slope may delay or deflect the movement of some caribou, but have not impacted the herds overall. A text addition has been made to Section 4.7.7.3.2 that addresses the fact that no single factor is responsible for either changes in caribou herd sizes or dispersal patterns. With regard to restricted access of subsistence users to subsistence resources (which appears to be the focus of the referenced coastal management plan), the EIS concluded that this would be a consideration (particularly on the North Slope) but the restriction would not be great. The point here is that traditional harvest areas for caribou are quite large (see Maps D-3 and D-4 for Anaktuvuk Pass and Nuiqsut) and the restricted areas relatively very small.

00055-005: The comment points not to restricted subsistence user access to resources due to the TAPS and the Haul Road (Dalton Highway), but rather to possible restrictions in caribou movement due to the these two pieces of infrastructure. The issue of modified caribou migrations due to the TAPS or the Dalton Highway is mentioned frequently by Alaska Natives and other rural Alaskans along the pipeline, and is presented in Section 3.24 for several communities (including Anaktuvuk Pass and Nuiqsut). Those possible impacts are considered under both the proposed action (Section 4.3.20) and cumulative impacts (Section 4.7.8.1). As discussed in Section 4.7.7.3.2, structures within the North Slope may delay or deflect the movement of some caribou, but have not impacted the herds overall. A text addition has been made to Section 4.7.7.3.2 that addresses the fact that no single factor is responsible for either changes in caribou herd sizes or dispersal patterns. With regard to restricted access of subsistence users to subsistence resources (which appears to be the focus of the referenced coastal management plan), the EIS concluded that this would be a consideration (particularly on the North Slope) but the restriction would not be great. The point here is that traditional harvest areas for caribou are quite large (see Maps D-3 and D-4 for Anaktuvuk Pass and Nuiqsut) and the restricted areas relatively very small.

00055-006: Section 4.1.2.10 discusses pipeline design characteristics that focus on big game crossings. More than 550 designated big game crossings were included in pipeline construction to help promote the movement of caribou, moose, and bison, consistent with the policy referenced in the comment. Other considerations for minimizing adverse impacts to ecological resources associated with the operation and maintenance of TAPS are addressed in Section 4.1.3.3. Based in part on these features of the TAPS, caribou migrations do not appear to be affected substantially by the presence of the pipeline and associated facilities (see Section 4.3.17.2).

00055-007: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00056

AFFILIATED WITH THE SEAFARERS INTERNATIONAL UNION OF NORTH AMERICA • AFL-CIO

SEAFARERS INTERNATIONAL UNION
ATLANTIC • GULF • LAKES AND INLAND WATERS DISTRICT
NATIONAL MARITIME UNION
721 SESAME STREET, SUITE 1C • ANCHORAGE, ALASKA 99503 • (907) 561-4988

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VICE PRESIDENT AT LARGE
CHARLES STEWART
VICE PRESIDENT AT LARGE
JOHN SPADARO
UIW NATIONAL DIRECTOR

August 15, 2002

BLM TAPS Renewal EIS
Agonne National Laboratory EAD/900
9700 S. Cass Avenue, Argonne, IL 60439

RE: TAPS Renewal

Dear Sir or Madam:

On Behalf of the Seafarers' International Union I wish to support the 30-year right-of-way renewal for the Alyeska Pipeline Service Company currently being considered by the federal Bureau of Land Management and the State of Alaska. Our union represents many of the mariners involved in the coastwise Jones Act that serves Alaska. Our contracted operators include Alaska Tanker Company, the primary tanker operator that transports BP's Alaska crude to markets in Washington, Hawaii, and California and the major deep-draft vessel operators, TOTE and CSX Lines, who service Alaska's rail belt.

Our union sponsors a special hire marine training and employment initiative which seeks to recruit, train, and hire Alaskans, particularly Alaska Natives, disaffected youth, and unemployed fisherman and loggers. Our program has won national and state honors for its success in recruitment and retention of Alaskans. Many of the graduates of the program end up working on the tankers and cargo ships in the Alaska trade. Alaska's environment is a major beneficiary of the program, after all who better to protect our waters and natural splendor than those who have had a life long appreciation for its beauty.

FAX (907) 563-0122

The TAPS remains a remarkable feat of engineering and is among the safest pipelines in the world. Notwithstanding the *T/V Exxon Valdez*, our U.S. flag fleet ranks among the safest of any nation. The quality of the TAPS trade vessels, officers, and crew continues to surpass its own accomplishments as new standards are set and met for training, equipment, and vessels. In fact, Alaska Tanker Company will soon be operating the most sophisticated and safe tankers ever built. These vessels will maintain redundant radar, navigational and propulsion systems that will minimize most any threat to the environment. 56-1

By renewing the TAPS right-of-way for a 30 year period, you will be providing our state with the opportunity to produce 7 billion more barrels of ANS crude and increase the likelihood that our state will finally see the economic benefits we have long sough in commercializing the estimated 30 trillion cubic feet of "stranded" gas in the North Slope. Both of these outcomes are critical to our membership as our Alaska-related employment is dependent upon both a steady flow of oil resources and a prosperous Alaskan economy. In a nutshell, if Alaskan consumers and businesses aren't buying products than out cargo shippers will have nothing to ship and they will lay-up vessels, leaving our people unemployed. Consequently, we rely on you to make a right-of-way renewal decision that will enhance the ability for continued investment by the industry in sustained resource development. Do not place so many regulatory burdens and hurdles on these firms that they seek to invest on other nations or oilfields. Our members are depending on a future in Alaska. 56-2

We urge the BLM and State to provide Alyeska Pipeline Services Company with a 30-year renewal of their federal Right-of-Way for the Trans-Alaska Pipeline. 56-3

Sincerely yours,

Harold M. Holten
International Representative

Responses for Document 00056

00056-001: Thank you for your comment.

00056-002: Thank you for your comment.

00056-003: Thank you for your comment.

00057

TRUSTEES FOR ALASKA

A Nonprofit Public Interest Law Firm Providing Counsel to Protect and Sustain Alaska's Environment

1026 W. 4th Ave., Ste. 201 Anchorage, AK 99501 (907) 276-4244 (907) 276-7110 Fax Email: ecolaw@trustees.org

August 20, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

John Kerrigan
State Pipeline Coordinator
Department of Natural Resources
Joint Pipeline Office
411 West 4th Avenue, Suite 2
Anchorage, Alaska 99501-2343

Re. PUBLIC COMMENT: Draft EIS, Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way, BLM/AK/PT-02/026+2880+990, U.S. Department of Interior, Bureau of Land Management (July 2002) and Commissioner's Statement of Reasons and Proposed Written Determination for the renewal of the Trans-Alaska Pipeline Right-of-Way Lease, ADL 63574 (July 5, 2002).

To Whom It May Concern:

These comments are submitted on behalf of Alaska Center for the Environment, Alaska Conservation Alliance, Alaska Conservation Voters, Alaska Forum for Environmental Responsibility, Alaska Public Interest Research Group, Alaska Wilderness League, Arctic Audubon Society, Eyak Preservation Council, National Wildlife Federation, Natural Resources Defense Council, Northern Alaska Environmental Center, Sierra Club, Sierra Club Denali Chapter, and The Wilderness Society on the above-referenced documents released by the U.S. Bureau of Land Management and Alaska Department of Natural Resources, respectively, on July 5, 2002. Initially, while we are submitting these comments within the 45 days allowed by your agencies, we would again like to request that members of the public be given additional time to analyze and comment on the voluminous documents associated with renewal of the federal grant and state lease for the Trans-Alaska Pipeline System. The reasons in your letters denying the requested extension, dated July 31 (DOI) and August 2 (DNR), go only to the availability of the document or the public's implied awareness of the process. Your reasons do not go to the ability of the public to analyze and respond to the nearly 2000 pages, and to consider the broad range of technical, social, and environmental issues implicated in renewal of the TAPS oil delivery system for another 30 years. 57-1

As the recent hearings around the state demonstrated, many individuals as well as community, environmental, and Native organizations are extremely interested in this issue.

Despite the limited and inconvenient time frame, approximately 150 people testified. In three communities, the hearings ran past midnight. At Barrow, two elders, ages 79 and 83, waited more than five hours for the opportunity to express their concerns to you. We will not attempt to summarize the many specific issues raised by concerned citizens during this process. However, we will look forward with interest to your specific responses to the questions raised by concerned citizens. In light of the public interest in the renewal process, your guideline should be to involve the public more, not less, for this project of tremendous importance to the citizens of the State of Alaska and the nation as a whole.

I. FACTUAL BACKGROUND

The Trans-Alaska Pipeline System (TAPS) delivers oil from the North Slope to the Valdez Marine Terminal in Prince William Sound. Oil development along the Arctic coast of Alaska began with the discovery of the huge oilfield at Prudhoe Bay in 1968. Since oil began flowing down TAPS in 1977, oil development infrastructure has spread across the Arctic coastline of Alaska like an industrial driftnet. Over 400 miles of roads, over 1,137 miles of pipelines, and over 9,160 acres of gravel fill in wetlands have spread across Alaska's North Slope for oil development. All of this development is made possible by the Trans-Alaska Pipeline System, which delivers the oil from its source underground to markets in the U.S. and abroad.

Since the 1974 EIS for construction of TAPS, no other EIS has ever been prepared for a new onshore oilfield production or transportation project in Alaska. The environmental impacts of the full scope of the TAPS oil development system have never been comprehensively examined by any federal agency in an Environmental Impact Statement. Nor have the cumulative impacts of past permitting activities on the North Slope ever been comprehensively examined. Instead, federal and state agencies have looked at each development in isolation, finding that each of the thousands of incremental steps will not have a significant impact on the environment. As a consequence, Alaska's North Slope is now a complex latticework of roads, structures, and pipelines that has never undergone the thorough analysis of an EIS. As set out below, the current right-of-way renewal process is the appropriate time to undertake such an analysis under the National Environmental Policy Act (NEPA).

II. DEIS IS INSUFFICIENT UNDER FEDERAL LAW

A. DEIS IS INSUFFICIENT UNDER NEPA

Department of Interior's (DOI) Draft Environmental Impact Statement (DEIS) for the Trans-Alaska Pipeline System (TAPS) Right of Way Renewal fails to comply with NEPA. NEPA is an action-forcing document, requiring government agencies to rigorously examine the impacts of proposed actions and the comparative impacts of reasonable alternatives, so that the agency can make the most informed choice of action.

The TAPS DEIS fails to satisfy four NEPA requirements. First, DOI improperly defines the purpose and need of the DEIS too narrowly, thereby excluding reasonable alternatives from consideration. Second, the DEIS limits its analysis of direct, indirect, and cumulative impacts to a geographic and temporal scope that is too narrow. Third, the DEIS fails to consider a sufficient

57-2

range of reasonable alternatives to the proposed action. Finally, the DEIS fails to comply with NEPA requirements for acknowledging and acting on incomplete information regarding adverse environmental impacts. We note at the outset that many of the issues discussed below were raised by the Alaska Forum for Environmental Responsibility in its scoping comments last fall but were summarily dismissed in both the state and federal documents supporting the course of action proposed by the reviewing agencies. As discussed below, we believe that many of these issues require serious consideration. 57-2 (Cont.)

In order to remedy these NEPA shortcomings, DOI must prepare a new DEIS, adequately performing the required analyses. DOI must allow for public comment on the completed analyses in a revised DEIS because simply to perform the analyses and incorporate them into an FEIS without obtaining additional public review would violate the requirement in NEPA and the Administrative Procedure Act (APA) that an agency solicit and obtain public comment. The NEPA inadequacies in the current DEIS are simply too great not to obtain public comment on a revised analysis. While DOI gave an inadequate 45-day comment period for this DEIS, the public nonetheless found many NEPA shortcomings. That an inadequate and hurried public review process of 45 days found numerous glaring shortcomings underscores the many important flaws in the TAPS DEIS. The only option to remedy the NEPA violations in the DEIS is for DOI to prepare a new DEIS, completing the required analyses.

1. PURPOSE AND NEED IS TOO NARROWLY DEFINED

The TAPS DEIS violates NEPA because it defines the Purpose and Need for the statement too narrowly. The DEIS' definition of the purpose and need largely dictates the range of reasonable alternatives the statement must consider. Thus, if the statement defines the purpose and need too narrowly, it will not consider an adequate range of reasonable alternatives. Agencies cannot define the purpose and need so narrowly as to foreclose reasonable consideration of alternatives. By defining the purpose and need of the statement solely in terms of the TAPS owners' application, the TAPS DEIS excludes important alternatives from the range of reasonable alternatives that must be considered in order to comply with NEPA. The TAPS DEIS defines the purpose and need for the statement as "to assess the positive and negative environmental, social, and economic impacts associated with the application." TAPS DEIS Vol. I at 1-1. By limiting the statement of the purpose and need to a consideration of the positive and negative impacts of granting or not granting the right of way -- only as it was applied for by and on terms acceptable to the owners -- DOI has precluded examination of alternatives to the proposed action. DOI should have examined alternatives in addition to those presented in the TAPS owners' application. 57-3

DOI should have examined the alternative of modifying the Grant terms to cure defects in the existing Grant, some of which were identified in public comments during the scoping period but were nevertheless not considered in the flawed DEIS. For example, the DEIS declined to consider requiring TAPS owners to deposit the required dismantlement, removal, and restoration (D,R,&R) funds into an escrow account as a pre-condition of renewal of the right-of-way. In addition, DOI should have evaluated the alternative of establishing a citizens' oversight group to ensure that the pipeline is maintained and operated in a manner that safeguards the natural resources of Alaska and ensures the safety of continued oil shipment. Another example of a new 57-4 57-5

57-6

provision the DEIS should have considered is the periodic Technical Review and Audit of the TAPS. Due to aging equipment and possible effects of climate change and technological development, renewal of the right-of-way grant should be conditioned on satisfactory completion of an independent evaluation -- including technical review and audit every five years -- to ensure that TAPS uses best available technology and has systems in place and equipment on hand to address emergencies. The DEIS failed to evaluate any of these proposals to ensure that the Grant terms will be effective in fulfilling their stated purpose during the proposed renewal period. Due to these failures, the DEIS has violated the NEPA requirement that DOI not define the Purpose and Need section so narrowly that it excludes reasonable alternatives.

One way to properly define the purpose and need of an impact statement is to refer to the agency's statutory authorization to act, in addition to other congressional directives. In examining its congressional directive to act in the renewal of the right-of-way, DOI must consider the Trans-Alaska Pipeline Authorization Act (TAPAA), which mandates, "The Secretary of the Interior . . . [is] authorized at any time when necessary to protect the public interest, pursuant to the authority of this section and in accordance with its provisions, to amend or modify any right-of-way permit, lease. . ." Trans-Alaska Pipeline Authorization Act, 43 U.S.C. § 1652(e). According to federal appellate courts, DOI must consider the emphasis the TAPAA placed on acting in the public interest in defining the purpose and need of the TAPS DEIS. Defining the purpose and need in accordance with TAPAA requires DOI to consider a broader range of options than the DEIS currently considers. Doing so would serve the public interest by, e.g. examining the benefits of requiring D,R,&R funds to be deposited into an escrow account, or by examining the environmental benefits of citizens' oversight of the TAPS system.

Because the TAPS DEIS defines its objectives so narrowly as to exclude reasonable options, the DEIS violates NEPA. DOI must perform a new DEIS, adequately defining the purpose and need for the study so as to include all reasonable options to the proposed action.

2. DEIS FAILS TO CONSIDER ADEQUATE SCOPE OF IMPACTS—DIRECT, INDIRECT, AND CUMULATIVE IMPACTS

The TAPS DEIS also fails to comply with NEPA because it considers an unreasonably narrow scope of impacts. DOI's decision to renew the TAPS right-of-way represents a "critical decision" to act on the TAPS site. The proposed action of renewing the right-of-way for another thirty years will ensure the continuing operation of the TAPS for at least thirty years, or until the Prudhoe Bay oil supply loses commercial viability. Because the proposed action will allow TAPS to operate for thirty more years, it represents a critical stage of the decision-making process at which DOI must consider the direct, indirect, and cumulative impacts of the proposed action and the alternatives. However, DOI failed to evaluate all site-specific impacts of extending operation of the TAPS oil delivery system. To comply with NEPA, DOI must produce a new DEIS that evaluates all direct, indirect, and cumulative impacts of the proposed action and its alternatives in compliance with NEPA.

NEPA requires federal agencies to analyze three types of actions, and three types of impacts. Agencies must consider actions that are connected, cumulative, and similar. Connected actions are those which are "closely related," including those that "[c]annot or will not proceed

unless other actions are taken," or those that are "interdependent parts of a larger action and depend on the larger action for their justification." Cumulative actions are those that "have cumulatively significant impacts and should therefore be discussed in the same impact statement." Similar actions include those that have "common timing or geography." The three types of impacts that agencies must consider are those that are direct, indirect, and cumulative. Direct effects are those that are caused by the action and occur at the same time and place. Indirect effects are those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." A project's "cumulative impact," is

> the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions . . . . Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The DEIS for TAPS renewal failed to adequately consider these three types of actions and three types of impacts.

DOI should have considered the impacts of connected actions taken by federal agencies and private developers in the North Slope oilfields, as well as impacts of actions related to marine transportation and safety. All of these activities related to oil production in Alaska are "connected" within the meaning given in NEPA, as they clearly are interdependent parts of a larger action -- oil transportation -- and they all depend on that larger action -- the oil transportation system -- for their justification. Other similar actions that must be considered include the proposed renewal of other pipeline rights-of-way on the North Slope, because they share common timing and geography with TAPS renewal. DOI should also have considered the cumulative impacts of the natural gas pipeline proposed to parallel portions of the existing oil pipeline, and the implications of such a gas line and its associated construction impacts and natural gas infrastructure on the safety and integrity of the existing TAPS line. The DEIS must also evaluate the potential cumulative impacts of all proposed OCS offshore drilling activities currently in place or now being proposed by the DOI under that agency's newly-adopted 2002-2007 Five-Year OCS Oil and Gas Leasing Program, as well as current and proposed state offshore leases. In addition, future commercialization of subsea and permafrost methane hydrate deposits should be considered as part of the complex of cumulative impact issues to be evaluated, in light of the thirty-year timeframe being considered in the current TAPS DEIS process. All of these issues are foreseeable through reasonable forecasting by DOI, and they must therefore be considered in any revised DEIS. 57-7

Also, the DEIS contains an inadequate risk assessment, which leads to an underestimation of the environmental risks from continued operation of the TAPS system without significant modifications of the lease. For an evaluation of risk to be properly portrayed, it is necessary for the probability an incident will occur (no matter how slight) to be multiplied by the value of the damage as a consequence of the failure. The TAPS DEIS consistently understates the magnitude of failure(s), which may have tremendous external costs in two different ways. The first is to drastically understate the negative impacts. For instance the discussion of an oil rupture into the Yukon suggests that only those downriver communities immediately adjacent to the crossing may be negatively impacted. It does not take into account 57-8

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(907) 276-4244

the impacts on communities farther downriver nor on those upriver communities such as Whitehorse and beyond. As subsistence resources travel both upstream and downstream, the DEIS should analyze impacts to communities throughout the Yukon River watershed. Also, the DEIS minimizes the concept that any major polluting incident should be viewed as a negative impact -- on the contrary it states that a major incident should be viewed as a tangible positive economic benefit to all concerned as primary beneficiaries of the costs associated with any attempted cleanup. The next major error in logic in the DEIS is the assumption that the past record is a substantial indicator of future probability that polluting incidents will or will not occur during the future. It is generally recognized by students of low-risk/high-cost events that the past is not a reliable indicator of calculating probability for future events as noted by other individual testimony. The DOI must analyze the probability of future polluting incidents from this aging system, as such events are reasonably foreseeable and will have cumulative impacts.

57-8 (Cont.)

DOI also should have considered a broader universe of impacts of the TAPS. Renewal of the Federal grant of the right-of-way involves vast geographic areas in addition to the 800 miles of pipeline traveling from the North Slope to Valdez. The decision to renew the right-of-way also includes the entire North Slope drilling operations' infrastructure, the Valdez Marine Terminal, and the marine transportation system. Renewal of the right-of-way also impacts this vast area thirty years and more into the future. For example, over the next thirty years, for which DOI is proposing to renew the right-of-way, one can expect the number of oil spills to continue at the rate witnessed during the previous twenty-five year period—i.e. 1,500 North Slope crude oil Spills, 2,300 diesel fuel spills, and more than 70 saltwater spills (4.7.4.10.1, TAPS Right of Way Renewal Oil Spill Database). In addition, DOI should have evaluated the environmental impact of chronic and reasonably foreseeable maintenance failures. For example, over the past seven years, restart problems have threatened pump station safety, caused oil spills, and caused internal pressure hammers that have moved the pipe, resulting in damage to pipeline support structures. Another threat to the environment is the failure of TAPS emergency response to leaks. For example, in October, 2001, TAPS owners' emergency response measures failed for 36 hours to plug a leak caused by a bullet-hole near Livengood. If emergency response plans cannot respond to a stray bullet, it appears doubtful that the emergency response actions could effectively prevent disaster in the event of a major spill. The DEIS discusses spill response measures as one of the mitigation factors ensuring environmental safety but also considers the spill response plans to be beyond the scope of its review. DOI also declines to evaluate the reasonably foreseeable effects of the marked warming trend of the past 20 years in Alaska on the TAPS above-ground support system in combination with the seismic risks -- especially, in the southern portion of the pipeline, where structures built on permafrost are most vulnerable to the effects of climate change -- despite the submission of a technical report on this subject during scoping. We find this dismissal of public concerns both inconsistent and unresponsive.

57-9

By failing to consider the vast temporal and geographical impacts of the proposed action, the DEIS fails to meet the requirements of NEPA. Furthermore, the failure to consider all the impacts of the proposed action prevents the agencies from evaluating the reasonable range of alternatives they are required to consider. In order to remedy these flaws in the NEPA process, DOI must perform a new DEIS and present the examination of impacts to the public for comment.

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3. DEIS FAILS TO CONSIDER AN ADEQUATE RANGE OF REASONABLE ALTERNATIVES

The DEIS fails to consider all reasonable alternatives to the proposed action as required by NEPA. DOI should have examined alternatives of modifying the Grant terms to cure defects in the existing Grant, or modifying Grant terms to increase protections of public resources. Several of these potential alternatives for modification were identified in public comments during the scoping period but were nevertheless not considered in the flawed DEIS.

The TAPS DEIS briefly dispatches the suggested action of requiring TAPS owners to deposit into an escrow account funds for D,R,&R of the pipeline and its infrastructure. TAPS DEIS at Volume I, 2-6. The TAPS Mineral Leasing Act lease does not require the TAPS owners to pay funds prospectively. However, this has been done -- with potentially perverse consequences for public policy. Nevertheless, the DOI does not consider this a problem. Instead, DOI states that the D,R,&R escrow account suggestion is outside of the scope of the DEIS: "Additional regulatory authority would be necessary to change this situation. This would involve a separate rule-making process with its own NEPA analysis." TAPS DEIS at Volume I, 2-6. First, it must be noted that DOI cites *no* legal authority for its statement that "additional regulatory authority" is a prerequisite to modifying lease terms to include escrow of DR&R funds. Nothing in the current law prevents DOI from imposing new or different stipulations and conditions at the time of lease renewal. As in any landlord-tenant relationship, lease renewal may be a time of negotiation. Thus the reasoning given by DOI for failing to consider lease modifications including escrow of DR&R appears calculated to impose a false roadblock.

57-10

Moreover, an agency cannot ignore an alternative simply because it would be difficult to perform or because it would require action by Congress. NEPA requires DOI to "rigorously explore and objectively evaluate all reasonable alternatives" to the proposed action in the impact statement. However, the DEIS does not evaluate modification of the Grant to consider such reasonable actions, based on experience, as the D,R,&R alternative. Other examples of suggested improvements to the Grant, based on experience, are provisions for a Citizens' Oversight Group, as well as the periodic Technical Review and Audit of the pipeline system. DOI should review the technology in use now on TAPS that is related to control of actual and potential environmental pollution, and the agency should compare that with what would be considered best or optimal environmental protection and control technology in the year 2002. For example, is the back-up technology for discovering leaks and ruptures from ruptured crude oil storage tanks and then controlling them currently in use still considered "state-of-the-art" today? If not, what would be state of the art, and what are the relative environmental costs and benefits of imposing requirements in new lease modifications.

DOI must perform a new DEIS considering these alternatives and all other reasonable alternative lease modifications identified during scoping because NEPA requires federal agencies to consider alternatives even if they involve administrative difficulty, alternatives that it cannot accomplish acting alone, and a broader range of alternatives than it would normally evaluate. Until DOI performs this analysis, its DEIS cannot stand under NEPA.

4. DEIS FAILS TO CONSIDER MITIGATION MEASURES

NEPA requires a discussion of potential mitigation measures to ameliorate existing and potential adverse environmental effects. Section 4.8.4 of the DEIS admits that DOI did not consider *any* potential mitigation measures. The DOI must consider mitigation measures to avoid or minimize environmental effects. The DEIS acknowledges adverse impacts to wildlife and their habitat, yet no mitigation measures are proposed to reduce these effects. The DEIS analysis of direct impacts identifies numerous impacts from the previous 30 years of TAPS operation, and the agency simply cannot avoid any discussion of reasonable mitigation measures. Several reasonable measures that could mitigate adverse impacts have been suggested by the public in scoping comments: citizens oversight, periodic technical review and audits, and escrow of DR&R funds. Many more reasonable mitigation measures have been suggested by the public in testimony on the DEIS. The DOI must consider reasonable mitigation measures to comply with NEPA. 57-11

5. DEIS FAILS TO ADEQUATELY ADDRESS INCOMPLETE INFORMATION

Finally, the TAPS DEIS fails to comply with NEPA's requirements for identifying and acting on incomplete information. One of the most important aspects of NEPA is to ensure the agency does not act on incomplete information, only to regret its decision after it is too late to correct. However, the TAPS DEIS fails to acknowledge areas in which it has inadequate information. Further, the DEIS fails to perform the required analytical process when it does acknowledge inadequate information. NEPA requires DOI to go through a specific process when it lacks information relevant to foreseeable adverse impacts. When the agency cannot obtain the required information, or when the costs of doing so are exorbitant, the agency has to summarize all existing scientific information and develop a theoretical approach for analyzing impacts based on the available information. The TAPS DEIS fails to acknowledge instances of inadequate information, especially in considering the cumulative impacts of the proposed action and all reasonable alternatives. For example, the Joint Pipeline Office (JPO) acknowledged the importance of the National Academy of Sciences (NAS) National Research Council (NRC) study of North Slope cumulative impacts in the JPO's May 2, 2001 timeline for the TAPS renewal process. There, JPO observed that it might have to change the Preferred Alternative in light of information contained in the National Academy of Sciences North Slope cumulative impact study. However, in the DEIS JPO has failed to acknowledge that it is acting on inadequate information by proceeding without the NRC report. This oversight could be excused if DOI made findings as required by CEQ regulations, but it did not. In addition to failing to acknowledge acting on inadequate information, the DEIS also fails to perform the required analysis when it does acknowledge inadequate information. Thus, the DEIS fails to comply with NEPA requirements on inadequate information. 57-12

When the DEIS lacks adequate information, it fails to comply with the requirement of acknowledging that it has inadequate information. The most significant example of inadequate data is the cumulative impacts on the North Slope, as discussed above. Another example is the DEIS discussion of impacts on caribou. The TAPS DEIS acknowledges that the effect of the proposed action on caribou "might not be measurable because of the natural variability, including productivity, of a large population." TAPS DEIS, Vol. III, 4.7-95. However, the

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DEIS does not acknowledge that it lacks the information, as required by NEPA. Nor does it undergo the process required by NEPA of determining whether the lacking information can be obtained, or whether costs of doing so are exorbitant. Further, the DEIS fails to summarize all relevant existing information and develop a theoretical approach for analyzing impacts based on the available information. The DEIS shortcuts the required NEPA process by not analyzing the effect of the proposed action on caribou. The statutory requirement to prepare an EIS ensures that the agency will obtain and consider detailed information about significant environmental impacts, and that the agency will disseminate that information to the public so that it too can join the decision-making process. The TAPS DEIS does not perform this legal obligation. Thus, DOI must perform a new DEIS acknowledging inadequate information, summarizing the existing information, and constructing a theoretical approach by which to analyze the impacts.

57-12 (Cont.)

B. DEIS MAY BE INSUFFICIENT UNDER ESA

The TAPS DEIS' failure to consider the adequate scope of impacts and the failure to consider an adequate range of reasonable alternatives make it impossible to assess Endangered Species Act (ESA) compliance. The ESA requires federal agencies to insure that any action funded or carried out by such agency is unlikely to jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of critical habitat. 16 U.S.C. § 1531 et seq. However, the TAPS DEIS fails to consider the ESA because it inadequately examines the scope of impacts of the proposed action and it evaluates an insufficient range of alternatives.

57-13

These NEPA violations make it impossible to determine whether DOI has sufficiently considered the impact of the proposed action on threatened and endangered species because the DEIS does not evaluate the impact of the proposed action on endangered and threatened species whose habitat includes the North Slope, interior Alaska, southeast Alaska, Prince William Sound, and the North Pacific. In order to assess whether the DEIS complies with the ESA, DOI must produce a new DEIS, which adequately assesses the scope of impacts and the reasonable range of alternatives.

II. THE COMMISSIONER'S DETERMINATION IS INSUFFICIENT UNDER STATE LAW

A. The DNR Decision Does Not Comply With AS 38.35.110.

The decision by the Commissioner of the Department of Natural Resources must comply with state law. Here, it appears that the Commissioner's decision does not comply with requirements of the Alaska Right-of-Way Leasing Act.

The Right-of-Way Leasing Act provides that right-of-way leases shall be renewable "so long as the lessee is in commercial operation and is in full compliance with all state law. . . and is in compliance with all terms of the lease." AS 38.35.110. The requirement of lawful operation reaches more than just the pipeline itself, and applies to all of the TAPS facilities including all pipe, pump stations, docks, tanker loading facilities, operations centers, etc.

In its report on compliance with Grant and Lease terms, the JPO defined its tasks regarding compliance as ensuring that Alyeska (1) obtain all permits, (2) know all requirements, (3) reasonably detect deficiencies related to these requirements and (4) correct them in a timely manner. While this interpretation of compliance sounds reasonable, it also appears to contradict Alaska's Right-of-Way Leasing Act, which requires the lessee to be "in full compliance with all state law." Assuming for the sake of argument that "full compliance with all state law" can be interpreted to mean "substantial compliance" as described by JPO, this problem remains: JPO has not defined or set guidelines to determine what constitutes timely identification and abatement of noncompliance issues.

The question of what it takes for an agency to find the TAPS Owners noncompliant is raised by two recent U.S. Department of Transportation enforcement action notices issued against Alyeska. Details of these two notices, previously unreported publicly, were revealed in the JPO report on Grant and Lease compliance, which provided the following substantive information:

- Notice of Probable Violation, Proposed Civil Penalty and Compliance Order (CPF No. 5 2002 5003, February 6, 2002) proposes fines for allegedly unsafe operations that caused (1) the massive pipe movement in Atigun Pass, discovered in May 2000, and (2) over pressuring at MP 710 (south of Glennallen), where a patch of mainline pipe was that had been gouged 80% through during construction was being repaired.

- Notice of Probable Violation and Proposed Compliance Order (CPF # 5 2001 0012, Dec. 3, 2001) proposes a new compliance order requiring Alyeska to correct violations of safety regulations on the small-diameter fuel gas line between Pump Stations 1 and 4.

Concerning the first notice, $25,000 of the proposed $80,000 fine is for the unsafe restart (or restarts) of TAPS in Atigun Pass in late 1999/early 2000, discussed above. This proposed fine follows OPS enforcement actions for restart violations in 1997 through 1999 and documented restart problems on TAPS in 1995 and 1996. Despite this history, JPO found Alyeska restart procedures to be safe in its CMP report on operations issued in April 2001. However, JPO's description in the same report of severe damage Alyeska inflicted on the pipeline contradicts the conclusion that Alyeska restart procedures are safe (Alyeska damaged above-ground structures in Atigun Pass to eliminate a 15-minute delay in the valve-opening sequence in Atigun Pass). Alyeska engineers concluded that the damage resulted from the creation of a violent pressure hammer on restarts, resulting in the pipe movement in Atigun Pass.

Concerning the second notice, the fuel gas line problems listed in that citation include exposed buried pipe on MP 84 hill. That location was the subject of a previous compliance order that "required Alyeska to take all practicable steps to protect its fuel gas line and associated appurtenances in those areas from future detrimental movement and external forces." In connection with the more recent notice, it is noteworthy that the May 6, 2002 letter from the TAPS Owners to Alyeska declined to approve a funding request for Fuel Gas Line System Maintenance. The recurring problems on the small-diameter fuel gas line appears to be another example of Alyeska's failure to abate problems in a timely manner.

Given these two formal citations, issued in part to correct chronic and unabated problems associated with TAPS operations and maintenance, the agency findings that the TAPS owners do not have compliance problems on TAPS are dubious at best. DNR's conclusion that the TAPS owners are in full compliance with all provisions of the lease as well as all provisions of state law is not supported by the evidence. The Commissioner's Determination therefore may not stand without substantial revisions to address these problems.

B. The DNR Decision Does Not Comply With Lease Section 22.

Section 22 of the Right-of-Way Lease for the Trans-Alaska Pipeline System establishes a clear requirement to prevent or abate hazards or adverse conditions on the pipeline if it arises out of or could adversely affect the construction, operation, maintenance, or termination of the pipeline. As pointed out in comments and documents submitted to the State of Alaska, Alyeska has demonstrated a chronic failure to identify and abate operational, maintenance, and programmatic deficiencies in TAPS operation in a timely manner. However, in their reports on Grant and Lease compliance, the JPO and State Pipeline Coordinator state that

> [t]he State Pipeline Coordinator does not actively monitor this section, since it is mainly a legal provision of the Lease. JPO conducts extensive monitoring of the integrity, safety and environmental issues that could rise to findings.

With regard to prevention, the JPO and SPCO state that "[p]revention of 100 percent of serious or significant harm . . . may not always be practicable. However, by working toward a prevention goal with a commitment to continual improvement of performance, a high degree of success will be achieved."

JPO's refusal to enforce the duty to prevent and abate hazards is indicated by the report that the CMP data base refers to seven reports listing field reporting on 15 specific performance attributes relating to Section 22. By comparison, the stipulation setting out requirements for surveillance and maintenance claims field measurement of 1,618 attributes covering a broad range of subjects, some of which may overlap with prevention and abatement. In other words, in the CMP database general surveillance requirements received 100 times the attention JPO devoted to duty to prevent and abate. It is not clear why JPO chose not to focus on the important question of hazard abatement, what is meant by "mainly a legal provision of the Lease" or what constitutes "high degree of success" in prevention.

DNR must detail in its Commissioner's Determination the requirements of Section 22 of the State Lease. To dismiss Section 22's requirement that the agency identify and abate deficiencies as "mainly a legal provision," is to ignore the best interests of the State of Alaska, which in itself could be a violation of Constitutional and statutory duties.

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C. The Commissioner's Determination Implicates But Does Not Address Constitutional Provisions.

The Commissioner's Determination, as written, implicates and possibly violates several provisions of the Alaska State Constitution.

As the proposed period for TAPS lease renewal is 30 years, this duration renders this a disposal of state land. As such, the Alaska Constitution requires prior public notice of the disposal as well as "other safeguards of the public interest" as may be prescribed by law. Ak Cnstn, Art. XIII, Sec. 10. In this case, DNR's refusal to extend the comment period in the face of multiple requests from a variety of Alaska interest groups could implicate this constitutional provision. DNR's Commissioner's Determination purports to analyze 30 years of TAPS operations, and it purports to justify an additional 30 years, and 45 days is simply too short a time to constitute adequate protection of the public interest. Again, DNR's denial letter regarding the requested extension does not provide reasons why denial is in the public interest; rather, it details DNR's efforts to make the documents known and available to the public. In this case, given the gravity of the environmental, social, and technical issues raised as well as the demonstrated degree of public concern, increased opportunities for public participation are necessary in order to safeguard the public interest.

Also, the disposal of state land here must meet the constitutional requirement that disposals be consistent with the public interest. Art. XIII, Sec. 1. The Alaska Right-of-Way Leasing Act, discussed above, was enacted to further the constitutional requirement that the legislature provide for the use of state resources "for the maximum benefit of the people." Art. XIII, Sec. 2. To this end, the Legislature allows renewal of a lease only if the lessee is in full compliance with all provisions of state law, as well as in compliance with lease provisions. AS 38.35.110. Here, as discussed above, DNR is proposing renewal of a lease that does not meet the "full compliance" test. DNR's action could therefore run afoul of the "maximum benefit" requirement of the Alaska Constitution.

The disposal of state land for an additional 30 years for TAPS, without modifications to the state lease to protect the public interest, also appears to run afoul of the State's public trust obligations. A trust responsibility is to be implied by the text of provisions of Article VIII (incl. Section 1-4, 8, 10, 13-14) requiring the State to manage its natural resources for the public's benefit. In order to satisfy the public trust, the State must ensure adequate funding for DR&R by requiring those funds to be placed in escrow, to protect state resources for the future. Also, the State must require adequate maintenance and technical integrity in order to protect state resources crossed by the pipeline, to ensure that the line does not foul state lands and waters. These and other obligations of the public trust have been ignored in the Commissioner's Determination.

These deficiencies, as well as those set out above, must be remedied before the DNR Commissioner's Determination is finalized.

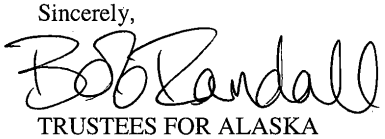
III. CONCLUSION

TAPS DEIS fails to meet NEPA requirements in the Purpose and Need Statement, in the Scope of Impacts, in the Range of Reasonable Alternatives considered, and in the Acknowledgement of Inadequate Information. Therefore, DOI must complete a new DEIS that remedies the shortcomings of this statement. The problems identified in this DEIS are too great to be remedied in the FEIS. Public comment is required to remedy the shortcomings identified in these comments. Although the public comment period was impossibly short to evaluate the DEIS in detail, the public identified numerous glaring shortcomings. As a result, DOI must prepare a new DEIS solving the problems identified in these and other comments.

Also, the DNR Commissioner's Determination does not satisfy requirements of Alaska law as well as those of the lease itself. DNR should revise the Commissioner's Determination to meet the deficiencies discussed above, and release a new draft determination for further public review.

Thank you for giving full consideration to these comments. Please contact me if you have any questions, or if I can provide any further information.

Sincerely,



TRUSTEES FOR ALASKA
Bob Randall
Staff Attorney

Responses for Document 00057

00057-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule, and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00057-002: Comments received during scoping are aggregated into a record of public scoping and are used to frame the issues and the analyses in the EIS. All scoping comments were considered in preparing the DEIS. Scoping comments are not listed and identified individually or responded to in the EIS. Comments received on the quality of the analysis in the DEIS are addressed specifically in the FEIS and may result in text changes in the FEIS, as well.

The EIS was prepared in full compliance with the National Environmental Policy Act and the Council on Environmental Quality regulations. Please see Section 2.5 in the FEIS for additional text related to alternatives that were considered but not included.

00057-003: The action that triggered the EIS was an application to renew the Federal Grant of Right-of-Way for TAPS for thirty years. Thus, alternatives to renew for thirty years, renew for less than thirty years, or not to renew were analyzed in the EIS. Please see Section 2.5 for additional information about alternatives.

00057-004: Please see Section 2.5 in the FEIS for an expanded discussion of Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00057-005: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00057-006: Please see Section 2.5 in the FEIS for an expanded discussion of Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00057-007: Additional explanation of the relationship of actions has been added to Section 4.7.

00057-008: Spill scenarios considered along the pipeline and at VMT are discussed in Section 4.4.1 of the EIS. Similarly, the scenarios considered in PWS and at the North Slope are given in Section 4.7.4.10. For the purposes of analysis in the EIS, a spectrum of spill scenarios ranging from high frequency/low consequence to low frequency/high consequence events is considered. Many of the scenarios considered have not occurred during the 25-year operation of the TAPS but have been postulated to occur with certain frequencies in the EIS. Therefore, contrary to the suggestion made by the commentor, the future performance of the TAPS is not assumed to be based strictly on past performance. In estimating the frequencies and spill volumes for future spills, both the historical data from past spills and the potential for catastrophic spills of large consequence were considered.

00057-009: The DEIS addressed the broader geographic issues in the cumulative analysis (Section 4.7). The spill scenarios developed in the FEIS (Section 4.4) are derived from ongoing operational activities and accidental releases. The FEIS contains information on the MP 400 incident, including lessons learned (Section 4.1.1.8). Climate change issues as they may affect structural support of the pipeline are found in Section 4.1.3.2.1.

00057-010: The EIS was prepared in full compliance with the National Environmental Policy Act and the Council on Environmental Quality regulations. Please see Section 2.5 in the FEIS for an expanded discussion of alternatives considered but not subjected to further analysis.

The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide the BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the grant and lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 ("Adaptive Nature of the Grant in Compliance Monitoring"), 4.1.1.3 ("Risk-based Compliance Monitoring"), 4.1.1.4 ("JPO Comprehensive Monitoring Program"), and 4.1.1.8 ("Coordinated Planning and Response to Abnormal Incidents") for more information on the role of adaptive management as a JPO business practice.

00057-011: Mitigation is discussed in detail in Section 4.1 of the FEIS. Many of the alternatives that were identified as potential mitigation factors during scoping are addressed in Section 2.5 of the FEIS.

00057-012: Please see Appendix E in the FEIS for a description of the methodologies used for analysis in the EIS. BLM recognizes that information was not always available for some analyses. For example, the BLM recognizes that there may be interactions between the TAPS and subsistence resources. The BLM also notes that current information does not show a relationship between TAPS and subsistence impacts. The BLM and State of Alaska within the JPO are currently working with industry and others to develop a science-based approach to determine how TAPS and subsistence interact.

00057-013: The BLM conducted all consultations required under Section 7 of the Endangered Species Act.

Testimony

Trans Alaska Pipeline System (TAPS) Right of Way Renewal

My name is Jack Laasch, and I am employed by Natchiq, Inc. as their Executive Vice President of Strategic Development and External Affairs. Natchiq, Is a wholly owned subsidiary of Arctic Slope Regional Corporation, one of the thirteen native corporations formed as a result of the Alaska Native Claims Settlement Act in Alaska. Natchiq, is a global energy service provider that originated in Alaska by providing construction, engineering, maintenance, fabrication and assembly services to the oil and gas industry. I'm also President Elect of the Alaska Support Industry Alliance which represents over four hundred companies providing products and services to the oil and gas industry in Alaska.

I was introduced to Alaska, as a result of working on construction of the TAPS line beginning with the haul road construction in 1974, through completion of construction of the pipeline. I am a registered professional engineer in Alaska.

I believe that the TAPS pipeline was built with the highest of quality standards, and to this day the fact that Alyeska has experienced 99% reliability is a testimony to that quality. Alyeska currently operates under standards that far exceed the industry for safety and protection of the environment. Total spill quantities on an annual basis compared to quantities transported are measured in parts per billion. 58-1

I have a high degree of confidence that the TAPS line will continue to operate safely, without negatively impacting the environment for at least another thirty years, and I recommend that the right of way renewal be in effect for that period of time. The delivery of oil through the pipeline is the a key economic driver for the State of Alaska and its residents and a vital resource that benefits those receiving the products refined from Alaska's oil. The right of way grant needs to be extended for an additional thirty years without incorporating additional cost into the transportation of oil. Thank you. 58-2

Jack Laasch

Responses for Document 00058

00058-001: Thank you for your comment.

00058-002: Thank you for your comment.

OFFICE OF THE CITY MANAGER

August 6, 2002

BLM TAPS Renewal Scoping
Argonne National Laboratory
EAD/900
9700 Cass
Argonne, IL 60439

Gentlemen:

On behalf of the City of Valdez, I am submitting the attached written comments on the Draft Environmental Impact Statement of the Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way.

If you have any questions concerning the City's comments, please do not hesitate to contact me.

Sincerely,

David Dengel
City Manager

CC: Joint Pipeline Office
Alaska Department of Natural Resources-Commissioner's Office

P.O. BOX 307 * VALDEZ, ALASKA 99686
907-835-4313 PH * 907-835-2992 FAX

Written Comments of
City of Valdez, Alaska

Regarding the Draft Environmental Impact Statement for the Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way

August 5, 2002

The City of Valdez supports the proposed action to renew the federal grant and the state right-of-way lease for 30 years. The Valdez City Council adopted Resolution 02-56 (Attachment A), which supports the renewal of the Trans-Alaska Pipeline System right of way for 30 years. Renewing the right-of-way grant for 30 years will provide economic stability, predictability and future economic projections for not only the TAPS owners, but also the State and the municipalities along the pipeline corridor. 59-1

There is little doubt that the Trans Alaska Pipeline System has brought economic benefits to the City of Valdez and its residents. The operations of the City of Valdez are very dependent on money collected from ad valorem property tax. Approximately 75% of money collected from property tax comes from oil property.

HAVING SAID THIS the City does have some issues with the Draft EIS and the proposed action and determination of the Commissioner of Natural Resources.

With the exception of last year, the City has experienced a rapidly declining tax base. Between 1988 and 2001, the assessed valuation of oil property in Valdez declined over 50%. However, the level of throughput during that same time frame has declined just over 30%. 59-2

During the scoping meeting that was held in Valdez last fall, the City of Valdez asked that the Draft Environmental Impact Statement consider the socio-economic impact of this rapid decline of property value on the City of Valdez and its residents.

After reviewing the Draft EIS, we do not see where this has been addressed.

Volume 2, Section 4.3.19.3.5 State and Local Tax Revenues, which begins on page 4.3-73, discusses the very issues that Valdez is most concerned about.

The Draft EIS projects that total state tax revenues from oil production will decline at an average rate of 0.5% over the 30-year renewal period. This represents total taxes collected by the State.

Table 4.3-13 which is found on page 4.3-75 projects that local property taxes generated by TAPS will decline by 4.8% annually. Using the current value of TAPS property located within the City of Valdez, the assessed valuation of this property will decline 77 percent from the projected 2004 value of $654,944,010 to $150,645,778 in 2034. (See Attachment B)

Using the maximum tax rate that is assessed against oil property of 20 mills, the property taxes collected in 2034 from the TAPS property will be just over $3,000,000. Today, at the 20-mill tax rate, the City of Valdez collects approximately $13.1 million.

The Draft EIS at page 4.3-74 states that local municipalities tax revenues will increase by 0.8% annually. Attachment B provides a look at the City of Valdez's property tax revenue picture and how work this assumption really is. In order for the City of Valdez tax revenues to grow at this rate, the non-oil property will need to grow between 13 percent in 2005 and 141 percent in 2034. The City of Valdez already projects a growth in non-oil property values of 2 percent annually. This additional growth is on top of the City's 2 percent projection.

59-2 (cont.)

The Draft EIS assumes that the .0.8 percent growth will be based on state and federal transfers to local government not being affected by the declining state revenues and actually increasing to make up the difference. How can this be with the declining taxes generated by the oil industry? The Draft EIS assumes that the State will work its way out of the deficit that it faces. Perhaps we will, but Valdez cannot bet on it.

The transfers from the State have been declining over the last few years. From 1996 to 2001, Valdez has seen its state revenue sharing decline by almost 50% in this 5-year period. For example, in 1996, Valdez received approximately $742,000. In 2001 Valdez received $376,000.

The Draft EIS says that North Slope production has regularly constituted more than 15 percent of the country's domestic crude production. It all flows through Valdez. Valdez provides services that TAPS owners and shippers use and need. We have different costs that other communities of our size because of the Valdez marine terminal. We are on everybody's radar screen, figuratively and literally. What other community our size has police officers trained in bomb disposal? The local hospital is a necessary part of the infrastructure not only for the community but also for TAPS operations. The nearest hospital is 125 air miles and 310 road miles away.

In addition to these specialized services, the City provides the normal things cities do such as library, parks and recreation, education, snow removal, sewer and water, and solid waste disposal. All of these would need to be provided by Alyeska and its owners if Valdez were not here.

Valdez needs financial certainty just like the oil industry. To think that the State of Alaska is going to make up the difference due to the decline in value is ludicrous. Valdez does not even have a State Trooper. We do have a Fish and Wildlife Protection Officer, but no other state law enforcement personnel. There are communities smaller than Valdez without a major industrial complex that is critical to the economy of the State of Alaska and the United States that have state troopers.

For this reason, the valuation of TAPS needs to remain at a constant level as long as there is crude oil flowing through it. The City of Valdez will need to provide the same level of services that the industry requires today.
On page 4.3-82, Section 4.3.19.5.4 the Draft EIS states:

> "With the availability of state funds for local expenditure programs, together with moderate population and economic growth in the pipeline corridor region, impact of the TAPS renewal on local public finances and public service employment in the region is, therefore, not expected to be significant."

59-2 (cont.)

I direct your attention to one of previous comments. Revenue sharing from the State of Alaska has decline 50 percent over the last five years.

The Draft EIS dealt with the socio-economic issue of the reduction in oil property tax by the assuming that the State and the federal government through transfer payments. The State has its own problem that they cannot seem to resolve, how are they going to resolve Valdez's?

The City of Valdez believes that the one option that needs to be considered by both the State and the federal government is one of placing a floor on the value of the TAPS for property tax considerations.

Using the Draft EIS's projections, the City will need to make up between $29 million annually all the way to $425 million in assessed valuation in order to continue to provide the same level of services. This is significant.

The State is not going to help Valdez with this because, property taxes is a tariffable expense that reduces the value at the well head, thereby reducing the amount of money the State receives for royalty oil and severance taxes. The State receives most of its money from royalty and severance, not property taxes.

The Draft EIS has taken the easy way out in dealing with the socioeconomic impact of the devaluation of the TAPS property. The value of TAPS for property tax purposes needs to be addressed, as it will most definitely have an impact on the finances of Valdez.

The City of Valdez again requests that the Environmental Impact Statement discuss the impacts of the declining tax base of the TAPS property.

The City recommends and encourages that the Final EIS and language in the renewal documents encourage the State of Alaska to establish a floor on the value of TAPS. This floor should be not lower than $3.0 Billion as long as throughput is below 1 million barrels per day. As throughput increases, the value of TAPS should also increase so that the value of the property for tax purposes, tracks with the value of the oil that is flowing through it. With the extension of the TAPS right-of-way for 30 more years, the value of the pipeline certainly has increased.

In fact, during hearings in 2001, the industry argued that the values of TAPS for property values should be much lower because the right-of-way permits would expire in 2004. With the renewal, the value should be higher because the life has been extended for 30 more years.

This is needed in order to provide financial certainty for the City of Valdez and other municipalities along the pipeline. We will be asked to provide services for the industry for the life of the pipeline.

Responses for Document 00059

00059-001: Thank you for your comment.

00059-002: Tax revenues from ANS production and TAPS have provided considerable financial benefits to local governments throughout Alaska. In addition to the royalties and severance taxes paid to the state on oil production, a share of which is distributed to local governments throughout the state, a number of local governments are able to collect property taxes on oil company property located within their jurisdictions. A large proportion of revenues collected by local governments in the North Slope Borough and in the City of Valdez come from oil sources, meaning that these communities have become highly dependent on these revenues. As the commentor notes, declining TAPS throughput has the potential to adversely affect the ability of local governments in these communities to generate sufficient tax revenues from local sources to maintain existing expenditure programs. Falling state tax revenues from declining ANS production would also potentially limit state support for local government programs.

While it is becoming clear that even with TAPS renewal, new sources of revenue in addition to likely cutbacks in expenditures, will be necessary in the near future at both the state and local level, the nature and timing of any changes that might be made to the structure of government finances in Alaska are unclear at this time. Because of this uncertainty, the EIS assumed that existing levels of revenue and expenditure growth would be maintained throughout the renewal period, and that the evaluation of decisions made by the state and by local governments to change the way tax revenues are raised to support existing expenditure programs, including changes in property tax rates and in the size of transfers between state and local governments, was considered to be beyond the scope of the analysis. Specifically, proposed changes in assessment rates for property taxes suggested by the commentor that might be made in order to maintain adequate levels of local government service provision in the City of Valdez, would be the result of negotiation between the City and the State of Alaska, the outcome of which is unknown at this time.

Date August 20, 2002

RE: Draft Environmental Impact Statement Report
Right of Way Renewal Agreement with Alyeska Pipeline Services Company

TO: BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

To whom this may concern:

My name is Jeannie Sayre. I testified on August 5, 2002 at the Anchorage Hilton Hotel and I am following up on several issues I wasn't able to address at that DEIS hearing. I will therefor add this document as a supplement to my testimony given on August 5th. I wil be referencing many, many documents that should be available & provided to you by the Federal DOL, the State of Alaska DOL/OSHA, the JPO, VECO, and Alyeska Pipeline Services Company. If you have any problems in accessing these files, documents or websites, please let me know and I will make copies for you from my own files and mail them to you.

I am a Whistle Blower on the Trans Alaskan Pipeline. I was fired twice by my employer - VECO Alaska, because I raised safety and environmental concerns. I filled several DOL complaints regarding the retaliatory treatment I received while working on TAPS. Alyeska Pipeline Services Company was also named in 2 complaints for retaliation against me for raising concerns. As stipulated in th ROW agreement, Alyeska is responsible for their contractors behaviors and the contractors compliance with ALL sections of the ROW Agreement. No exceptions. Alyeska cannot disregard their fiduciary duty as the sole operator of the Trans Alaskan Pipeline and the JPO cannot dismiss Alyeska's direct involvement in harasssment, intimidation, interference, retaliation and discrimination against TAPS employees engaging in protected activities.

My first complaint to the DOL for retaliation was in 1996. It resulted in a DOL Hearing in October of 1997, to which the Honorable David DiNardi found both VECO and Alyeska Pipeline Services Company guilty of retaliation against an individual engaging in protected activities. (See DOL Case No.: 1997-TSC-6, File No.: 0-130-97-007)

In a second separate complaint filed in February of 1999, VECO was again found guilty of retaliation against an individual engaging in protected activities. Meanwhile, APSC did nothing to discipline or discourage this contractors' illegal behavior. (See DOL Case No. 1999-CAA-0019)

In 1999 -2000, I filed a third compilation of complaints to the DOL for ongoing employer retaliation by both VECO and Alyeska Pipeline Services Company. This action resulted in a second DOL ordered Hearing held in April of 2001 before the Honorable Richard Malamphy, which has not yet been decided. (See DOL Case No. 2000-CAA-007)

I was fired in January of 2001 for a North Pole Metering Project Deficiency Report I had been requested to make by my Alyeska Lead at Pump Station #7 - James Giles. I spoke to an individual at the JPO, Mr. Joe Corea regarding these Quality Program Violations. I was requested by Mr. Corea to refer each line item to the Alyeska Quality Program Standards, and/or the Alyeska Specification and/or the Nationally recognized codes & regulations, because he "had been with the JPO for 6 years but never read these books ....". What type of *oversight* can this posibly be?

- **North Pole Metering Right of Way Agreement Violation:**

The NPM Project B176 was to build a larger building designed to deliver more crude to the North Pole refineries and re-inject the extremely hazardous waste by-product, known as residuum, back into the pipeline. The selected *AND* installed software program for the metering of crude & residuum was not in compliance with the Right of Way Stipulation as noted below .... (CAPS)

3. TECHNICAL

3.1. General

3.1.1. The following standard shall be complied with in design, construction, operation and termination of the Pipeline System.

3.2 Pipeline System Standards

3.2.1 General Standards

3.2.1.1. ALL DESIGN, material and CONSTRUCTION, operation, maintenance and termination PRACTICES EMPLOYED IN THE PIPELINE SYSTEM SHALL BE IN ACCORDANCE WITH safe and PROVEN ENGINEERING PRACTICE and shall meet or exceed the following standards:

(please refer to the entire ROW Stipulation as referenced above)

I had mentioned and documented this violation of the ROW Agreement to the Asset Manager in a letter dated 10/09/00. But this was never resolved nor investigated by the JPO. Only recently was this projects' software program replaced with another vendors' product. Could this be due to the fact that the software program was not "proven Technology" as stipulated in the ROW Agreement? Why was this practice never questioned, investigated, nor brought to the attention of Congress in the JPO Weekly Report to Congress?

Hundreds of violations to adherence of 29 CFR were duly noted thoughout the NPM Project Defiency List. (See JPO Report 'Analysis & Review of the "Itemized Punch List of Non-Compliances" Associated with Project B176, North Pole Metering Station', prepared by Joeseph Corea, September 2000, attachment 3, pages 1 thru 8), yet were 'washed over' by members of the JPO staff.

- **North Pole Metering APSC Quality Program Violations:**

Hundreds of violations to adherence to APSC's Quality Program Engineering, Procurement & Documentation Requirements are were duly noted thoughout the NPM Project Defiency List. (See JPO Report 'Analysis & Review of the "Itemized Punch List of Non-Compliances" Associated with Project B176, North Pole Metering Station', prepared by Joeseph Corea, September 2000, attachment 3, pages 1 thru 8, last blue column on far right of spread sheet)

- **North Pole Metering APSC Specification Violations:**

Hundreds of violations to adherence to APSC's Equipment Specifications Requirements was duly noted thoughout the NPM Project Defiency List. (See JPO Report 'Analysis & Review of the "Itemized Punch List of Non-Compliances" Associated with Project B176, North Pole Metering Station', prepared by Joeseph Corea, September 2000, attachment 3, pages 1 thru 8, middle blue column on far right of spread sheet) Additionally, these specifications are a Quality Program requirement, which is clearly stated in the ROW.

- **North Pole Metering Code Violations:**

(See JPO Report 'Analysis & Review of the "Itemized Punch List of Non-Compliances" Associated with Project B176, North Pole Metering Station', prepared by Joeseph Corea,

September 2000, attachment 3, pages 7 & 8, items 29a, 83a, 83b, 83c, 83d, 100a, 122a, 123a, 124a, 125a)

Additionally within this report, please see 'MEMORANDUM' from Ray Elleven to Joe Corea, attachment #6, page 1, which addresses a few items I had identified in my NPM Deficiency List.

Item #79 was mis-identified by Mr. Elleven as being a *requirement* by NFPA. It was NOT a requirement but a recommendation as stated in my NPM Deficiency List. APSC has eye wash stations in all their facilities that have batteries. APSC additionally has an Alyeska Equipment Specification #I-105, which is specifically written for Eye Wash Stations and was referenced as such in the NPM Defiency List. (See JPO Report 'Analysis & Review of the "Itemized Punch List of Non-Compliances" Associated with Project B176, North Pole Metering Station', prepared by Joeseph Corea, September 2000, attachment 3, page 3, item #79, second blue column on the right)

I have found numerous errors on the JPO Report and an inordinate amount of "white-washing" of the issues regarding violations of the ROW Agreement, Quality Program, 29CFR, NFPA and other techical issues. How could such potentially catrastrophic errors pass the JPO's oversight scrutiny?

Beginning with the State of Alaska Electrical Inspector report, I found his evaluation of the Area Classification for the NPM facility to be in **absolute** error & extremely disturbing. (See JPO Report 'Analysis & Review of the "Itemized Punch List of Non-Compliances" Associated with Project B176, North Pole Metering Station', prepared by Joeseph Corea, September 2000, attachment 5, page 1, item number 1) Had this individual reviewed the Area Classification Drawing for this facility, he would have been able to determine that the **entire** area outside of the process area of the building is, in fact, identified as Class I, Division II, Group D. This determination was based on of APSC's utilization of the Industry standards as noted in the following Codes & Guidelines, which is consistent with all process areas on the Pipeline and the VMT:

1. API RP 500, Recommended Practice for Classification of Location for Electrical Installations at Petrochemical Facilities
2. NFPA 30, Flammable and Combustible Liquids Code
3. NFPA 58, Standard for Storage and Handling of Liquidfied Petroleum Gases
4. NFPA 70, National Electric Code or NEC
5. NFPA 325M, Fire Hazard Properties of Flammable Liquids, Gases, & Volatile Solids

There are numerous other inconsistencies and inaccurate statements throughout this report but addressing them within the body of this letter would be time consuming, and of no value to individuals who do not understand the basic principles of drafting, design, engineering, & as-builts. However, one statement should ring loud and clear within the entire construction & engineering industry, which is ..... *always error on the side of caution* (not money).

- **North Pole Metering State Regulations Violations:**

Violations of State of Alaska Requirements for Direct Supervision (and NOT spot checking certifications as was performed by State Electrical Inspector on 4(?) occasions) by Licensed Electrical Administrator (EA) and/or Licensed Mechanical Administrator (MA) and certifcation/sign off forms. The law requires 24/7 supervision of all work performed. There was a period of time, 3 months, when the EA refused to sign off of questionable installations occuring in Texas, and quit the job. Therefore, there was NO direct EA supervision for 3 full months in this instance. If the JPO conducted an adequate investigation and had I not been prevented from attending this inspection

walk-down, this would have come to light, had to have been addressed, and/or NOV's issued by the State Representative.

Additionally, it is my understanding that one of the State Inspectors, was trained as a DOL Safety and Hygeine Inspector and not an Electrical Designer, Engineer or Inspector. Also, as I understand the State Electrical Inspector is not an Electrical Designer or Electrical Engineer and therefore did not have the ability, experience or trainning to determine the correct Area Clasification of the new North Pole Metering Facility.

I was requested to furnish Mr. Jim Giles, PS#7 Asset Manager, a sketch of what I determined the NPM Area Classification of this facility should be. This was based on my specific training and education in Area Classification Determinations provided to me by Flour Engineers and Constructors, July 1973.

I found the existing Area Classification drawing(s) woefully inadequate, in gross error and indisputably dangerous in that there are several areas within this building that were never identified as Class I Division I areas. These highly volatile hazardous areas would require a much higher design level of protection on the equipment selection, location and installation. A clear example of this would be the immediate area around any one of the many flow meters. The code requires a 3'-0" radius area surrounding the flow meters being classified as Class I Division I. (Highly explosive atmosphere)

All electrical equipment, hardware, and wiring should comply with API RP 500 Figure 102, Section 14.3.6. As well as NFPA 70, Art. 501-3. Meters, Instruments, & Relays. Yet, at the time of the JPO Inspection of this facility, the duly appointed inspections individuals did not take notice of this design error nor the type and design of the adjacent equipment within the 3'-0" radius considered as the Class I Division I "sphere". (Please request from APSC a copy of the 5 page NPM Area Classification drawing/sketch I prepared and delivered to Mr. Jim Giles)

There were meter design errors as well as numerous other 'oversight' errors on the part of this inspections party, and which were not noted on the code violations report either inspections persons. Another extremely dangerous situation present at this site, and NOT looked into was the 'gerry rigging' of the meters to accomodate a miscalculation on the counter mechanism tolerances. The "engineering fix" to the meters was to insert spacer bars to elevate the counter mechanism in order to produce more accurate reading/reporting.

By tampering with these metering devices, the UL listing was now void. If the meter was in fact rated for a Class I Division I installation - explosionproof, this rating also would be rendered null & void thereby placing the operators, any other personnel working within the confines of this structure and the adjacent neighbors in imminent critical danger since this device is no longer rated for a Class I Division I application. The PSV's, the exhaust stacks, the sump tank, the sump tank vent, the external walls that were not designated vapor tight and the building air supply were a few items also not identified as potential Class I Division I Hazardous Areas and explosion proof designed equipment installed there in. How could this "minor oversight" happen?

Just how in depth was this JPO/DOL inspection? Why weren't the referenced documents reviewed and resolved. Isn't the JPO the oversight agency that is employed to insure the TAPS employees are doing their jobs? What about enforcement of the Quality Program Requirements as stated in the Right of Way Agreement? Why didn't these two individuals review the referenced documents on the NPM Deficiency List? Why was the author of this NPM Deficiency List not contacted after the "JPO/DOL inspection" to resolve outstanding issues? How is it that such a

hearty and robust spreadsheet of damning idiot-proof information be white-washed into a minor report penned by individuals without an iota of electrical design or electrical engineering experience?

On another issue, the lack of fit test certification documents for both electrical and mechanical installations of equipment were not located in the closeout documents as clearly stated in the NPM Deficiency List. Where are these documents within the Project close out package at the time of the JPO investigation? (See JPO Report 'Analysis & Review of the "Itemized Punch List of Non-Compliances" Associated with Project B176, North Pole Metering Station', prepared by Joeseph Corea, September 2000, attachment 3, page 6, line items 130, 131, 132, 133) This IS a Quality Program requirement as defined in the ROW Agreemnt

- **North Pole Metering City Permitting Violation:**

The City of North Pole has a Building Permit Policy in place and has been in place for years. The policy clearly states that:

> *All buildings being constructed within North Pole City Limits must have a current building permitand be in compliance with minimum construction standards set forth by the Uniform Building Codes as adopted by the State of Alaska, and by the City of North Pole Ordinance 81-5, Chapter 5, Section: 5-1 through 5-6.*
>
> *Before a permit cna be issued, the contractor must submit a set of construction plans and specifications to the City of North Pole for a plan review. The plan review process will review the proposed construction for compliance with the applicable Uniform Building Codes (i.e. U.B.C., U.M.C., U.P.C., N.E.C.). The plans to be submitted for review shall be at a minimum include the following:*
>
> *Site Plan ....*
> *Foundation Plan .....*
> *Floor Plan ....*
> *Section ....*
> *Electrical, Mechanical & Plumbing ..... etc etc etc*

This requirement was never complied with by neither VECO nor APSC. I had documented this issue in my NPM Project Defiency report to Mr. Jim Giles and Mr. Rob Merdes, Alyeska Pump Station 7 Area Asset Managers, as part of the Quality Program non-compliance items for this new construction project. (See JPO Report 'Analysis & Review of the "Itemized Punch List of Non-Compliances" Associated with Project B176, North Pole Metering Station', prepared by Joeseph Corea, September 2000, attachment 3, page8, line item 100a) Why was this never addressed?

It was alleged by VECO that the job was "in progress" & therefore incomplete. However, if a remotely adequate investigation was in fact performed, and if I was part of the investigation, as Mr. John Stallone, State of Alaska DOL OSHA, had requested I be, the findings would have been remarkable different in that this was a factual *project closing defiency listing* for the transfer of care, custody & control of this project from VECO Engineering to APSC.

The question begs to be asked as to why was this highly visible APSC building installation investigation and subsequent report never submitted to Congress nor mentioned in the JPO's Weekly Report to Congress?

Why was the lack of hydrotesting and documentation of the crude oil piping and residuum piping at this facility never reported to Congress in the JPO's Weekly Report to Congress? Why was the hydrotesting documentation of all other piping in this facility not requested by the JPO? Is it available? Had the hydrotesting of all required piping of this facility ever been performed ***after*** it was installed at the NPM facility? Documented? Are these documents available?

- **Pump Station #1 Metering & Valdez Metering:**

Why has the metering of oil from Pump Station #1 to Valdez never balanced out? Why has APSC not completed a thorough investigation of this issue? Where is this "unaccounted for" oil? Why has the JPO not investigated this issue?

- **Underground Drawings:**

While I was employed on TAPS, I had several concerns about the underground drawings and lack of accuracy in the depiction of the underground piping, electrical feeders, water, gas and fuel lines. If the Ocean Tech drawings were audited by technically qualified personnel, Alyeska would demonstrate their inability to focus on and fund the complete as-building of all Alyeska facilities.

While I was at PS#7, a project required excavation for a trench on the pad for the electrical power, control and fire protection supplies. Within 5"-0" of exiting the generator building, while using a backhoe, the excavation crew chopped through a 2" power cable. This cable was not depicted on any drawing, nor was it found during the pre-exavation survey by Ocean Tech. Fortunately, the cable was "dead", no one was hurt and the job continued. Again, another cable was chopped through by the backhoe crew and neither was this second cable documented on any drawing, sketch, nor identified by the pre-job survey of the project area.

In both these instances, no one was injured. But the work crew was so alarmed and concerned for their safety, the job was halted and any further excavation was done by hand with pick axes, shovels and buckets full of sweat. Was this incident reported in the JPO's Weekly Report to Congress? Why not?

Other issues I had on the underground drawings were the lack of identification of buried fuel tanks abandoned under the gravel pads. PS#7 had 2 buried fiberglass fuel tanks that were "cleaned", filled with sand and crushed in, then covered with gravel. The drawings, at that time, did not depict these tanks nor did the drawings show the abandoned electrical conduits, and any associated underground piping/grounding. I had redlined them onto the master set of Ocean Tech drawings but since these drawings are entirely inaccurate, few people trust the contents of these "as-built" drawings and even fewer utilize them for referencing.

The need to ask several questions regarding this practice is of significent importance. How could the determination be made that no soil beneath these abandoned fuel tanks were contaminated by fuel leaking from the fiberglass tanks? Why weren't the tanks dug up and removed as the State required? Could it be that if the tanks were exhumed, the potential for discovering contaminated soil is very high? And in turn the cost for clean up even higher, especially at a time with the 'Owner Companies' are ordering Alyeska to have cutbacks in pipeline spending? Why hasn't the JPO ordered the physical removal of these fuel tanks? How many other sites have these buried fuel tanks and are not depicted on any documents?

- **ROW Section 28 Compliance:**

Several women, including myself, had gone to the JPO and complained about gender discrimination and harassment while employed on TAPS. Why were there never any written

reports, subsequent documented investigations, follow-up interviews with the women who brought these concerns to the attention of the JPO EEOC Representative? Where are the files on these complaints? What was the final outcome? Were the complainants ever given copies of the investigations? And more importantly, why were these complaints regarding violations to the Right of Way Agreement, Section 28, never documented or in the JPO Weekly Report to Congress?

- **ROW Section 29 Compliance:**

I know of a female native who had gone to the JPO with complaints of being treated in a discriminatory manner becuase she was a native. Was this action documented bythe JPO? Is there a copy of this invedtigation? Would it be available to the public? Why was there never any resolution to this issue? Wasn't this a direct violation of the Section 29 Clause in the ROW Agreement? Was she the only Native person to complain to the JPO about disparate treatment due to her/their race? And more importantly, why were these complaints regarding violations to the Right of Way Agreement, Section 29, never documented or in the JPO Weekly Reports to Congress?

- **RGV Ventilation:**

The RGV's or Remote Gate Valves are located on the pipeline primarily to control the amount of oil that may be spilled during a catastpohic event on the pipeline. The RGV's consist of a control module/building which houses the various devices, components, signals and alarms for the capability to remotely control these valves. In the wintertime, the RGV buildings are an environmentally sealed building with no automatic ventilation means available to remove any hydrogen gases that may build up during the battery re-charging process. There is no automatic fire suppression system installed in any RGV on the pipeline. This condition is extremely hazardous and in fact against NFPA 70, the code adopted by this state. This requirement has been in place since the creation of the pipeline. Therefore, the argument can't be made that this is a recent addition to the code or that this requirement wasn't in place during the design of the pipeline. Check the DOL library for the NEC code in place during the early '70's.

The NEC specifically states ..... *Provisions shall be made for sufficient diffusion & ventilation of the gases from the battery to prevent the accumulation of an explosive mixture. (National Electrical Code NEC Art. 480-8 a)*

I brought this concern forward to the APSC ECP Department in '97. A 24 hour non-standard, by-the-seat-of-their-pants "test" was performed by the APSC Safety Dept personnel. This non-technical "test" consisted of drilling a hole in the bottom siding/wall of an RGV enclosure/module and inserting a gas testing tube through the hole every 60 minutes, then recording the readings. This "test" resulted in demonstrating that no dangerous accumulation of Hydrogen gases (from the action of battery recharging) was present. However, this" test" did show a positive high level reading of Carbon Monoxide gas present over that 24 hour "testing" period.

The question begs to be asked as to why was the hole drilled at the bottom of the RGV enclosure/module? Who decided this was the best place to test the gas level for hydrogen gas acumulation? A first year chemistry student would know that hydrogen gas is lighter than air and therefore would accumulate in the ceiling area and certainly not the floor area. Secondly, the 24 hour test was wholly inadequate given the fact that during the severe winter months & for weeks at a time, the RGVs are not entered for "ventilation" or work/inspections. The action of the battery recharging can potentially build up extremely dangerous levels of hydrogen gases in these small, non-ventilated RGV enclosures. How could this potentially catrastrophic disaster pass the JPO oversight scrutiny? It is relatively easy if there is no one on staff with electrical design or electrical engineering experience.

- **Pipeline Bullet Hole Incident:**

Why was the Pipeline not immediately shut down when the pressure dropped? Mr. Robert Malone stated several times in numerous speeches that the detection equipment on the pipeline was so sophisticated, that a pin hole leak in the pipeline could be detected in an instance and the line immedialtely & safely shut down. Why didn't this detection and immediate shut down happen? How is it that this pipelines' sophisticated detection equipment didn't detect a drop in pressure but that an unscheduled helicopter flight found and reported the spill? What would have happened if the helicopter flew in the opposite direction? How long - minutes, hours, days - would it have taken for APSC's sophisticated detection equipment to alarm the Pump Station Control Room personnel that the pipeline had a drop in pressure and releasing tens of thousands of gallons of toxic crude onto the tundra? Why was this never reported to both the public and to Congress in the JPO's Weekly Report to Congress? Why wasn't this simple question ever asked by anyone with the Authority of Jurisdiction over the Pipeline?

Is this such a technical question that only one person in the entire state would ask this? Why wasn't the bullet retrieved for prosecution of the shooter? For a ballistics test? Why wasn't the damaged pipe cut out for ballistics testing and for researching & replaced with a new piece? Could it be that perhaps if the pipe was cut and presented at trial, the public could clearly see the corrosion of the interior/exterior of the pipe? I have spoken to many hunters and they seem to agree that the caliber of that rifle coupled with the reported bullet load weight, would not necessarily bring down an adult bull moose with a kill shot to the shoulder. So, I'm a little confused ..... how is it that this gunshot could put a hole in a 3/4" thick treated steel pipe and not bring down an adult moose shot in the shoulder?

- **Fire Protection Issues:**

In 1996 I brought forward concerns of gross errors in design, engineering and as-builts of the fire protection systems at PS#3. I researched the requirements for design and engineering and drawings regarding fire protection systems by multiple phone conversations with the State Fire Marshal's office personnel, state fire codes & regulations literature, and face to face meetings with the then State Fire Marshal, Craig Goodrich. An APSC ECP Employee, Patrick Higgins, accompanied me to one such meeting.

I brought these concerns to the JPO, Bob Jones, Coleen McCarthy, and James Lusher. However, before any JPO investigation commenced, I was fired from my job at PS#3 for raising these concerns. The JPO led a formal investigation on my concerns resulting in several findings in my favor. However, there were even more findings left "indeterminate" and never subsequently followed through and resolved.

These issues could and would have been easily concluded if the JPO personnel had an Electrical Designer or Engineer on staff to make these determinations. Better yet, a simple phone call or meeting with the State Fire Marshal would have been sufficient to make multiple findings and issue hundreds of Notice of Violations to APSC for Fire Systems Violations.

The question that begs to be asked is simple. Why was this course of action never taken by any member of the JPO "technical" staff? Yet another more important question must be asked - why are there no Electrical Designers or Electrical Engineers on staff full time at the JPO? If more than 75% of the GAO Audit findings were electrical in nature, then why wouldn't the JPO's "technical" staff be comprised of 75% Electrical Designers or Electrical Engineers?

Two final questions I have regarding this matter is why was this formal JPO investigation concerning the wrongful termination of a TAPS employee for engaging in a protected activity, never reported in the JPO's Weekly Report To Congress? What happened to this investigative report? Why was there no official file/investigation number assigned to this set of documents? How can a person obtain a copy of this investigation without having an idnetification or file number? (Investigation report document by Coleen McCarthy and James Lusher - JPO General Engineers - completed in May 1997)

In Alaska's desolate and frigid north, a massive explosion & fire could spell ultimate disaster to both personnel and the environment. The weather is unpredictable. The environment unfriendly to man. The ability to get rescue and spill response crews to the site could be severe impacted by incliment weather such as a blizzard or white-out. Getting personnel off the Pump Station Pad during such a cataclysmic event could be virtually impossible if the crude tank were to explode and cut off the exit out of Pump Station #3 as an example.

How could this potentially catrastrophic disaster pass the JPO oversight scrutiny? It could be easily argued that it is relatively easy if there is no one on staff with fire protection design, electrical design or electrical engineering experience.

- **Violation of 41 CFR 50-201.201 - Breach of stipulations.**

  - **Section Number:** 50-201.201 (b)
  - **Section Name:** Breach of stipulations.

(b) Whenever a final determination of a breach of stipulations is made, the Secretary of Labor will furnish to the contracting agency a copy of the findings and decision with such recommendations as will assist the contracting agency in determining whether or not the contract should be canceled for such breach.

Alyeska had wantonly breached the Right of Way Agreement by allowing the retaliation of a TAPS employee by both their engineering contractor on TAPS and their own employees. This happened on more than one occasion and to dozens of whistleblowers who brought concerns up. These cases are a matter of public record and evidence of this activity can be found on the DOL website www.dol.gov

My own particular case against Alyeska can be found on this website. (See DOL Case No.: 1997-TSC-6, File No.: 0-130-97-007)

- **Violation of 29 CFR 24.2 - Obligations and prohibited acts.**

  - **Section Number:** 24.2
  - **Section Name:** Obligations and prohibited acts.

(a) No employer subject to the provisions of any of the Federal statutes listed in Sec. 24.1(a), or to the Atomic Energy Act of 1954 (AEA), 42 U.S.C. 2011 et seq., may discharge any employee or otherwise discriminate against any employee with respect to the employee's compensation, terms, conditions, or privileges of employment because the employee, or any person acting pursuant to the employee's request, engaged in any of the activities specified in this section.

(b) Any employer is deemed to have violated the particular federal law and the regulations in this part if such employer intimidates, threatens, restrains, coerces,blacklists,

discharges, or in any other manner discriminates against any employee because the employee has:

(1) Commenced or caused to be commenced, or is about to commence or cause to be commenced, a proceeding under one of the Federal statutes listed in Sec. 24.1(a) or a proceeding for the administration or enforcement of any requirement imposed under such Federal statute;

(2) Testified or is about to testify in any such proceeding; or

(3) Assisted or participated, or is about to assist or participate, in any manner in such a proceeding or in any other action to carry out the purposes of such Federal statute.

(c) Under the Energy Reorganization Act, and by interpretation of the Secretary under any of the other statutes listed in Sec. 24.1(a), any employer is deemed to have violated the particular federal law and these regulations if such employer intimidates, threatens, restrains, coerces, blacklists, discharges, or in any other manner discriminates against any employee because the employee has:

(1) Notified the employer of an alleged violation of such Federal statute or the AEA of 1954;

(2) Refused to engage in any practice made unlawful by such Federal statute or the AEA of 1954, if the employee has identified the alleged illegality to the employer; or

(3) Testified before Congress or at any Federal or State proceeding regarding any provision (or proposed provision) of such Federal statute or the AEA of 1954.

(d)(1) Every employer subject to the Energy Reorganization Act of 1974, as amended, shall prominently post and keep posted in any place of employment to which the employee protection provisions of the Act apply a fully legible copy of the notice prepared by the Occupational Safety and Health Administration, printed as appendix A to this part, or a notice approved by the Assistant Secretary for Occupational Safety and Health that contains substantially the same provisions and explains the employee protection provisions of the Act and the regulations in this part. Copies of the notice prepared by DOL may be obtained from the Assistant Secretary for Occupational Safety and Health, Washington, D.C. 20210, from local offices of the Occupational Safety and Health Administration, or from the Department of Labor's Website at http://www.osha.gov. (2) Where the notice required by paragraph (d)(1) of this section has not been posted, the requirement in Sec. 24.3(b)(2) that a complaint be filed with the Assistant Secretary within 180 days of an alleged violation shall be inoperative unless the respondent establishes that the complainant had notice of the material provisions of the notice. If it is established that the notice was posted at the employee's place of employment after the alleged discriminatory action occurred or that the complainant later obtained actual notice, the 180 days shall ordinarily run from that date.

- **29 CFR 98.305 - Causes for debarment.**

  - **Section Number:** 98.305
  - **Section Name:** Causes for debarment.

Debarment may be imposed in accordance with the provisions of Secs. 98.300 through 98.314 for:

(a) Conviction of or civil judgment for:

(4) Commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects the present responsibility of a person.

(b) Violation of the terms of a public agreement or transaction so serious as to affect the integrity of an agency program, such as:

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(1) A willful failure to perform in accordance with the terms of one or more public agreements or transactions;
(2) A history of failure to perform or of unsatisfactory performance of one or more public agreements or transactions; or
(3) A willful violation of a statutory or regulatory provision or requirement applicable to a public agreement or transaction.

For a complete copy of reasons for debarment, please refer to the DOL website www.dol.gov under **29 CFR 98.305**.

references for violations of 29 CFR:

- *Alyeska was found to have retaliated against an individual engaging in a protected activity. See DOL website www.dol.gov.*
- *My own substantiated case against Alyeska can be found on this website. (See DOL Case No.: 1997-TSC-6, File No.: 0-130-97-007)*
- *My 2 substantiated cases against VECO can also be found on this website. (See DOL Case No.: 1997-TSC-6, File No.: 0-130-97-007 & DOL Case No. 1999-CAA-0019)*
- *My second complaint/case against Alyeska and third complaint/ase against VECO are currently pending before the DOL's ALJ Judge Richard Malamphy. (See DOL Case No. 2000-CAA-007)*

If this debarment action was to have taken place as the law prescribes, negotiations for the ROW renewal process would not be taking place with this Pipeline Operator. The debarment proceedings would/should have removed both Alyeska and VECO from engaging in any contract or agreement of this nature. Nor could either of these companies be performing any services on this Pipeline, since the ROW is with both the State of Alaska and the Federal Government.

And finally this certainly warrants the GAO investigation and questioning of the JPO authorities as to why they have not been enforcing the stipulations of the ROW Agreement? Additionally, where is the JPO with regards to strict enforcement of laws pertaining to discrimination against persons engaging in protected activities? Doesn't this lack of action on the part of the JPO bring to light the desparate need for the creation of a Citizens' Oversight Group?

I have had hundreds of questions regarding the technical and non-technical aspects of the TAPS Pipeline processes and operations, but this is not the place to have all of them addressed. I have personally had no luck and do not trust the staff of the JPO. First, I find the JPO personnel inept and technically unsound with regards to the design and engineering concerns of the pipeline.

Secondly, the covert "memorandum of understanding" between Alyeska and the JPO defeats the purpose of having this oversight agency. Lastly, the staff has never resolved most of the concerns I had brought to them. This organization never finalized any investigations or reports in association with my concerns. The JPO's failure to execute their obligation of reporting Alyeska's ROW violations in their Weekly Reports to Congress is an absolutely unacceptable method of conducting pipeline oversight. 60-1

I find the upper level staff at the JPO is remarkably similar to a double edged sword. No matter what way they swing, you will get sliced. This happened to me on several occasions in my dealings with the JPO and as I recommended to Connie Broadus in 1996, I still recommend now - get rid of these current state and federal lapdogs. Replace them with individuals with solid skills, training, education, abilities, character and most importantly - integrity.

This action can **only** be accomplished through a valid, capable, non-prejudicial citizen oversight group. As was suggested during the August 5th Hearings, the money for the final North Slope Clean-up & Restoration Fund should be placed in an interest bearing account with the interest going to support a citizen committee to oversee the pipeline. This would be a real agency where frightened TAPS workers can bring their concerns to and have them addressed by professionals who are not "tethered by a goat rope" to the oil companies. People who are well versed in the codes and regulations. People who are not afraid to enlist the services of other agencies, such as accessing the staff at the State of Alaska Fire Marshal's Office, when fire related issues arise. People who will not back down when lay-off rumors are intentionally "planted" amoung the TAPS workforce. 60-2

People who will develop a following of pipeline workers who bring concerns forward & will not fear retaliation or demotion because their identities will remain protected if requested. An agency that will document and report incidences of questionable behaviors, illegal actions, engineering or construction issues, equipment malfunctions, deceitful management decisions or dubious maintenance practices. A place where trust is the key to success and the word of mouth spreads this success throughout the Pipeline.

I also support creating a program similar to the NRC's requirement to shut down the operations of a plant if more than 10% of the employees feel uncomfortable raising safety or environmental concerns. If yearly surveys of the TAPs employees would be conducted by the citizen oversight group and more than 10% felt uncomfortable raising concerns, then the federal government should step in, take action & implement immediate resolutions. By doing this annual "audit" of the work environment, the survey questionaires could not be "*manipulated*" to reflect Alyeska's wants or desires but will truly mirror the trust, faith & confidence which the TAPs employees have for the Operator of the Pipeline. 60-3

Thank you for allowing me the opportunity to provide to you my testimony and my feelings on the current proposal for another 30 year ROW renewal with no additional stipulations to the agreement. I feel allowing this to happen is a terrible disservice to the Alaskan people, the TAPS employees, the Alaskan wildlife and the unique Alaskan environment.

If you have any questions, please give me a call at 907/345-0292 or email me at jeannies@alaska.net.

Sincerely,
Jeannie Sayre Jeannie Sayre 8/20/02
(injured former TAPS employee/whistleblower)

cc: A. Alene Anderson
Jackie Kittrell
Robert Seldon
George Miller
John Dingell
Maria Cantwell
Bob Randall

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Responses for Document 00060

00060-001: Thank you for your comment.

00060-002: Please see Section 2.5 of the FEIS for information regarding citizens' oversight.

00060-003: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00061

Alaska Forum for Environmental Responsibility

Alaska Center for the Environment

Northern Alaska Environmental Center

August 20, 2002

BLM TAPS Renewal Scoping
Argonne National Laboratory, EAD/900
9700 South Cass Avenue
Argonne, IL 60439

State of Alaska
Department of Natural Resources / JPO
Joint Pipeline Office
411 West 4th Avenue, Suite 2
Anchorage, Alaska 99501-2343

Re: Public Comment on *Draft Environmental Impact Statement, Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way* (BLM/AK/PT-02/026+2880+990, U.S. Department of Interior, Bureau of Land Management, July 2002) and *Commissioner's Statement of Reasons and Proposed Written Determination for the Renewal of the Trans-Alaska Pipeline Right-of-Way Lease* (ADL 63574, July 5, 2002).

Dear BLM and State of Alaska:

The Alaska Forum for Environmental Responsibility has closely monitored and actively participated in the recent hearings held in seven Alaska communities on TAPS Grant and Lease renewal. Three factors compel us to submit this supplementary comment at the close of the 45-day public review process: the importance of this issue to the citizens of Alaska, the inadequacies of the review process and the shortcomings of the documents that support proposed agency recommendations to renew the TAPS right-of-way Grant and Lease agreements without modification. The Northern Alaska Environmental Center and the Alaska Center for the Environment join us in submitting these comments.

Many of those testifying at the recent hearings criticized the timing of the hearings for two principal reasons: The hearings took place at the height of the summer, when many persons were engaged in hunting, fishing or were otherwise engaged in customary summer activities. Moreover, many who testified requested more time to review the documents on which they were asked to comment. These documents, totaling more than 1,900 pages, were made public on July 5, only three weeks before the first hearing. More than twenty public interest, environmental

61-1

and Native organizations formally requested an extension to the public comment period, but the request was denied by state and federal officials July 31. One indication of the importance with which many people regard this issue is the fact that approximately 150 people testified at seven statewide hearings that ended August 9. In three communities, the hearings ran past midnight, at Barrow, elders waited more than five hours for the opportunity to express their concerns about the renewal terms. Although we believe the procedural flaws in the public proceedings that end August 20 compromise the entire process, our process objections are already part of the record and will not be repeated here. Rather, this comment will focus on TAPS and the operating, maintenance and management procedures of the TAPS Owners.

61-1 (Cont.)

Representatives of the Alaska Forum observed and testified at each of the seven hearings. Principal issues discussed by Alaska Forum representatives at the seven hearings included the following:[1]

- ➔ the pernicious effect on the safety of TAPS operations resulting from chronic cost-cutting pressure by the TAPS Owners;
- ➔ the effectiveness of the Reliability Centered Maintenance (RCM) process, which both the state and federal monitors constituted a major reason to assume the adequacy of the TAPS Owners' program for assuring adequate maintenance on TAPS;
- ➔ the citation of the RCM process as a basis for finding the TAPS Owners to be in compliance with certain Grant and Lease requirements;
- ➔ failure of the government monitors to devote sufficient attention to risks associated with human factors and shortcomings in operating procedures;
- ➔ Alyeska's failure to identify and abate conditions adverse to safe operations in a timely manner;
- ➔ failure of the government documents to deal with demonstrated inadequacies in the required TAPS mainline oil spill prevention and response program,
- ➔ failure of the government documents to deal adequately with Alyeska's efforts to deal with the risks associated with climate change;
- ➔ failure of the government documents to deal adequately with Alyeska's efforts to deal with the risks associated with seismic events;
- ➔ failure to provide details as to how (or whether) Alyeska has dealt with the problem of restarting TAPS after an extended winter shutdown – a design requirement that Joint Pipeline Office (JPO) identified in 2001 as the most significant operational compliance issue on TAPS.

In addition to these concerns, the Alaska Forum also submitted for the record its June 2002 report, *The Emperor's New Hose: How Big Oil Gets Rich Gambling with Alaska's Environment*, by Richard A. Fineberg. That report and our previous testimony contain strong evidence to support each of the points to which the Alaska Forum has previously testified. The testimony

[1] This summary is not intended to replace testimony submitted previously by representatives of the Alaska Forum. The points and concerns raised by the Alaska Forum and requiring formal response can be found in the oral and written testimony submitted for the record at each of the seven public hearings. Since those materials, *The Emperor's New Hose* and our comments during scoping last September all contain documentary references for the concerns presented, that documentation is not repeated in this commentary.

we have presented during these hearings provides both documentation for the concerns of that have been raised during the public review process. This final comment provides perspective.

The Alaska Forum (and most of those advocating modifications to the Grant and Lease) do not seek to terminate TAPS operations. The guiding purpose of the Alaska Forum's efforts in the Grant and Lease renewal process has been to institute improvements in the governance of TAPS that will protect Alaska's land and watersheds – and continued, uninterrupted delivery of this vital commodity -- during the proposed period of renewal.

A proposed improvement recommended by many – but given little consideration in the renewal process – is the establishment of a citizens' oversight group (COG) for the pipeline similar to the organizations established by Congress in 1990 for Prince William Sound and Cook Inlet. Noting that the Bureau of Land Management already has a mechanism for citizen oversight of all lands under its management, the federal Draft Environmental Impact Statement (DEIS) dismissed this suggestion. The state's Proposed Determination simply ignored the proposal. In response, we renew our request for consideration of this proposal and make the following points:

- a multi-purpose, statewide group dealing with diverse lands issues is clearly different from a technical advisory body whose focus would be limited to the pipeline, the TAPS corridor and potentially affected watersheds;
- the existence of other institutional mechanisms does not preclude the establishment of a COG by contractual agreement;
- the failure of government monitors to apprehend and address citizen concerns about the operation, maintenance and management of TAPS in a timely manner demonstrates the need for a formal entity that would improve the interaction between government and concerned citizens;
- during this hearing process, the need for such an entity was recognized by representative governments at both ends of the pipeline; and
- the efficacy of citizen oversight groups has been demonstrated by the experience in Cook Inlet and Prince William Sound. In view of the positive impacts these groups have exercised on environmental issues in their respective regions, we believe this issue falls clearly within the scope of the DEIS and Proposed Determination.

61-2

In order to focus on the environmental consequences of TAPS operations, maintenance and management in the limited time available for comment, during this hearing process the Alaska Forum decided not to develop detailed materials on TAPS economics or North Slope operations, which are served by the pipeline and dominated by the three major owners of TAPS. However, during the scoping process last fall the Alaska Forum submitted several economic reports dealing with the profitability of North Slope operations and the effects of TAPS on competition, a factor that is generally recognized as crucial to continued North Slope development. Additionally, our June 2002 report quantifies both the high of return that TAPS delivers to its owners and the separate – and equally extraordinary – windfall benefit the TAPS Owners have received through pre-collection of cash for the future dismantling of TAPS. The federal DEIS arbitrarily ignored these economic issues, considering only economic literature that excluded analysis of profitability, cash flow, competition and the windfall gains the TAPS Owners realize through the dismantling provision of the TAPS tariff (shipping charge). We question the logical and legal

bases for this approach, as well as the results. While we have noted, as a technical matter, apparent contradictions in the aggregate data on which the authors of the DEIS explicitly relied, in this wrap-up testimony we are concerned with three broader issues that flow from the selective approach to economics taken by the DEIS:

- Based on (1) investment in the existing infrastructure, (2) the marketing system served by that infrastructure and (3) analysis of North Slope profitability previously submitted by the Alaska Forum, we believe the COG – and the other measures we have proposed – may have net economic benefit because these measures tend to reduce the likelihood of a disastrous shutdown of oil flow. Moreover, we have seen no analyses to indicate that environmental mitigation measures we have proposed are not viable economically.
- In Anchorage and again at Fairbanks, some persons suggested that a COG for TAPS might jeopardize the competitiveness of North Slope oil on the global market. Many of those individuals noted present or past or affiliation with firms employed on TAPS, on the North Slope or in support services; their testimony was typically unsupported by data such as that previously submitted by the Alaska Forum. As Walter Parker of the Alaska Forum Board later observed, the opposition to a citizens' oversight group by individuals who believe this modest proposal jeopardizes their livelihoods precisely demonstrates the Alaska Forum's concern that the perceived (but unquantified and possibly misperceived) need to hold down costs tends to threaten safe and environmentally sound operations.
- The high rate of return on TAPS investment and the demonstrated windfall benefit to the TAPS Owners from the collection of approximately $1.6 billion for the future dismantling of TAPS both have potential environmental consequences, as well as harmful effects on competition. The Alaska Forum finds the determination that these issues are beyond the scope of the DEIS incomprehensible and therefore requests explanation.

61-2 (Cont.)

The Alaska Forum has found agency efforts to redress various problems on TAPS to be insufficient. The rejection of public concerns about specific issues on TAPS by the agencies that are supposed to address those concerns is a subject that warrants further attention. As we request again that the renewal process consider these previously-documented issues in detail before a 30-year renewal for the TAPS right-of-way is authorized, we suggest a possible explanation for agency intransigence and the polarization between JPO and concerned citizens. Consider in this regard the alleged failure of the TAPS operators to abate in a timely manner the risks associated with recurrent pipeline restart problems after planned and unplanned shutdowns. The Alaska Forum provided reviewers with an information packet documenting restart problems with potentially significant consequences in each of the last seven years.[2] However, these concerns have been dismissed by state and federal monitors and were ignored by the documents released

[2] See: Documentary package on TAPS restart problems between 1995 and 2000, submitted as an attachment to Richard A. Fineberg, *Comments on Trans-Alaska Pipeline System Operations (Part II)*, submitted at Scoping Meeting for the TAPS Right of Way Renewal Application of the Owners of the Trans-Alaska Pipeline System (May 2001), Fairbanks, Alaska, October 10, 2001. (The issue is also documented in my testimony at Cordova, July 26 [pages 2 and 3, footnotes 3 through 7].)

in support of the proposed Grant and Lease renewal. Informally, JPO officials have told the Alaska Forum that TAPS restart procedures are safe and that each incident was an isolated event.[3] In other words, JPO believes that because it cannot identify a single causal mechanism, these events are unrelated. The Alaska Forum believes that because each event occurred during a restart, as indicated in the previously submitted document package, Alyeska has demonstrated its inability to manage restarts safely.

In assessing this difference of opinion, it may be useful to consider the lessons of the ill-fated *Challenger* launch in 1986. The space shuttle, carrying a crew of seven including its first civilian passenger, exploded 73 seconds after blast-off, killing all on board. The *Challenger* decision seriously damaged the credibility of the National Aeronautic and Space Administration (NASA) and resulted in a Presidential Commission to determine the cause of this tragedy. The final, fatal mistake was the decision to launching at temperatures far below that specified as safe for the critical joint between the solid rocket motor and its booster. The critical O-rings that comprise that joint failed during the launch. Moreover, engineers from Morton Thiokol, the rocket manufacturer, had specifically warned launch managers of the danger. Had an arrogant and amoral bureaucracy, intent on enhancing its reputation and ensuring congressional funding by meeting its schedule, ignored these technical concerns? After reviewing the event industrial sociologist Diane Vaughan came to a different but equally disturbing conclusion: She found there was no intentional managerial wrongdoing. Rather, she concluded, the disaster resulted from the failure of a complex organization to deal appropriately with an unprecedented and uncertain technology in an environment of scarcity and competition.[4]

What went wrong? The problem of charring and erosion of the critical O-ring seal had been clearly identified well in advance of the fatal launch. With no cold-weather launch experience, as early as 1982 the NASA engineers began to develop a set of makeshift guidelines designed to deal with the problem. With each successful launch, they became more confident about their complex compromise with safety.[5] In retrospect, physicist Richard Feynman, a member of the Presidential Commission, felt the warning flags should have been clear. The O-rings were not supposed to char and erode at all.[6] Six months before the fatal launch, an independent observer within NASA had concluded that the partial failure of the O-rings on previous launches immediately defined as "deviant and risky" a problem that people in the launch decision chain regarded as "normal and acceptable." But that warning flag was discounted, in part because the author was not an engineer.[7] An investigating group was formed to consider the problem; despite the concerns of the engineers within that group, the investigation languished, at least in part due to inadequate resources. Consequently, the issue was not resolved in a timely manner.[8]

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[3] Interview with Gary Reimer, Deputy Authorized Officer, BLM, at Anchorage, Aug. 14, 2002.

[4] Diane Vaughan, *The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA* (University of Chicago Press, 1996), pp. xi-xv.

[5] Vaughan, pp. 9, 395.

[6] Richard Feynman, *The Pleasure of Finding Things Out* (Perseus Publ., 1999), pp. 155-156.

[7] Vaughan, p. 417.

[8] Vaughan, pp. 450-455.

Several months later, as the weather in Florida approached freezing on the eve of the January 1986 launch, the unresolved problem became critical. At that point, all of the appropriate rules were followed. After an unusual pre-flight teleconference meeting failed to resolve all doubts, flight managers even extended their rules to allow the concerned engineers additional time to marshal their arguments.[9] By then it was too late. Operating within the accepted the norms of cost, scheduling and safety satisficing, the engineers were further handicapped by partial information. Moreover, they were attempting to communicate among themselves from three separate locations. In the short time available they were unable to present an argument that met the required standards of scientific excellence.[10] Only later was it discovered that the critical technical rule regarding temperature constraints had been misread, misinterpreted and misused for years.[11] In sum, the concerned engineers were unable to combat a mind-set that unintentionally discounted critical arguments while highlighting confirming information.[12] According to Vaughan, the engineers reluctantly acceded to the launch decision, contributing to a tragic mistake whose "origins were in routine and taken-for-granted aspects of organizational life that created a way of seeing that was simultaneously a way of not-seeing."[13] Reflecting further, Vaughan noted that some analysts believe that accidents are normal or inevitable in certain technological systems. The root of those accidents, she writes, may lie within the system, rather than its component parts.[14]

The failure of the *Challenger* team, despite the best intentions of its members, calls attention to the danger that any system designed to manage new technology may develop an inappropriate resistance to warning signals generated outside that system. This lesson may help explain the marked differences between the analysis of the restart issue by the JPO and that of the Alaska Forum, discussed and documented in statements in this forum, and in *The Emperor's New Hose*. The fact that potentially serious problems have occurred during TAPS restarts year after year suggests the existence of a condition adverse to safe operations – a problem that exists whether or not JPO has identified the warning signal.

The various issues identified in previous testimony in which the Alaska Forum has differed from government monitors suggest that three lessons from the history of the *Challenger* may be applicable to TAPS:

- engineering experts do not have an iron-clad grip on truth;
- a complex system may contain the seeds of its own downfall; and
- cost constraints may have unanticipated consequences for system safety.

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[9] Vaughan, pp. 2-6.

[10] Vaughan, pp. 396-399.

[11] Vaughan, p. 391.

[12] Vaughan, p. 354.

[13] Vaughan, p. 394

[14] Vaughan, p. 415.

The lessons of the *Challenger* appear to have particular relevance to the arbitrarily defined concepts of compliance and abatement employed by the TAPS monitors and relied upon by the DEIS and the documents supporting the Proposed Determination. As noted in previous testimony, when the records clearly indicate recurrent failures to abate hazards and conditions adverse to safe operations, we do not believe that the TAPS Owners are in compliance with the requirements of the Grant and Lease. Further, we believe this discrepancy is evident in the documentary record, as demonstrated by ongoing agency enforcement actions that have been taken and are underway precisely because identified compliance issues remain unresolved.[15]

At the broadest level, the history of the *Challenger* suggests the need for independent review of agency conclusions regarding the immediate and long-term safety of TAPS. The following questions, raised in previous testimony, are foremost among those that should be answered by an independent inquiry *before* the TAPS Grant and Lease are renewed:

- Has JPO demonstrated that the Reliability Centered Maintenance (RCM) can serve to identify and eliminate unanticipated problems caused by human error on TAPS?
- Has JPO demonstrated that RCM can function effectively when top managers seek budget reductions that may reduce the ability of field personnel to participate in the RCM process?

61-3

The discussion of recurrent problems at the Valdez Marine Terminal in *The Emperor's New Hose* provides strong indication that RCM may not function effectively to abate hazards associated with TAPS operations, maintenance and management.

In conclusion, we reiterate that the purpose of these questions is to underscore the importance of the specific issues discussed in the Alaska Forum's status report on TAPS, and in our previous testimony.

Sincerely,

Richard A. Fineberg, Consultant
Alaska Forum for Environmental Responsibility

Submitted on behalf of the Alaska Forum for Environmental Responsibility, the Alaska Center for the Environment and the Northern Alaska Environmental Center

[15] Although the purpose of this commentary is to provide perspective on issues we have already documented on one or more occasions, two examples from the Alaska Forum's previous testimony and reports are particularly noteworthy in this regard: Enforcement actions by the U.S. Department of Transportation and actions by the Alaska Department of Environmental Conservation to resolve the inadequacies in the TAPS mainline oil spill contingency plan that became evident during the response to the MP 400 bullet hole spill last October.

Responses for Document 00061

00061-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule, and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00061-002: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00061-003: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide the BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the grant and lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 ("Adaptive Nature of the Grant in Compliance Monitoring"), 4.1.1.3 ("Risk-based Compliance Monitoring"), 4.1.1.4 ("JPO Comprehensive Monitoring Program"), and 4.1.1.8 ("Coordinated Planning and Response to Abnormal Incidents") for more information on the role of adaptive management as a JPO business practice.

00062

Chugach Regional Resources Commission

August 20, 2002

Chenega Bay
Eyak
Nanwalek
Port Graham
Qutekcak Native Tribe
Tatitlek
Valdez Native Tribe

BLM TAPS Renewal Scoping
Argonne National Laboratory, EAD/099
9700 South Cass
Argonne, Illinois 60439

To Whom it May Concern:

The Chugach Regional Resources Commission (CRRC) is a Tribal nonprofit organization composed of the seven Tribes in the Chugach Region of Alaska (Chenega Bay, Tatitlek, Eyak, Port Graham, Nanwalek, Qutekcak, and Valdez Native Tribe). The CRRC was established to work with the Tribes in addressing issues of concern relating to the natural resources and environment in the traditional use areas of its member Tribes. In accordance with our mission statement, we respectfully submit the following comments regarding the Draft Environmental Impact Statement for the renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of Way.

The Chugach Regional Resources Commission supports renewal of the Trans-Alaska Pipeline System Right-of-Way, as long as the federal grant allows for safe and secure operation of the pipeline and transport of oil through the traditional waters of Prince William Sound and the Gulf of Alaska. 62-1

We must express our deep disappointment with the refusal of the Bureau of Land Management to extend the comment period by 45 days. Requests by Tribal Governments, as well as Native organizations and other sectors of the general public requested an extension to allow additional time to adequately review this four-volume document. These requests were summarily dismissed with little or no consideration of the trust relationship 62-2

4201 Tudor Centre, Suite 300, Anchorage, Alaska 99508, 907 / 562-6647, FAX 907 / 562-4939
A Tribal Organization Focusing on Natural Resource Issues Affecting the Chugach Region of Alaska

the federal government has with the Tribes or of the Tribal policy the Department of Interior is mandated to operate under. It is our sincere hope that our comments are not treated in a similar manner and adequate time is spent seriously considering the comments submitted by the Tribal Governments and Native organizations affected by the renewal of the right-of-way.

62-2 (cont.)

Throughout the document, it is very clear that inadequate time was spent conducting research by Argonne Labs on subsistence in Alaska, and what little information was gathered during their site visits is conspicuously absent in the DEIS. Although traditional ecological knowledge is discussed and recognized as a tool in research in the DEIS, this information gathered as a result of the DEIS is treated as anecdotal information and inconclusive. While the authors appear to recognize the value of TEK by stating that "observations of life-long subsistence hunters and fishermen regarding declining harvests and increasing difficulty of subsistence activities are very compelling" this information is summarily dismissed in the same sentence. Given the number of individuals who claim that loss of subsistence opportunities and resources are directly related to the TAPS should be given more credence and more serious consideration in the decision-making process.

62-3

The DEIS states that available data do not enable the researchers to make assessments on declining/increasing resource populations, change in subsistence locations, increased competition for resources, disruptions of subsistence activities, reduced/increased access to resources, or how these factors are directly or indirectly linked to the TAPS. If the researchers had taken advantage of the TEK, this information would have been available. In addition, much of the available technical data used by the researchers is outdated and unreliable. Many of the Tribal Governments along the TAPS corridor have natural resource programs with reliable harvest and population data, as well as other valuable information (TEK) that would show how the subsistence lifestyle has been impacted by the TAPS. It doesn't appear that there was any effort made to contact these Tribal programs for this information. A literature search on Alaska Department of Fish and Game

62-4

reports regarding subsistence only scratches the surface of the information that is available on this subject. More research should be done on the subsistence impacts, and this research should be done through contracts with Tribal Governments and/or Tribal organizations that have established natural resource programs. This should have been considered when formulating the DEIS. Funding should be provided to these entities to provide continuing research and data on subsistence resources, impacts, and issues throughout the operation of the TAPS.

62-4 (cont.)

We strongly disagree that "potential impacts on subsistence due to accidents such as oil spills, would not be part of normal operations under the proposed action" and "subsistence possibly has experienced substantial negative impacts . . . these impacts are not clearly associated with the TAPS to the exclusion of other potential causes." The Exxon Valdez Oil Spill was directly related to the operation of the TAPS and definitely has substantial negative long term impacts on subsistence. To not recognize the impacts of this technological disaster is a travesty and an insult to the residents, both Native and non-Native, still living with the negative effects of the oil spill on a daily basis. The treatment of oil spills in the DEIS as an impact separate from the "routine operations" of the TAPS is misleading and should be changed. The Tribes of the Chugach Region experienced first hand the oil spill and take exception to the statements in the DEIS, like "the most significant environmental impacts associated with the TAPS already occurred when the pipeline was constructed" and the "transit of the tankers through Prince William Sound under normal operations has also not resulted in any observed impacts on physical marine resources." The BLM must give proper recognition to the importance of the oil spill and the impact it had on the people and resources of the Chugach Region.

62-5

The DEIS states that the transportation of oil through Prince William Sound from the Valdez Marine Terminal is not a component of TAPS and that this is a cumulative impact and not a direct effect of the TAPS operation. The DEIS must recognize that the Exxon Valdez Oil Spill was a direct effect of the TAPS operation and should seriously consider the full impact of the TAPS, including the fact that the oil pipeline

62-6

transportation corridor extends from the North Slope all the way through the Gulf of Alaska. It is irresponsible for the BLM to ignore the fact that the oil is transported through the traditional use areas of Alaska Natives once it leaves the Valdez Marine Terminal when considering the renewal of the right-of-way. 62-6 (cont.)

The Tribal Governments, ANCSA regional and village corporations, and regional Native nonprofit organizations worked together to develop a resolution signed by all parties outlining issues that should be addressed when considering the renewal of the TAPS. The key issues included:

- Recognizing that the transportation corridor of the pipeline extends beyond the oil pipeline terminal in the Port of Valdez through Prince William Sound, to the 200 mile limit of the Gulf of Alaska
- The establishment of an endowment to assist the Tribes in being more meaningfully involved in the operation and oversight of the TAPS; and
- Satisfaction of all claims resulting from the Exxon Valdez Oil Spill, holding the oil industry accountable for promises made in the original right-of-way agreement. 62-7

A copy of this resolution as well as public testimony was provided to BLM during the scoping process. None of these issues were addressed in the DEIS and feel that a response is warranted. In addition, the Inter-Tribal Oil and Gas Coalition (of which many of the Chugach Tribes are members) submitted testimony and a video outlining the issues of the Tribes located along the pipeline transportation corridor, and none of these issues were addressed in the DEIS. Again, given the fact that the BLM should be abiding by its Tribal policy and Presidential Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, these issues should be given some attention in the DEIS.

We take exception to the statement made in the DEIS that "for the Chugach Alutiiq, a sociocultural system much changed through considerable interaction with non-Natives, relatively few impacts are anticipated under 62-8

the proposed action beyond continued access to cash . . ." There is a very real concern in the Chugach Region of another oil spill. The natural resources, upon which the Alaska Natives depend, are keys to the maintenance of traditional ties within and beyond the community. Any disruption of the subsistence resource harvest will have far reaching and long term effects in the Chugach Region. The Exxon Valdez Oil Spill impacted social relations, traditional subsistence activities, as well as the mental and physical health of the communities and their members, and should not be ignored in the DEIS.

62-8 (cont.)

Finally, under Presidential Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, we are respectfully requesting input and involvement in the development of the new federal right-of-way grant, once the right-of-way is approved. Even if there will be no changes to the existing grant, the Tribes of the Chugach Region should be consulted and provide input into this process. This Executive Order states that federal agencies have a fiduciary and trust obligation to "... establish regular and meaningful consultation and coordination with tribal officials in the development of federal policies that have tribal implications." We believe the reauthorization of the federal grant of right-of-way has tribal implications.

62-9

Thank you for the opportunity to comment on the DEIS. If you have any questions or are interested in working with us to redraft the section on subsistence, please feel free to contact us at 907/562-6647.

Respectfully submitted,

Patty Brown-Schwalenberg
Executive Director

Responses for Document 00062

00062-001: Thank you for your comment.

00062-002: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00062-003: The EIS contains extensive information regarding the experience of Native Alaskans, including traditional ecological knowledge. Much of the latter is provided in Section 3.24.2. Those data are accorded the same level of importance as other types of what is deemed reliable data (e.g., statistical data collected by government agencies). There is no intent to dismiss the validity of traditional ecological knowledge, but the EIS does acknowledge possible complications in using certain types of information. In the case of traditional ecological knowledge, there is a concern that the complexities of causality of subsistence impacts could be extremely difficult to assign with traditional ecological knowledge.

00062-004: The FEIS considered traditional ecological knowledge available to its preparers. In addition to documented data, the BLM attempted to obtain such knowledge from Alaska Natives, both through meetings with Tribal and other Alaska Native groups and through written requests to these groups (see Table 5.3-1). Certified letters mailed in early April 2002 inviting the 21 directly affected Tribes to provide additional traditional ecological knowledge to date have received no response. Additional information relevant to subsistence has been added to the FEIS based on comments received on the DEIS.

The available data are adequate for purposes of evaluating impacts of the proposed action and all alternatives considered in this FEIS. The acquisition of additional subsistence data, and how these data would be collected, are beyond the scope of this FEIS.

00062-005: Spills, notably large spills such as the Exxon Valdez Oil Spill, are not a part of normal TAPS operation, but occur when mistakes happen. The EIS considers potential spills under a 30-year right-of-way renewal, including their probability of occurrence and likely impacts, in Section 4.4. The issue is by no means avoided or discounted, but is dealt with in what preparers of the EIS considered to be the most appropriate locations.

The second passage quoted in the comment refers to impacts of normal operations (Section 4.3.20), not spills. The EIS indeed does recognize the impacts of the Exxon Valdez Oil Spill, and discusses this event in a number of different places in the document (e.g., Sections 4.7.8.1 and 4.7.8.2, both of which contain expanded discussions of that event).

00062-006: The proposed action addressed in this EIS is the renewal of the Federal Grant for the TAPS right-of-way, which extends from Prudhoe Bay to the Valdez Marine Terminal. The Federal Grant does not include transportation of oil from the Valdez Marine Terminal through PWS and the Gulf of Alaska. For this reason, Sections 4.1-4.6 of the EIS discuss the consequences of Grant Renewal related to the pipeline right-of-way. Oil production on the North Slope and transportation of oil from the Valdez Marine Terminal to market are other actions, closely related to renewal of the TAPS Federal Grant. Thus, they are included in the cumulative effects analysis, Section 4.7: Cumulative Impacts, as required by NEPA regulations. Section 4.7 addresses spill scenarios and impacts of spills during the renewal period. Historical impacts from oil spills are also included.

Maps 3.24-1, D-21, and D-24 show Alaska Native subsistence harvest areas for Chenega Bay and Tatitlek (no such map data were available for Cordova). Sections 3.24.2.4.1, 3.24.2.4.2, 3.24.2.4.5, D.2.3.4.1, D.2.3.4.2, and D.2.3.4.5 discuss subsistence activities for Chenega Bay, Cordova, and Tatitlek. All potential impacts of tanker traffic through Prince William Sound consider these subsistence areas, as noted in Section 4.7.8.1 (again, Cordova is not mentioned because of an absence of data on the precise location of its subsistence area).

It is important to understand that the issue of potential impacts of transporting oil by tanker through Prince William Sound, and traditional use areas of Alaska Natives, are not avoided by the EIS. It is merely considered under cumulative impacts as opposed to impacts of the proposed action. Both categories of impacts will be considered by the BLM prior to making its decision regarding right-of-way renewal.

00062-007: The Bureau of Land Management authority under TAPPA and the Federal Grant only extend to the delivery of oil to the tankers at the Valdez Marine Terminal. The U.S. Coast Guard and the U.S. Department of Transportation have authority to regulate tanker traffic in Prince William Sound and the coastal waters of the United States.

The BLM does not have the authority to establish an endowment fund that specifically funds tribal government involvement in the oversight of TAPS.

The settlement claim for punitive damages related to the Exxon Valdez oil spill in Prince William Sound is currently in court system and is outside the scope of the environmental impact statement process for the renewal of the federal grant of right-of-way. Federal decisions on the renewal of the grant of right-of-way will not consider the issue of damage claims related to the Exxon Valdez oil spill.

The Bureau of Land Management has worked closely with the affected tribal governments during the EIS process, beginning well before the onset of the EIS process (in April 2001; see Sections 4.3.25 and 5.2). Many of the issues cited by Alaska Natives have been considered in the DEIS, as they relate specifically to environmental impacts associated with the TAPS. Other issues which do not specifically relate to these environmental impacts are not considered in the EIS, but can continue to be considered under government-to-government consultation.

00062-008: The concerns voiced by the comment are valid and were not ignored in the EIS. However, they tend to be addressed in other portions of the document than the one referred to in the comment. A discussion of sociocultural impacts associated with spills (see the revised version of Section 4.4.4.15), as well as subsistence impacts and impacts on other issue areas (see other subsections in Section 4.4.4), appear in the portion of the EIS explicitly focused on spills.

Sociocultural impacts occurring due to the Exxon Valdez oil spill, in turn, are discussed under cumulative impacts in the revised version of Section 4.7.8.2, with closely related subsistence impacts due to that spill located in the revised version of Section 4.7.8.1.

00062-009: The BLM conducted extensive government-to-government consultations with directly affected villages and tribes that is clearly documented in Table 5.3-1 of the EIS and summarized in Section 5.3.

AHTNA

INCORPORATED

August 20, 2002

BLM/TAPS Renewal Scoping
Argonne National Laboratory, EAD/900
9700 South Cass
Argonne, IL 60439

Dear Sirs:

This letter accompanies seven (7) pages of comments and statements for editing the DEIS as it relates to the TAPS ROW Renewal. A committee composed of Tribal members from each of the merged Villages in Ahtna contributed to the review and comments. We would like each of these addressed and referenced or answered. This committee and our Corporation have reviewed and concur with the comments and statements made by the Alaska Federation of Natives (AFN). We feel very strongly that the success of this renewal is at stake with the accuracy of this document. Please contact Michelle Bayless with any further questions or for clarification. Thank you in advance for your attention to the details.

Respectfully submitted on behalf of:

Native Village of Cantwell
Cheesh'Na Tribal Council
Chitina Village Council
Native Village of Kluti-Kaah
Gakona Village Council
Gulkana Village Council
Mentasta Traditional Council
Tazlina Village Council

P.O. Box 649 • Glennallen, Alaska 99588 • Mile 115 Richardson Hwy.
Phone: (907) 822-3476 • Fax: (907) 822-3495

AHTNA

INCORPORATED

August 20, 2002

BLM/TAPS Renewal Scoping
Argonne National Laboratory, EAD/900
9700 South Cass
Argonne, IL 60439

To Whom It May Concern:

The Ahtna Village ROW Committee submits these comments on behalf of the eight (8) Federally Recognized Tribes within the Ahtna Region. These are the sections we have identified to date. There are some comments that relate specifically to an inadequacy in a specific section in the DEIS that follow after general topics.

Census

It has come to our attention that the census figures from 2000 are to be implemented into the final DEIS, without affording Tribes the opportunity to comment on a vital part of the DEIS. We need to be able to review and comment on any changes to the numbers listed in the DEIS released July 8 2002, regardless of deadlines. If it is new information to be implemented we deserve a comment period. 63-1

Subsistence

1. Section 4.7.4.9.3 needs a breakdown of the number of the hunters, sports fishermen, etc. 63-2
2. Future research studies need to be done with the Tribes used as reference. 63-3
3. There should be continuous subsistence data collection and analysis through out the life of the Right Of Way Agreement. Currently decisions affecting subsistence are based on 20 yr old data. 63-4
4. New subsistence research should have been contracted with the Tribes in Alaska to prepare a subsistence report for the DEIS. 63-5

P.O. Box 649 • Glennallen, Alaska 99588 • Mile 115 Richardson Hwy.
Phone: (907) 822-3476 • Fax: (907) 822-3495

5. In 4.3.3 Seismicity, it states that the "pipeline was not designed to withstand a landslide". There must be immediate measures in place to respond to a catastrophe of this nature. Trained and ready emergency response teams must be in place for natural disasters and manmade disasters. 63-6
6. Alyeska Pipeline Service Company needs to have a biologist or a biology department to begin baseline subsistence studies as they are out of compliance with Section 30. Alyeska should fund these studies and they should encompass the entire ecosystem survey up river, not just the Copper River and down. 63-7
7. Section: Figure 3.24-6 No Caribou referenced. 63-8
8. Elders should be interviewed, and those interviews credited as accurate oral reports for historical use and subsistence areas. 63-9
9. Low income facts are very inaccurate, affecting the subsistence counts. 63-10
10. Subsistence Impacts of an oil spill in the Gulkana, Tazlina, Klutina and Tonsina, tributaries of the Copper River, would be devastating to the freshwater fish, marine fish, fresh water, marine water, and plants in the Copper River and Prince William Sound. Trained and ready emergency response teams need to be in place for such an emergency as well as other man-made and natural disasters. 63-11
11. Data collection should be done in cooperation with the Tribes. 63-12
12. Subsistence not adequately addressed because studies dated 1987 to 1996, done by AK Fish and Game, with out discrimination of Natives and Non Natives. This is crucial to demonstrating a way of life of the Ahtna people affected by TAPS. 63-13
13. The impact of the pipeline era (1970s) on the subsistence users of the Copper Basin have eroded the subsistence lifestyle of the people; due to the impact of the increased use of the land and resources, since the 1970s by people either moving to the area – due to pipeline related work; and the increased use of lands and resources by urban areas, which is due in part to the increased overall population of the State since the 1970s or pipeline era. 63-14
14. The Executive summary states that loss of revenue is the most significant impact of a spill E.S. 6.1.2. In the Copper River Basin the most significant impact would be *subsistence.* 63-15
15. There has never been a Traditional Ecological Knowledge Research study in the Copper Basin either before or since the pipeline has been in operation. The Ahtna Elders have vital information about the changes in the environment, fish and wildlife, birds and plants that are known and should be documented because it is the most impacted area. The report states that there have been Traditional Ecological Knowledge Research studies done elsewhere in Alaska. 63-16
16. The contaminants caused by the Oil Spill in 1989 have never been fully researched and studied to reveal what damage has been done to the fish, plants, birds, and wildlife, etc. The food web and food chain from Prince William Sound up to the headwaters of the Copper River have 63-17

been affected by the oil spill. Research study needs to be done on the contaminants of the effects of the oil spill on fish, birds, wildlife and plants, etc. In Section 4.4-98, it states that " there are several gaps in the toxicological database that result in uncertainties in the assessment results" and that only "15 PAHs were included in the quantification of included on 15 PAHs, although crude oil contains 100 different PAHs," which implies that research studies on toxic level of PAHs were not fully conducted. Funds for research need to be set aside for research studies if a man made or natural disasters occur. 63-17 (cont.)

17. In Section 3.24 it essentially states, "That available data of impacts to subsistence are inadequate". Research studies of impacts caused by the pipeline, related activities of pipeline maintenance, and increased use of land and resources need to researched and studies need to be conducted with the tribes on impacts of the pipeline on subsistence use. 63-18
18. The renewal should be 15 years or less. The oil may not last for the next 30 years. The pipeline has been in operation since June 1977. It needs to be maintained and repaired for leaks, cracks, etc. The impact to subsistence would less, if less than 30-year renewal lease would be implemented. 63-19
19. The Copper Basin communities need to be compensated, if a man-made or natural disaster causes disruption to their ability to have their subsistence needs met through monetary payment. The monetary settlement should be compensated at a comparable value to the statewide subsistence value as stated in the Alaska Dept. of Fish & Game report. 63-20
20. Access to Subsistence Resources should be allowed to the Ahtna Natives. The pipeline crosses some fishing and hunting areas that are not accessible to the Ahtna People. Cooperative Agreement should be made with the tribes to allow for access across the pipeline corridor. 63-21

Representation

1. There should be a Tribal representative at JPO, because Ahtna people own 55 miles of the pipeline right of way. JPO does not understand subsistence and cultural values and JPO makes decisions that affect subsistence without consulting or understanding them. 63-22
2. The JPO agencies would continue to use risk-based approach to overseeing applications, whereas the familiarity of culture, historic uses, subsistence patterns and changes, and other terrain knowledge needs to be inserted in the risk-based method of thinking to estimate the true impacts of possible events. For example, an oil spill that reached the Copper River impacts the spawning habits of salmon at Batzulnetas on Tanada Creek, which is the main source of subsistence fishing for Mentasta residents. 63-23
3. There is still a need for Tribal participation on the Joint Pipeline Office and a "Tribal" draft Environmental Impact Statement should be considered. 63-24

Since the Native land interests are at risk and need protection. Native oversight should be required. 63-24 (cont.)

Oil Spill Contingency

1. "Oil spill response planning is a separate process" is quoted from the executive summary. Oil spill response should be a part of the EIS and the grant. The ability to respond should be required before the grant is renewed. 63-25
2. Oil spill plan should be a part of the ROW agreement, local response teams trained and tested. 63-26
3. Containment sites have no land access as it is right now. There would be no way of getting to an oil spill with the type of equipment needed for containment. 63-27
4. No adequately tested oil spill contingency plan. Not ever physically tested successfully. They have never been able to successfully boom any of the four major rivers. 63-28
5. No equipment for oil spill on site. It would take hours to get to it up here. Weather would impede this also, not planned for and not noted. For your information, it would take approximately 57 minutes for oil from the Tazlina suspension bridge to get to the Copper River. What measures are in place for this kind of timeline? They need to be addressed in the DEIS. 63-29
6. As the pipeline ages, there should be more time working on oil spill contingencies and practices not less. 63-30
7. Not adequately trained local personnel and not enough of them to operate any plan to date. 63-31
8. There needs to be locally equipped and trained Certified Spill Response Teams. The teams need to be state and federally certified. APSC needs to be state and federally certified- APSC needs to provide the training and funding for this certification. 63-32
9. Supplies and equipment need to be placed and stationed at all sensitive sites, all moving bodies of water should be considered sensitive sights. 63-33

Authority

1. The BLM did not have the authority to convey lands, nor do they have the authority to renew convaince of lands, or continue to administer it. 63-34

Native Hire

1. The 20 percent hiring goal should be based on payroll not hours. 63-35
2. The average Native hire for the last 30 years needs to be brought up to 20% APSC is out of compliance with sections 29 and 30. 63-36

Little or no return of funds to the Copper Valley for crossing and restricting lands

1. Because the Copper River Basin is in the unorganized borough the residents do not collect the taxes on TAPS. The state collects the taxes, 63-37

however, the funds are not returned to the Copper River Basin. Except through limited school funding, and a small detachment of State Troopers. 63-37 (cont.)

2. There should be consideration for reimbursing the expenses incurred in defense of subsistence and land rights during the establishment and continued use of right-of-way, including legal and consulting expenses and issues associated with trespass enforcement. 63-38
3. Mentorship and job shadow programs through contractors and TAPS need to be implemented. We have been told there is no money for it, and this needs to be addressed as part of the Socio Economic section. 63-39
4. Only petroleum based job training or scholarships are available, and there is no provision for less than 12 credit hour students. 63-40
5. The DEIS discusses State and Local expenditures (3, 23.3.5 3/4) but fails to consider the fact that the Glennallen area does not tax the pipeline and there is an impact in the level monies available for community programs and education spending in its surrounding communities. The level of expenditures per capita will only decrease and the Tribal Governments will again, unfairly assume many responsibilities. 63-41

Little time to respond

1. The release of the DEIS coincided with the busiest time of the year for Natives in this area, as we are putting up necessary foods and culturally preserving and preparing them. This makes it extremely difficult to gather individuals from the different Villages to review. This is something ignored by all responsible individuals at the Department of Interior. Several letters were sent, emails and comments made with this point emphasis 63-42

Environmental justice and the lack of consultation

1. Section 4.3.9.7 Environmental Justice: The entire Argonne project should have been contracted out to or at least consulted with Native Corporations and Villages on the selection of a firm to develop the DEIS. This is a major federal action that affects Tribes and executive order demands Government to Government consultation. There was no Government to Government relationship maintained here. 63-43

Access

1. Tribes and Tribal members must apply to a non local person (Pete Naggel) in Anchorage to get a letter of non objection for access to Village and corporate lands including the Native allotments. 63-44
2. There is a false sense of security, how they lock up some areas but others are left completely unprotected, except for a weekly helicopter flight. 63-45
3. Residents can't access their lands. They are often locked in or out of their property by security. 63-46
4. More funding needed for surveillance in heavy areas, to control unauthorized trespass during hunting season and in heavily impacted areas like the Ahtna Region. 63-47

5. There is a lack of active security. Areas where the Electronic control to the RGV's need attention so that it functions like it is supposed to. 63-48
6. There is not access to all roads in the winter, including access to the containment areas. This would make it very difficult to respond in an emergency, which means, until there is adequate clearing of roads for 4x4 accesses there needs to be a helicopter on standby to shut off a valve. Helicopters may not be foolproof though because they can't fly in extreme weather. 63-49

Special Section Comments

1. Section 3.3.1.8 and .9 need to list all of the special projects that they had to fund to keep the safety and security standards of Alyeska Pipeline Service Company to date. 63-50
2. Section 3.7.1.5 summarizes the rivers in this region too much. These rivers are very different, from the silt content, glacier waters, temperatures, amounts of drop from the surface to bottom. These rivers need to be separate entities, not tied together on paper or in practice. All of the flow rates need to be addressed as well. 63-51
3. Section 3.18.1.3 there is no facts on Spruce Bark Beetle infestation, the general forest health since 1970, there is no ties to forest fire protection and beetle infestation. 63-52
4. Section 4-4 of the Executive Order 12989 identifies subsistence issues as a particular concern. Other effects discussed by EPA guidelines in particular impact areas including ecological, human health and socioeconomic analysis. Some impacts we face as tribal governments include being tasked with (and under-funded for) the disproportionately high and negative impacts to our lands and their ecosystems, not to mention the socio-cultural and socio-economic impacts that accompany. 63-53
5. Executive Order 12898 (59 FR 7629) directs agencies to include environmental justice considerations as part of their missions, addressing the disproportionately high and adverse human health or environmental effects of their actions, programs or policies on minority and low-income populations. . Many communities should have received economic benefits that include improved education facilities, economic development, socio-cultural awareness, etc. But with decline in Federal and State funding, the quest for improvement becomes increasingly difficult as we compete for the limited and declining resources. Tribes, with fewer resources, bear a disproportionate share of negative environmental consequences. 63-54
6. Section 3.24 discusses subsistence as "difficult to estimate relative impact of subsistence harvests because consumption and exchange of subsistence products do not occur in the marketplace". This shows the need for further study. 63-55
7. Subsistence is discussed in Section 3.24 in figures, techniques, reasons and a brief discussion of harvest patterns, with old and inaccurate data. It is apparent that the study still does not grasp the full impact of subsistence. A history has been provided, but there does not seem to be 63-56

an understanding of the true impact of a spill, for example, would have an impact on more than one river. A failure to protect our Tribal member's historical subsistence use and livelihood in this area and along the entire Copper River puts at risk a catastrophe that cannot be measured in dollars. 63-56 (cont.)

8. BLM is authorized to fund any study it finds necessary in the course of its monitoring of TAPS and can oblige TAPS owners to fund studies, so a study on Tribal impacts on Alaska's Native population. 63-57
9. The census figures used in the EIS were from 1990, and reflect "minority" Natives and not any other ethnic or minority group, an updated census needs to be analyzed for Native benefit. The 20% Native hire figure by 2004 has not been met, and an adjustment for education and training was not the original intent of the figure agreed upon. Much has changed since the 1990 census figures that were used and old figures only present gross inaccuracies. 63-58
10. The DEIS did not address trespass concerns and land use issues in and around Native lands. 63-59
11. The DEIS suggests that socio-cultural impacts would be negative but small, but the continued fragmentation of rural Alaska Natives and non-Native socio-cultural conditions is important and needs further study 63-60
12. Since the DEIS was not received by the tribes in a timely manner, we can only continue to encourage the agencies to provide a "sufficient opportunity for productive participation". We expect to submit further comments as this lengthy document is reviewed further regardless of existing deadlines. 63-61
13. No base line studies ever taken before Pipeline influence for Subsistence or socio-economic facts. 63-62
14. There has been 27 court cases over land use, access, bison hunts and this has never been supplemented or been a reimbursed cost. This is a vast expenditure, taking a large toll on the Ahtna Villages and Corporation. 63-63
15. Congress funds BLM for all TAPS issues. BLM can charge back anything related to pipeline issues. BLM can fund any legitimate study related to the Pipeline. These studies should be considered requested with the filing of these statements. 63-64

This concludes comments by the Right of Way Committee of Ahtna Incorporated and it's corresponding Villages.

Responses for Document 00063

00063-001: The new census data have been incorporated to define the distribution of low-income populations by census block-group, as part of the environmental justice analysis. However, the use of these data do not change the environmental justice conclusions. As discussed in Sections 4.3.25, 4.4.4.19, 4.5.2.25, and 4.7.8.7, for most alternatives considered in the EIS, and all but the most unlikely spill scenarios, high and adverse impacts (the preconditions for environmental justice impacts) are not anticipated. For the No Action alternative, high and adverse economic impacts still would be expected in the form of reduced state and local (where appropriate) tax revenues and consequent reductions in services.

00063-002: The numbers of hunting, fishing, and trapping licenses sold has been added to Section 4.7.4.9.3.

00063-003: The DEIS sections on subsistence received many critical public comments and, as a result, have received substantial revision. A small number of additional sources were identified, including the map of Cordova subsistence areas, and North Slope studies of impacts on subsistence economies from oil development. Previous sources were considered more closely, as when time-series data were derived from the ADF&G Division of Subsistence studies, and harvest permit data were disaggregated to distinguish patterns of rural and nonrural residents. The contribution of Tribal members in existing research and the value of Tribal partners as co-investigators in future subsistence research are acknowledged. However, with additional analysis of existing data, the EIS was able to draw reasonable conclusions about impacts on subsistence.

00063-004: As the comment observes, many of the baseline community studies reviewed for the EIS date to the 1980s. However, more recent community study data is available for many communities, particularly on the North Slope and those affected by the Exxon Valdez oil spill (See Table D-1). For all affected communities, harvest ticket and subsistence salmon harvest data are also collected on a routine annual basis, and these data have been examined for trends.

With additional analysis of this data, the EIS draws reasonable conclusions, on the basis of existing information.

00063-005: The revised version of Section 3.24 of the FEIS discusses a variety of subsistence data, including community harvest data, approximated subsistence harvests of selected game by geographic area, and information on resource populations (see also Sections 3.19, 3.20, 3.21, and 3.22). Sections 4.3.20 and 4.7.8.1 refer to studies that have focused on impacts related to the oil industry on subsistence, thus providing an interpretation of key situational data on subsistence. The available data are adequate for purposes of evaluating impacts of the proposed action and all alternatives considered in this EIS. The acquisition of additional subsistence data, and how these data would be collected, are beyond the scope of this EIS.

00063-006: As part of the oil spill planning process, risks of pipeline spills are analyzed line wide. Factors considered in the analysis include vulnerability of TAPS to landslides and seismic events. Many of the elements suggested in the comment are required by Alaska regulations.

Should a leak occur, there are several mitigating measures in place to limit the environmental damage that may result. Based on US Department of Transportation regulations and the federal and state right of way authorizations, mainline valves are located near each major river crossing to limit the amount of oil released from a pipeline leak. All potential spill volumes are listed in the Oil Discharge Prevention and Contingency Plan.

The TAPS Pipeline Oil Discharge Prevention and Contingency Plan (APSC 2001g—see Section 3.30 for reference) provides for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline. See Section 4.1.4.1 for an expanded discussion of the pipeline spill contingency plan.

00063-007: Concern about the adequacy of subsistence data led to an expanded analysis of existing data in the FEIS. As a result, conclusions about impacts of renewing the TAPS right-of-way have been drawn on the basis of existing information.

Detailed procedures for claims under Section 30 are beyond the scope of the EIS.

The reader is also referred to Section 2.5.

00063-008: This response assumes that the comment means Figure 3.24-2 of the DEIS, as Figure 3.24-6 does not exist in the DEIS. Figure 3.24-2 in the DEIS did not show caribou harvest as at the time of DEIS preparation, caribou data were maintained by herd, as opposed to by geographic unit where harvested (as discussed in the DEIS). For the FEIS, data on caribou harvest by geographic unit became available and ar shown in Figure 3.24-29 (where an approximated distinction between sport harvest and subsistence harvest also is shown).

00063-009: The revised version of Section 3.24 of the FEIS discusses a variety of subsistence data, including community harvest data, approximated subsistence harvests of selected game by geographic area, information on resource populations (see also Sections 3.19, 3.20, 3.21, and 3.22), and traditional ecological knowledge. Sections 4.3.20 and 4.7.8.1 refer to studies that have focused on impacts related to the oil industry on subsistence, thus providing an interpretation of key situational data on subsistence. The available data are adequate for purposes of evaluating impacts of the proposed action and all alternatives considered in this EIS. The acquisition of additional subsistence data, and how these data would be collected, are beyond the scope of this EIS.

00063-010: The EIS defines subsistence based on rural residence, which is consistent with current federal guidelines for Alaska. Subsistence (including its analysis) is not contingent on low-income determinations. Low-income data for areas (census block groups) near the TAPS are those from the 1990 census, as data for these geographic units had not been released for the 2000 census when the DEIS was prepared. As noted in Section 3.29, low-income data have been updated to the 2000 data for the final EIS.

00063-011: APSC's oil spill response capabilities and plans for the TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in APSC's "TAPS Oil Discharge Prevention and Contingency Plan" for the pipeline and in "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" for the Valdez Marine Terminal. The plans are available to the public at various libraries in several major cities in Alaska. Oil spill prevention and response capabilities and related activities specific to the Copper River drainage area are discussed more fully in a text box that has been added to Section 4.4.4.3.

00063-012: The revised version of Section 3.24 of the FEIS discusses a variety of subsistence data, including community harvest data, approximated subsistence harvests of selected game by geographic area, information on resource populations (see also Sections 3.19, 3.20, 3.21, and 3.22), and traditional ecological knowledge. Sections 4.3.20 and 4.7.8.1 refer to studies that have focused on impacts related to the oil industry on subsistence, thus providing an interpretation of key situational data on subsistence. The available data are adequate for purposes of evaluating impacts of the proposed action and all alternatives considered in this EIS. The acquisition of additional subsistence data, and how these data would be collected, are beyond the scope of this EIS.

00063-013: This EIS is a federal document, and as such it was decided to use the federal definition of subsistence. The main criterion is rural residence, not ethnicity, and thus the subsistence analysis does not discriminate between Natives and non-Natives.

00063-014: Available statistical data or subsistence in the TAPS ROW are rare prior to 1980. Section 3.24 has been revised and restructured to focus on Copper River rural community subsistence patterns, and Section 4.3.20 has been expanded to examine potential impacts of the TAPS (including a discussion of subsistence management steps that have been necessary in the Copper River Valley). The EIS acknowledges the presence of subsistence impacts, but notes that the cause of these impacts are not necessarily the TAPS.

00063-015: The Executive Summary has been revised, including its treatment of the Copper River.

00063-016: It is unclear from the analysis presented in the EIS that the Copper River area is the "most [highly] impacted area," although there certainly have been considerable impacts on subsistence in the area (not necessarily due to the TAPS), however). (See Section 3.24.2.3 in the reorganized Section 3.24 of the FEIS.) Traditional ecological knowledge is available from this area, and is cited in the EIS (see Section 3.24.2), but has not been obtained from a single, systematic study of the topic. In April 2002, EIS personnel contacted the 21 directly affected villages/tribes by certified mail to explore the acquisition of additional information, including traditional ecological knowledge (with an explicit focus on subsistence). Among the villages contacted were Chitina, Copper Center, Gakona, Gulkana, Tazlina, and Tonsina, all in the Copper River Basin. To date, no response to those letters has been received.

00063-017: Discussions on the impacts of oil spills on ecological resources are presented in Sections 4.4.4.9 through 4.4.4.12, 4.7.7.2.4, and 4.7.7.3.5. Additional information about the fate and effects of aqueous phase oil has been added to the discussion of impacts from spilled oil in Section 4.4.4.10. Discussion of observed and potential effects of oil on infaunal and epifaunal invertebrates has also been added to Section 4.4.4.10. The PAH accumulation was detected in mussels used to monitor water quality in Port Valdez as part of a PWS RCAC-sponsored monitoring program (Salazar et al. 2002). In that study, it was found that all measured concentrations of PAHs in water and estimated on the basis of bioaccumulation in mussel tissues indicated that the concentrations of PAHs in Port Valdez waters are in the low parts-per-trillion range. These concentrations are well below the levels that have been associated with adverse effects in herring and salmon embryos (Salazar et al. 2002). In addition, Salazar et al. (2002) did not detect reductions in overall growth of caged mussels that could be attributed to PAH burdens.

The Exxon Valdez Oil Spill Trustee Council was established to oversee the restoration of resources impacted by the Exxon Valdez oil spill. The Trustee Council's focus is on ecosystem studies and modeling. This includes the Gulf of Alaska Ecosystem Monitoring and Research program. The Trustee Council is also involved in purchasing lands for habitat protection throughout the Gulf of Alaska region. The need for development of additional toxicity data for individual PAH compounds (e.g., condensed thiophenes) and for PAH mixtures may be addressed by the Council. In the EIS human health impacts assessment, the uncertainties regarding PAH toxicity were compensated for by using conservative assumptions on the concentrations in edible tissues and the length of exposure. Also, toxicity equivalency factors were used that estimated high levels of toxicity of individual PAHs relative to benzo[a]pyrene.

00063-018: The DEIS sections on subsistence received many critical public comments, and as a result, have received substantial revision. A small number of additional sources were identified, including the map of Cordova subsistence use areas and North Slope studies of impacts on subsistence economies from oil development. Previous sources were considered more closely, as when time-series data were derived from the ADFG Division of Subsistence studies, and harvest permit data were broken down further to distinguish patterns of rural and non-rural residents. The contribution of Tribal members in existing research, and the value of Tribal partners as co-investigators in future subsistence research is acknowledged. However, with additional analysis of this data, the EIS draws reasonable conclusions, on the basis of existing information.

00063-019: The BLM and member agencies of the JPO are committed to ongoing evaluations of TAPS operations and maintenance. Please see Section 4.1.1 of the FEIS for further information on oversight activities. The reader is also referred to Section 2.5 for information on audits.

The BLM recognizes that there may be interactions between the TAPS and subsistence resources. The BLM also notes that current information does not show a relationship between TAPS and subsistence impacts. The BLM and State of Alaska within JPO are currently working with industry and others to develop a science-based approach to determine how TAPS and subsistence resources interact.

00063-020: Section 30 of the Agreement and Grant of Right-of-Way for Trans-Alaska Pipeline concerns compensation to subsistence users from a loss of subsistence resources due to the TAPS. Loss of subsistence resources due to other causes (that is, causes unrelated to the TAPS) is beyond the scope of issues covered in this EIS.

00063-021: The EIS recognizes that restricted access to subsistence areas is an adverse impact on subsistence, as noted in Sections 4.3.20 and 4.7.8.1. However, it also notes in those same sections that the areas where access is denied are extremely small compared to the traditional subsistence harvest areas (presented in Map 3.24-1 and in greater detail in maps found in Appendix D). Changes to restricted areas are beyond the scope of this EIS, unless such changes would be deemed necessary to mitigate large, negative impacts (which they were not). Similarly, agreements pursuant to such changes are beyond the scope of this EIS.

00063-022: The Joint Pipeline Office currently has a position open for an Alaska Native liaison.

00063-023: The FEIS contains information on spill planning, response, and mitigation for the Copper River Drainage (see the text box in Section 4.4.4.3).

00063-024: The Joint Pipeline Office currently has a position open for an Alaska Native liaison. The social/cultural sections of the EIS specifically address Alaska Native issues, including impacts to Tribal organizations associated with proposed renewal of the TAPS right-of-way.

00063-025: The text has been changed to note that the FEIS contains a detailed analysis of various spill scenarios.

The operational history of TAPS, maintenance activities, spill response capabilities, and the potential for spills associated with TAPS were considered in the analysis. Impacts associated with potential spills are discussed in Section 4.4 of the EIS.

Spill response planning is a distinct activity that is conducted separately from the NEPA process.

The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

The TAPS Oil Discharge Prevention and Contingency Plan for the pipeline (C-Plan), prepared by APSC (2001g—see Section 3.30 of the FEIS for the reference), provides for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline, including at river crossings.

The C-Plan is updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline are incorporated into the C-Plan. In addition, the C-Plan is reviewed annually by BLM, every three years by ADEC, and every five years by DOT. EPA also reviews the plan as it applies to pump stations. As part of this process, APSC and the federal and state agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment and personnel are made available along the TAPS.

00063-026: Thank you for your comment.

00063-027: There are approximately 284 secondary roads (from 120 feet to 7.5 miles long) linking state roads with the pipeline, pump stations, material sites, disposal sites, and airfields associated with TAPS operations. These roads are available for land access for oil spill containment purposes.

The type of equipment and method by which the equipment is to be transported to an individual spill location is detailed in the various volumes of the TAPS Pipeline Oil Discharge Prevention and Contingency Play, prepared by the APSC (2001g—see Section 3.30 of the FEIS for the reference).

00063-028: The EIS recognizes that spills that end up in the large rivers or fast-moving rivers/streams would not be easily contained and clean-up would be difficult (Section 4.4.4.3). The comment is accurate for certain highly unlikely spills. This does not reduce the need for spill response, but highlights that some scenarios are worse than others.

The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

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The C-Plan is updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline are incorporated into the C-Plan. In addition, the C-Plan is reviewed annually by BLM, every three years by ADEC, and every five years by DOT. EPA also reviews the plan as it applies to pump stations. As part of this process, APSC and the federal and state agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment and personnel are made available along the TAPS.

Response crews and equipment for initial deployment are stationed at Pump Station 9, Glennallen, Pump Station 12, and Valdez. The entire region crossed by the pipeline has been characterized with respect to the potential flow of spilled oil. Appropriate containment tactics are described in the C-Plan with site-specific descriptions for each identified containment site. For example, the Region 5 plan, which contains all contingency areas that could affect the Copper River, lists 12 contingency areas and 38 segment areas. Each of these 38 segment areas lists priority control actions and specific containment instructions. Each regional plan includes tables detailing materials and equipment available for oil spill response at all stations and containment sites.

The reader is also referred to the text box in Section 4.4.4.3 where spill planning, response, and mitigation for the Copper River Drainage are discussed.

Please note that AHTNA Incorporated is the primary spill contractor at PS 11 (See Section 4.4.4.3).

00063-029: Oil spill equipment are primarily located at the various pump stations along the TAPS. A list of available oil spill equipment is provided in Table 3.1 of the "Trans-Alaska Pipeline System Pipeline Oil Discharge Prevention and Contingency Plan, CP-35-1 GP," (C-Plan), prepared by the APSC and is summarized in Table 3.1-6 in the EIS.

The first responders who arrive at an oil spill site would most likely be from the closest pump station or APSC facility (Fairbanks or Valdez). The time required to move heavy equipment under various weather conditions is provided in Tables 1.10 to 1.12 of the C-Plan. The equipment required for a postulated oil spill is listed in the various sections of the C-Plan.

The estimated response times for various spill locations considered in the EIS are provided in Table 4.4-13 of the EIS. Oil spill prevention and response capabilities and related activities specific to the Copper River drainage area are discussed more fully in a text box that has been added to Section 4.4.4.3.

00063-030: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

The Trans-Alaska Pipeline System Pipeline Oil Discharge Prevention and Contingency Plan, CP-35-1 GP, prepared in 2001 by the Alyeska Pipeline Service Company (C-plan) provides full disclosure of spill planning, reporting, and response. The C-Plan is approved by the member agencies of JPO.

The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

Similarly, other incidents (such as, those mentioned in the comment) have resulted in modifications to the manner in which TAPS is operated. In order to be more proactive, the BLM and member agencies of JPO in close cooperation with APSC have begun a systematic process to identify the critical functional components of TAPS. The process, called reliability-centered maintenance (RCM), is an on-going system-by-system audit that determines function, failure modes, consequence and preventative maintenance of critical systems. The BLM is committed to RCM and believes that this process represents a pro-active approach to oversight.

00063-031: Ahtna Construction & Primary Products Corporation is a primary response action contractor for APSC. The team is comprised of six personnel based at the Glennallen Pump Station 11 area. The crew is a combination of teamsters, operators, and laborers. Ahtna is required by contract to provide a minimum three-person response team capability on a 24-hour-per-day/7-days-per-week basis. The team will be mobilized at Pump Station 11 and be prepared for deployment within 3 hours of notification.

TCC is a primary response action contractor for APSC, based at Valdez, Alaska. TCC works as part of the SERVS Initial Response Team. The team is comprised of eight personnel, made up of a combination of SERVS and TCC personnel, who are available on a 24-hour-per-day basis.

Houston Joint Venture is APSC's pipeline maintenance contractor, providing vehicle maintenance, pipeline facilities maintenance, and baseline crew staffing. All pipeline facilities and vehicle maintenance assigned personnel have collateral oil spill response duties and are available at various locations from Pump Station 1 to Valdez. Baseline crew members are assigned primary oil spill response duties and are available at Pump Stations 1, 3, 4, 5, 6, 7, 9, and 12.

Also, APSC has contracts with three local boat handlers for local knowledge of operations on area rivers and to augment responses by providing expanded logistics support. The reader is also referred to Section 4.4.4.3, to he text box on the Copper River Drainage. The section describes the oil spill planning and mitigation measures in place to protect this important resource.

00063-032: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

The TAPS Oil Discharge Prevention and Contingency Plan for the pipeline (C-plan), prepared by APSC (2001g—see Section 3.30 of the FEIS for the reference), provides for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline. Some of the oil spill response crews reside in local villages along the pipeline.

The C-Plan is updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline are incorporated into the C-Plan. In addition, the C-Plan is reviewed annually by BLM, every three years by ADEC, and every 5 years by DOT. EPA also reviews the plan as it applies to pump stations. As part of this process, APSC and the Federal and State agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment and personnel are made available along the TAPS. However, recommending specific methods for mitigating future oil spills should be done as part of the C-plan review.

00063-033: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

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The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

Similarly, other incidents (such as, those mentioned in the comment) have resulted in modifications to the manner in which TAPS is operated. In order to be more proactive, the BLM and member agencies of JPO in close cooperation with APSC have begun a systematic process to identify the critical functional components of TAPS. The process, called reliability-centered maintenance (RCM), is an on-going system-by-system audit that determines function, failure modes, consequence and preventative maintenance of critical systems. The BLM is committed to RCM and believes that this process represents a pro-active approach to oversight.

00063-034: The BLM believes that it had and has all of the authority required for granting use of the right-of-way. Access, land use, and trespass issues related to Native lands, including those owned by the Ahtna Corporation, are addressed in Section 4.3.23.1, "Land Use."

00063-035: Thank you for your comment.

00063-036: Section 29 is a specific provision in the Federal Grant of Right-of-Way for the TAPS that addresses aspects of Alaska Native employment on the TAPS (APSC and contractor employment). The need for this provision arose in the early 1970s in conjunction with the settlement of Alaska Native land claims and the construction of the TAPS.

Section 29 of the Federal Grant requires four things of the permittees:

1) An agreement with the Secretary regarding recruitment, testing, training, placement, employment, and job counseling of Alaska Natives;

2) A training program for Alaska Natives designed to qualify them for initial employment and later advancement;

3) Try to secure employment of successful trainees and report to the BLM's Authorized Officer regarding discharge of Alaska Natives; and

4) Furnish required information about Alaska Native employment to the Authorized Officer.

The agreement referred to above is known as the "Alaska Native Utilization Agreement" (ANUA) and was first executed in 1974 and more recently updated on a triennial basis, starting in 1995. The most recent agreement was signed in 2001. The agreement provides the basis for implementing the requirements of Section 29. BLM has a Native Liaison Officer whose responsibilities include close oversight of the Section 29 program at APSC. Any shortcomings or other agreement goals not being met are highlighted for special attention. As is the case for any other provision of the Federal Grant, the BLM can enforce this provision by requiring permittees to take actions to remedy any deficiencies noted.

APSC has had a good track record since 1995 of achieving continually rising employment goals spelled out in the ANUA. To provide assurances that these percentage gains won't be lost in the longer term, BLM has engaged APSC in negotiations that will lead to a written mechanism or procedure within the upcoming ANUA (2004) to rapidly address any slippage (Action 4.8.4).

00063-037: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00063-038: Thank you for your comment.

00063-039: Section 4 of the Alaska Native Utilization Agreement (ANUA, see Appendix F of the FEIS) covers training programs for APSC employees. Each "designated" contractor (those with 40 or more full time employees working on TAPS) will also have Section 29 implementing plans which may include internships, mentoring, counseling, incentives, or other appropriate programs for Alaska Natives (Section 2.2 of ANUA).

00063-040: The EIS evaluates the current version of the Agreement and Grant of Right-of-Way for Trans-Alaska Pipeline, which includes a provision for training and hiring Alaska Natives (Section 29). The Federal Grant is presented in Appendix B of the FEIS. Any changes to that agreement are beyond the scope of this EIS.

00063-041: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00063-042: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00063-043: The Bureau of Land Management is the lead federal agency for preparation of this EIS and has consulted with affected Tribal and Native organizations throughout the TAPS ROW renewal and EIS process. Government-to-government consultation, in accordance with Executive Order 13175, has been a part of the right-of-way renewal and EIS processes since before the EIS began, as summarized in Section 5.3.

00063-044: Thank you for your comment. The pipeline runs from the Beaufort Sea to Prince William Sound; Anchorage is the administrative center for TAPS administration. Also, no existing rights-of-way were terminated by TAPS. The TAPS ROW was granted before Native Corporations received adjacent lands.

00063-045: Security for the TAPS is an issue of national importance. There are elaborate security measures and plans in place, involving numerous federal and state agencies. BLM has reviewed these confidential plans and agrees with them. Opportunities to strengthen these measures will always be pursued diligently by the agencies involved. Because of the sensitive nature of security, in general, the DEIS does not reveal the specific aspects of TAPS security programs.

00063-046: Some restrictions on use of the TAPS corridor and access roads across the corridor, which were imposed for security purposes after September 11, 2001, will continue for an unknown period of time.

Existing dedicated access across the pipeline has not been restricted. Access on the work pad and use of pipeline access roads authorized by the BLM and built by the pipeline owners have been restricted to protect the pipeline.

00063-047: Thank you for your comment.

00063-048: In the aftermath of the events of September 11, 2001, the security of TAPS has been reviewed and enhanced. However, the details of the increased security cannot be discussed in this document.

00063-049: Aerial surveillance is one of the key tools used to track spill location and to plan the response. Surveillance is done primarily by helicopter, but may also be done with fixed-wing aircraft. The APSC maintains on-site helicopters at five locations along the pipeline: Pump Station 4, Pump Station 5, Fairbanks, Delta, and Valdez.

The transport options available for spill response during various adverse weather conditions are identified in section 1.6.2.4 on page 1-65 of the "Trans-Alaska Pipeline System Pipeline Oil Discharge Prevention and Contingency Plan, CP-35-1 GP," (APSC 2001g), which is available to the public through various libraries in several major cities in Alaska. The options include Tucker track vehicles, Bombardier track vehicles, all-terrain vehicles, snow machines, and helicopters.

Oil spill equipment is primarily located at the various pump stations along the TAPS and not at the potential spill site. A list of available oil spill equipment is provided in Table 3.1 of the above-cited document.

The first response measures to arrive at an oil spill site would most likely be from the closest pump station or APSC facility (Fairbanks or Valdez). The time to move heavy equipment under various weather conditions is provided in Tables 1.10 to 1.12 of the previously-cited document. The equipment required for a postulated oil spill is provided in the various sections of the previously-cited document.

The estimated response times for various spill locations considered in the DEIS are provided in Table 4.4-13 on page 4.4-44 of the DEIS.

The pipeline has 63 gate valves that are remotely operated, which can be closed to limit the oil flow in the pipeline. There are also 81 check valves that will limit the flow of oil to a spill site. In addition, APSC maintains road access to all Gate Valves (remove) year-round.

00063-050: The reader is referred to Section 4.3.2 for a detailed description of the activities and impacts related to construction and maintenance of TAPS in unstable soils permafrost conditions.

00063-051: As discussed in the Draft EIS, the TAPS pipeline crosses 80 major rivers and more than 800 streams between Prudhoe Bay and Valdez (Section 3.7). Providing details on each river and stream is neither possible nor necessary for the EIS, particularly considering seasonal effects on flow, velocity, and sediment load. Instead, six rivers were selected for detailed analyses in Section 4.4.4.3. Additional information on a mile-by-mile basis for the rivers and streams crossed by the TAPS pipeline can be found in the appropriate TAPS Contingency Plans.

00063-052: Text has been added to Section 3.18.1.3 indicating past beetle infestation in the vicinity of TAPS.

00063-053: Section 3.29 discusses the referenced Executive Order (this comment assumes that Executive Order 12898 was of interest), along with U.S. Environmental Protection Agency (and Council for Environmental Quality) guidelines for implementation. The EIS found no evidence for high and adverse impacts under the proposed action in any of the impact areas examined (including economic, human health, sociocultural, and subsistence), which Executive 12898 explicitly identifies as a prerequisite for environmental justice impacts. Levels of funding to Tribes to address various impacts are beyond the scope of this EIS.

00063-054: Section 3.29 discusses the referenced Executive Order. The EIS examined all impact areas for the presence of high and adverse impacts under all alternatives considered in the document (see Sections 4.3.25, 4.4.4.19, 4.5.2.25, 4.6.2.25, and 4.7.8.7). Many (rural) communities have received economic benefits funded by federal and (especially) state programs, as noted in Section 3.25.1.3 and elsewhere. The impact of competing for declining resources is discussed in Section 4.6.2.21. The EIS found no evidence for high and adverse impacts under the proposed action, which Executive 12898 explicitly identifies as a prerequisite for environmental justice impacts.

00063-055: For the sake of accuracy, note that the comment misquotes the DEIS, in addition referring to Section 3.23.5 instead of Section 3.24 (where the passage of interest occurs). The statement in the DEIS reads "difficult to estimate the relative economic importance of subsistence harvests because the consumption and exchange of subsistence products do not occur in the marketplace…" which is an accurate statement.

The DEIS sections on subsistence received many critical public comments, and as a result, have undergone substantial revision. A small number of additional sources were identified, including the map of Cordova subsistence use areas and North Slope studies of impacts on subsistence economies from oil development. Previous sources were considered more closely, as when time-series data were derived from the ADFG Division of Subsistence studies; and harvest permit data were broken down further to distinguish patterns of rural and non-rural residents. With additional analysis of this data, the EIS draws reasonable conclusions, on the basis of existing information.

00063-056: The description and analysis of subsistence harvest patterns are based a thorough review of a large body of systematic research as well as the traditional knowledge provided in testimony by local residents. A careful effort was made to include all sources of information and none were dismissed as unimportant. Major references include classic and over two dozen community harvest surveys conducted by the ADFG Division of Subsistence since the early 1980s. A very recent publication, systematically documenting the traditional ecological knowledge of Ahtna Elders regarding salmon in the Copper River, was incorporated into the revised analysis. In all cases, these reports are based on extensive and systematic interviews with local people. Every effort has been made to provide a full and accurate account of contemporary subsistence practices.

00063-057: The meaning of this comment is unclear. If it is meant to focus on TAPS impacts on the Alaska Native populations or on subsistence, the EIS discusses likely consequences of the proposed action on both of these impact areas in Section 4.3.21 and 4.3.20, respectively. Available data were adequate for the impact evaluation purposes in these two issue areas. The funding of additional research is beyond the scope of this EIS.

00063-058: Please see Section 3.29 of the FEIS. Also, see Section 4.3.21.1 regarding Alaska Native hires.

00063-059: Access, land use, and trespass issues related to Native lands, including those owned by the Ahtna Corporation, are addressed in Section 4.3.23.1, "Land Use."

00063-060: The EIS suggests that because the TAPS already exists, in part because Alaska Native sociocultural systems have become habituated to it and other features of modern Alaska, and in part because the TAPS provides sources of cash employment and revenues for key public programs, the additional negative impact on sociocultural systems is likely to be small (see Section 4.3.21). Additional studies of sociocultural systems are beyond the scope of this EIS.

00063-061: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00063-062: The assertion of the comment with regard to subsistence in general is consistent with the position taken in the EIS. Some socioeconomic data are available from the pre-TAPS period, including data at the village level, primarily from decennial censuses of population and housing conducted by the U.S. Bureau of the Census.

00063-063: Access, land use, and trespass issues related to Native lands are addressed in Section 4.3.23.1, "Land Use." The BLM recognizes the concerns of Tribal governments and Native allottees related to land use issues adjacent to TAPS. Although these concerns do not directly affect renewal of the Federal Grant of Right-of-Way renewal, the BLM will continue to work with these groups on these issues, as it has in the past.

00063-064: The reader is referred to Section 2.5 of the FEIS.

00064

M-B CONTRACTING CO., INC.
7101 DEBARR ROAD
ANCHORAGE, ALASKA 99504-1800
OFFICE (907) 333-5527 FAX (907)333-5871
SHOP (907) 333-5881 FAX (907)333-7066

FAX TRANSMITTAL.....

TO: BLM TAPS Renewal EIS ~~Argonne National Laboratory EAD/900~~ 9700 Cass Ave. ~~Argonne, IL.~~	FROM: J.I. Miller
ATTN:	DATE: August 20, 2002
@ FAX: 866 542 5904	4:10 PM
PAGES (INCLUDING COVER SHEET) 1	

COMMENTS:

Sirs:

I wish to express my SUPPORT for a 30 YEAR RENEWAL of the TAPS right-of-way lease. With that, I would expect proper oversight by the appropriate Federal and State Authorities to assure a physically safe and environmentally safe and sound operation. 64-1

Sincerely,

John I. Miller
President

PLEASE CALL 333-5527 IF THERE ARE ANY PROBLEMS WITH THIS TRANSMITTAL

Responses for Document 00064

00064-001: Thank you for your comment.

00065

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439
FAX: 1-866-542-5904

Regarding: The proposal to renew the Trans-Alaska Pipeline Lease.

Before you renew the existing lease for thirty years, consider the issue of reliability of the pipeline structure, and the reliability of Alyeska's operational procedures in light of the findings and conclusions in Richard P. Feynman's Minority Report to the Space Shuttle 'Challenger' Inquiry.

Dr. Feynman makes clear on page 156 of the book, The Pleasure of Finding Things Out, that problems which occur in a design that is intended to prevent such problems, are design failures. "The 'O' rings of the Rocket Boosters were not designed to erode. Erosion was a clue that something was wrong. Erosion was not something from which safety can be inferred."

Pipeline corrosion has not been perfectly controlled, nor accurately measured and pipe strength has been reduced by an unknown amount. Unintended pressure spikes at Thompson Pass did not rupture the pipeline the last time they occurred, but that is no proof that a future failure in procedure that causes pressure spikes that exceed design limits of safety will not result in catastrophic structural failure. To paraphrase Feynman's comments on page 155 of the book quoted above: "A failure, the causes of which are not understood, which doesn't lead to a catastrophic event in one or more instances, is no proof that catastrophe will not occur the next time such failure occurs."

Many people have testified, quoting Alyeska's claim that the pipeline has proven to be 99.999 percent reliable over a 25-year-life history. Please assess whether that figure has any basis in fact, after reviewing Dr. Feynman's critique of safety factors used at NASA with respect to the disastrous launch of the 'Challenger'. Alyeska's method of calculating reliability appears to be similar to NASA's approach with respect to the 'Challenger'. On pages 153 to 157 he discusses methods of defining reliability, and concludes that in this case "... NASA exaggerates the reliability of its product to the point of fantasy". 65-1

Over the life of the pipeline numerous problems in structural integrity and operational procedure have been documented, but are not considered "failures" by Alyeska or the State or Federal Regulators. Startup problems, pipe movement at Atigun Pass, pressure spikes at Thompson Pass, and thawing of permafrost around VSMs are a few examples of failure with respect to the structural design or written operational intention and expectation. Authorities have dismissed all of these problems, and many others, because none of these problems have yet created a catastrophic event.

Of these examples, Alyeska seems to have achieved 100% in failing to correct identified problems. This raises a question about compliance with the existing lease: year after year, State and Federal Regulators grant extensions to the time allowed for Alyeska to comply with certain requirements. Currently, it seems as if compliance has eluded the company, since the regulators have allowed for continued operation of the pipeline when "substantial compliance" has been achieved. Since Alyeska has failed to operate the pipeline in compliance with the existing lease, there is no duty to renew the lease at all.

All structural and mechanical equipment requires increased maintenance as time passes. This fact must be addressed in any new lease, and the lease renewal intervals should become shorter as age increases. No lease should be signed until DR&R funds that have been collected under the terms of the existing lease are placed in an escrow account for the benefit of the State. No responsible fiduciary institution would accept less, as the current corporate scandals make abundantly clear. 65-2

A new lease should include penalties for non-compliance and operating failures. To be effective, such penalties must be higher than the cost of compliance and failure prevention, and quickly and easily collected prior to the outcome of never-ending legal battles. Penalties not paid are not penalties. 65-3

The time constraints restricting public input on this matter and the dismissal of critical questions as "beyond the scope" of your authority, suggest you represent the oil industry, rather than the citizens of the state that employs you. This is a crucial time to improve the existing lease based on 25 years of experience coupled with input from concerned residents of Alaska, and the advice from experts outside the influence of the oil industry. 65-4

Sincerely,

Dan Dryden
HC03 Box 8118
Palmer, AK 99645

Responses for Document 00065

00065-001: The overall performance of TAPS was considered by the authors without use of APSC's reliability estimates.

00065-002: The reader is directed to the discussion of escrow funds found in Section 2.5.

00065-003: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00065-004: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00066

Seldovia Village Tribe

P.O. Drawer L
Seldovia, Alaska 99663
(907) 234-7898 Fax: (907) 234-7637

August 20, 2002

BLM TAPS Renewal Scoping
Argonne National Laboratory, EAD/900
9700 South Cass
Argonne, IL 60439

Via Fax: 1-866-542-5904

Re: **COMMENTS ON THE DRAFT EIS FOR THE TRANS-ALASKA PIPELINE ROW RENEWAL**

The following is the comments of the Seldovia Village Tribe, IRA for the above referenced EIS:

- Government-to-Government Consultation: BLM has a consultation policy that is not being followed. All agencies that form the Joint Pipeline Office are bound by either federal trust responsibility/executive order and their own approved department consultation policies, or by the Millennium Agreement (state). Sending letters to Tribal Council Presidents and meeting face-to-face should be the beginning of meaningful dialogue. 66-1

- Length of comment period too short. Should be extended. 45 days in the summer is unacceptable. Not enough time for adequate public and Tribal consultation. Inconsiderate of subsistence season. 66-2

- Attention to "federally recognized Tribes" in the Draft EIS is inadequate. Problems with language used regarding Tribes and consultation in subsistence and sociocultural systems sections. Lack of understanding that these aren't simply communities or villages. These are recognized forms of government, with elected Tribal Councils and are afforded status as sovereign nations. 66-3

- There is no mention of the Seldovia Village Tribe or the community of Seldovia in the subsistence section. 66-4

- Section 3.23.6 briefly discusses Alaska Native Corporations. There is no section devoted to federally recognized Tribes along the pipeline and TAPS affected environment. 66-5

Sincerely,

SELDOVIA VILLAGE TRIBE

Crystal Collier

Crystal Collier
Executive Director

Responses for Document 00066

00066-001: Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments," requires that the federal government consult with Tribal governments during the preparation of an EIS. Government-to-Government consultation for this EIS is described in Section 5.3 in the FEIS. As the lead federal agency associated with this EIS, the BLM established government-to-government exchanges with all Tribal governments in Alaska and more focused exchanges with 21 Tribes directly affected by the TAPS. These 21 communities received more detailed mailings explaining the proposed ROW renewal, the EIS process, and the availability of various sources of additional information. Meetings were held with all Tribal organizations and Native groups that requested them to discuss the EIS process and related issues in greater detail. At the meetings, specific emphasis was placed on how Tribal organizations and Native groups can participate effectively in the EIS and ROW renewal processes. While comments on the DEIS had to be received by the end of a 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to tribal governments and Native groups. The process of government-to-government consultation allows these organizations to continue dialogues with the Bureau of Land Management and for their comments to be considered in the Record of Decision. The BLM and member agencies of the JPO are committed to ongoing government-to-government consultations and welcome invitations to participate in meetings and dialogues with Native Tribes.

00066-002: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00066-003: A discussion of federally recognized native Villages and Tribes has been added to Section 3.25.1.2. The presence of specific federally recognized Tribes has been added to the discussion of Alaska Native sociocultural systems in Section 3.25.1.1.

00066-004: As noted in Section 3.24.1, the Alaska Native Villages included in the subsistence analysis consisted of 21 identified by the U.S. Bureau of Land Management as likely to experience direct effects from renewing the TAPS right-of-way. The criteria used for this determination included likely economic, cultural, and subsistence impacts, as well as impacts to Native land when the right-of-way was originally defined (see the revised version of Section 5.3).

00066-005: A discussion of federally recognized Native Villages and Tribes has been added to Section 3.25.1.2.

United States Department of the Interior

00067

NATIONAL PARK SERVICE
2525 Gambell Street, Room 107
Anchorage, Alaska 99503-2892

IN REPLY REFER TO:

N7619 (AKSO-RER)

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue,
Argonne, IL 60439

Dear Sirs:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for the Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way.

The National Park Service (NPS) has two conservation units that border the Trans-Alaska Pipeline right-of-way: Gates of the Arctic National Park and Preserve (GAAR) and Wrangell St. Elias National Park and Preserve (WRST). A major concern of the NPS is that an oil spill originating from the TAPS would enter rivers crossing the pipeline route and flow into rivers that form the boundaries of these conservation units. Spills of this nature could have a profound effect on the resources and values for which these parks were created.

The Middle Fork of the Koyukuk River forms part of southern boundary of the GAAR. The Dietrich River, Middle Fork of the Koyukuk River, and their feeder drainages parallel or intersect the TAPS between pipeline milepost (PLMP) 175.2 and PLMP 253. Major tributaries to the Middle Fork of the Koyukuk River are the Dietrich River, Hammond River, Slate Creek, Rosie Creek, and Marion Creek.

The Copper River forms the western boundary of WRST. Rivers that flow into the Copper River and their feeder streams span the TAPS from PLMP 606 to PLMP 775. Primary rivers along this stretch are the Gulkana, Tazlina, Klutina, Tonsina, Tiekel, and Tsina rivers.

Both park unit river corridors are important for recreational activities and access to the park units and for subsistence activities and access. Both rivers contain important fishery resources for subsistence, sport, and commercial activities. About 247 out of 800 pipeline miles, or about 31% of the pipeline reach could adversely affect an NPS unit if a serious spill were to occur. We are therefore very interested in the integrity of the TAPS and a robust oilspill contingency plan. We seek to ensure that park resources and uses are protected to the maximum extent practicable.

The NPS's comments on the draft EIS are as follows.

1. Page 4.7-45. Please rewrite the description of Wrangell-St. Elias National Park as follows.

   The headquarters of Wrangell-St. Elias National Park and Preserve are situated near Copper Center, Alaska. Wrangell-St. Elias National Park is the largest park in the national park system, and Wrangell-St. Elias National Preserve is the second largest preserve in the system. The 9.6-million

67-1

acre Wrangell-St. Elias Wilderness represents nearly 10 percent of the entire National Wilderness Preservation System. The park and preserve is within a mile of the TAPS at its closest point. Ahtna Corporation (Regional Native Corporation) owns about one million acres of land within the authorized boundary. Open year-round, visitation to the park and preserve averages about 30,000 with the majority of visitors in the summer season.

67-1 (cont.)

2. The EIS should evaluate the effects on park resources and values from small and large pipeline oil spills that are not contained and enter the Middle Fork of the Koyukuk and Copper Rivers. As indicated above, these rivers form part of the boundaries of GAAR and WRST. Both winter and summer season spill scenarios should be evaluated.

   For example: According to the draft EIS, a likely oil spill event would release 420,000 gallons of oil over a prolonged release period —the largest oil volume projected in the spill scenarios. For the given response times, the leading edge of the spill would be 5.6 miles to 34 miles from its source at the Tazlina River. This would place the oil slick in the Copper River with possible bank-to-bank shoreline oiling. The park boundary is along the east shoreline of the Copper River. Given the above, the environmental consequences section should be revised to identify the impacts of such a release on the affected environment specific to Wrangell-St. Elias National Park and Preserve, including but not limited to subsistence resources.

67-2

3. The effectiveness of oil spill containment and cleanup for small and large oilspills entering the above mentioned river systems in light of the current placement of existing equipment should be evaluated.

67-3

4. The EIS should contain an evaluation of oilspill containment response time from the onset of a spill to deployment of containment equipment (from pump stations and conex sites) at streams crossing TAPS that have the potential of entering the Middle Fork of the Koyukuk River and Copper River. This analysis is relevant to determine if a timely mobilization can be conducted to contain spills prior to their entering the Middle Fork of the Koyukuk and Copper Rivers. As indicated in the spill plan, containment of oil in major rivers is not effective. The EIS should disclose whether additional staging and deployment areas for oil spill response equipment should be established, supplied, and maintained.

67-4

5. The Port of Valdez is arguably the single largest receiver of ballast water in the United States. The document should provide additional detail on ballast water management given that ballast water management has resulted in introductions of non-native invasive species in other parts of the country. For example, is there a ballast water database and monitoring program at the Port of Valdez? Where do the exchanges take place—mid-ocean or elsewhere? Is the ballast water sampled, and for what parameters? What indicator species are used to verify where the exchanges take place?

67-5

Thank you for the opportunity to comment. If you have any follow-up questions or concerns about these comments, please contact Glen Yankus of my staff at (907) 257-2645.

Sincerely,

Joan B. Darnell
Environmental Resources Team Manager

cc: Superintendent, Gates of the Arctic National Park and Preserve
Superintendent, Wrangell-St. Elias National Park and Preserve

Responses for Document 00067

00067-001: Section 4.7.4.8.1 has been revised to reflect the information provided in the comment.

00067-002: The reader is directed to Section 4.4.4.3 and the text box on the Copper River Drainage.

00067-003: It is not possible to evaluate quantitatively the effectiveness of oil spill containment and cleanup for small and large spills because of site-specific and time-specific conditions, such as water velocity, turbulence, sediment load, ice, waves, channel morphology, dissolved constituents, the type of equipment used, and the experience of the remediation crew. Rather, the percent of oil “subject" to recovery at a containment site was used to compare the effects of short and long duration spills in Section 4.4.3.

00067-004: Spills that could potentially affect the Copper River Drainage are discussed in Section 4.4.4.3. Two representative tributaries were considered: the Gulkana and Tazlina Rivers. No calculations were performed specifically for the Middle Fork of the Koyukuk River. However, representative calculations were performed for Dan Creek/Sagavanirktok River and the Yukon River. A guillotine break of the pipeline that discharged oil directly to these rivers could produce major impacts. Similar impacts would be expected to occur for a direct guillotine-break spill to the Middle Fork of the Koyukuk River. Additional staging and deployment areas could reduce potential impacts. Additional information on spills in the Copper River Drainage is given in the text box "Oil Spill Planning for the Copper River Drainage" in Section 4.4.4.3.

The response times were estimated taking into account the location for spill containment and various weather conditions, based on detailed information for reconnaissance, response, and containment actions in the event of an oil spill provided in the TAPS Oil Discharge Prevention and Contingency Plan (C-Plan) prepared by the APSC in 2001.

Oil spill equipment is primarily located at the various pump stations along the TAPS and not at the potential spill site. A list of available oil spill equipment is provided in Table 3.1 of the C-Plan.

The first responders to arrive at an oil spill site would most likely be from the closest pump station or APSC facility (Fairbanks or Valdez). The time to move heavy equipment under various weather conditions is provided in Tables 1.10 to 1.12 of the previously-cited document. The equipment required for a postulated oil spill is provided in the various sections of the C-Plan.

The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

The C-plan provides for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline. The C-Plan is updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline are incorporated into the C-Plan. In addition, the C-Plan is reviewed annually by BLM, every three years by ADEC, and every 5 years by DOT. EPA also reviews the plan as it applies to pump stations. As part of this process, APSC and the Federal and State agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment and personnel are made available along the TAPS. Recommendation to increase staging and deployment areas for oil spill response equipment is noted. However, recommending specific methods for mitigating future oil spill should be done as part of the C-plan review.

00067-005: The possibility of the introduction of nonindigenous organisms via untreated segregated tanker ballast water is addressed as part of the analysis of cumulative effects in Section 4.7.7.2.1. Issues related to open-water exchange of ballast water from tankers are regulated by the U.S. Coast Guard and the U.S. Department of Transportation. While we recognize the concern related to ballast water management issues, the description of such management plans is outside the scope of the EIS.

AHTNA

INCORPORATED

August 20, 2002

BLM/TAPS Renewal Scoping
Argonne National Laboratory, EAD/900
9700 South Cass
Argonne, IL 60439

Gentlemen:

The Trans Alaska Pipeline runs through fifty-five (55) miles of private land owned by Ahtna Incorporated. We are not opposed to the pipeline crossing our land and nor do we object to its continued existence. We do, however, have serious concerns that we address here: employment, contracts, environmental impact, safety and subsistence.

The pipeline has brought economic benefit to the Copper River Basin, as well as the opportunity for employment, both of which are of great benefit to the region as a whole. However, we do not feel our corporation or our individual shareholders have benefited to the degree that should have been realized during these last 30 years.

The expectation that our corporation would get substantial consideration in the form of contracts and shareholder employment as compensation in return for not impeding the building of the pipeline and the free use of our property has not become a reality. 68-1

The contracts we do have are beneficial to us and appreciated, but are less than expected. Our shareholders have not been employed in the numbers that we had anticipated. The benefits of contracts and employment have for the most part been given to non-residents whom enjoy good, secure high paying jobs. In thirty years, Section 29, Native hire objectives have not been reached, although progress has been made in recent years.

The safety of the pipeline is of great concern as it crosses three major rivers on Ahtna land, the Gulkana, Tazlina and Klutina Rivers, all of which flow into the Copper River. The Copper River Salmon are not a resource whose use is of value for subsistence only. This resource is used worldwide commercially as well. The DEIS does not adequately address the impact any spill on any of the rivers mentioned above would have on this valuable resource. The DEIS does not adequately address the possibility of a disaster, the capability to respond to an oil spill, nor does it provide a realistic preventative plan of action. 68-2

Ahtna, Incorporated has in the past brought these safety concerns to the attention of Alyeska on many occasions and has presented Alyeska with viable safety measures to minimize the damage should a spill occur on one of these rivers. On site, low impact safety stations equipped with booms and response equipment should be in place at or near each river, at the very minimum, in order to prevent a small spill from becoming a catastrophic event. Mother Nature has been kind these last 30 year's, we cannot assume the same will be true for the next 30 years. There is after all a major fault line running through the valley. 68-3

Currently, pump station 12 is the closest facility with the capability for oil spill response and that is still a good hour away from the Klutina and an hour and a half away from the Gulkana. Also, we are assuming that the bridges that cross these rivers are going to be unaffected when a spill occurs. This may not be the case in the event of a major earthquake. By the time a crew and its equipment reach a spill on one of these rivers, there can 68-4

P.O. Box 649 • Glennallen, Alaska 99588 • Mile 115 Richardson Hwy.
Phone: (907) 822-3476 • Fax: (907) 822-3495

be little doubt that oil will have reached the Copper River, the only question will be how much? This is just an example, and does not fully take into consideration man-made and pipeline failure possibilities, neither does the DEIS adequately take these under consideration or address the consequences. 68-4 (cont.)

The increased population in the region as a direct result of the pipeline has stretched the infrastructure of the area beyond its limit in every capacity. Schools and recreational facilities are inadequate and do not meet the current needs of the communities much less be able to meet future needs. The increase in population has also brought up the crime rate, yet the police force has not increased in personnel. The same holds true for medical emergencies. The ability of the community to respond to emergencies has not been enhanced by the increase in population, but rather as a result is stretched beyond its capability. In addition, the Ahtna region not being in an organized borough does not enjoy the monetary benefits provided by the pipeline to other areas that are organized, for example, Valdez. Federal and State funds needed to address these infrastructure needs are allocated on a competitive basis. The Ahtna region communities must compete for these funds, often with communities with alternative funding sources, usually organized communities, that can access other funds not available to our communities. 68-5

The DEIS does not fully take into consideration a number of factors that impact our ability as a people to continue our traditional subsistence lifestyle. The data used in the DEIS is outdated and does not reflect the current socio-economic, traditional and cultural impact that the pipeline has had on our region, shareholders, wildlife and resources. 68-6

It is reasonable to anticipate an increase in the population in the Ahtna area. Such an increase has certainly occurred within the last 30 years. Alyeska Pipeline Services has been a catalyst in this increase as one of the largest employers in the region. As stated earlier most of those jobs went to non-local, non-resident individuals. Many have chosen to stay and have embraced the rural lifestyle. This includes increased participation in activities such as hunting, fishing and other similar activities. Often, trespassing on traditional Ahtna hunting grounds to do so. Their presence has and will continue to reduce a finite resource and impacts Ahtna shareholders in their pursuit of subsistence on which we are still dependant. 68-7

We as a people have not made the transition from a subsistence lifestyle to a cash economy because we have not had the opportunity to do so. This makes our subsistence existence harder to sustain because we cannot compete with this well-heeled competition for our limited resources. The next thirty years will bring more development that will further reduce our ability to maintain our subsistence lifestyle. 68-8

Ahtna, Incorporated has provided the free use of 55 miles of private land on which the pipeline crosses to Alyeska as our guest. Land that belongs to our Ahtna Native people, whom are directly impacted by the inability to utilize this property for economic development, home site's and during this national security crisis may even be prevented from crossing it in the future in many areas to reach subsistence hunting grounds. With that said, we still support the Alyeska Pipeline and the aspects of its continued operation but believe that more consideration should be given to our corporation, its shareholders and the impact the pipeline has on our region.

Sincerely,

Ken Johns, President/CEO

Responses for Document 00068

00068-001: As the commentor has noted, the pipeline owners have come close to meeting the goal of 20% Native hires in recent years. Section 3.23.6 notes recent contracting trends concerning APSC and Native corporations. However, the specific relationship between particular Native corporations and the APSC, including current and future contracting practices, is beyond the scope of this EIS.

00068-002: Section 4.4 of the EIS discusses the spill scenarios considered and the estimated impacts from these scenarios. The scenarios range from high frequency/low consequence events to low frequency/high consequence occurrences. The discussion includes potential impacts in the Copper River Drainage. Depending upon the timing and the quantity of oil, it is true that major impacts could occur to salmon in the Copper River if a large amount of oil from a pipeline break were to reach the Copper River. Text has been added to Section 4.4.4.10.1 to reiterate the importance of the Copper River for salmon production in the area and to recognize the potentially severe impacts to salmon in the event of a large spill entering the basin.

Oil spill prevention and response capabilities and related activities specific to the Copper River Drainage area are discussed more fully in the text box " Oil Spill Planning for the Copper River Drainage" in Section 4.4.4.3.

00068-003: The seismic design of the pipeline took all active faults into consideration. To reduce the likelihood of pipe rupture at the fault crossings, the pipe is above ground and on supports that allow relative displacement across the fault. The pipeline design was based on the possibility that severe seismic events could occur. Section 4.4 of the EIS discusses the spill scenarios considered and the estimated impacts from these scenarios. The scenarios range from high-frequency/low-consequence events to low-frequency/high-consequence occurrences. Potential seismic activity and fault displacements along the pipeline were included as potential scenario initiators. The discussion includes potential impacts in the Copper River drainage area. Oil spill prevention and response capabilities and related activities specific to the Copper River drainage area are discussed more fully in the text box in Section 4.4.4.3, "Oil Spill Planning for the Copper River Drainage."

00068-004: Oil spill prevention and response capabilities and related activities specific to the Copper River drainage area are discussed more fully in a text box that has been added to Section 4.4.4.3.

00068-005: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00068-006: The DEIS sections on subsistence received many critical public comments, and as a result, have undergone substantial revision. A small number of additional sources were identified, including the map of Cordova subsistence use areas and North Slope studies of impacts on subsistence economies from oil development. Previous sources were considered more closely, as when time-series data were derived from the ADFG Division of Subsistence studies; and harvest permit data were broken down further to distinguish patterns of rural and non-rural residents.

The EIS considers several factors associated with the TAPS that may affect subsistence, as discussed in Section 4.3.20 for the proposed action. The analytic challenge in assessing impacts is identifying the degree to which changes are clearly associated with TAPS, as opposed to general population increase in Alaska, continuing modernization in Alaska, disruption by activities not related to TAPS, etc. However, with additional analysis of this data, the FEIS draws reasonable conclusions, on the basis of existing information.

00068-007: The commentor's assumptions about population growth in the Ahtna area are consistent with the EIS discussion of demographic change in the Valdez-Cordova Census Area under the proposed action (which includes the Ahtna area; see Table 4.3-19). The EIS does acknowledge that many rural communities in the vicinity of the TAPS consider competition from sport hunting and fishing (much identified as non-local) as a major impact either directly or indirectly associated with the TAPS. A general relationship between population growth and pressure on subsistence resources (from subsistence and sport harvests) seems reasonable, and is noted in the EIS both in the text (see Section 4.3.20) and graphically as an increase in overall harvests in the vicinity of the TAPS (see Figure 3.24-2). This pressure may result in increased subsistence harvests and/or increased sport harvest.

00068-008: The EIS considers the economies of most Alaska Native villages/tribes to be mixed, combining subsistence and cash in varying degrees (see Section 4.3.21.1), rather than purely based on subsistence. The difficulty that Alaska Natives can have competing in the cash economy, as well as maintaining traditional cultural behavior in the face of increasing acculturation from modern American society, is noted in the EIS (Section 4.3.21.1).

Ken Adams

From: Ken Adams <kadams@ctcak.net>
To: <Gale_Norton@ios.doi.gov>; <tapswebmaster@anl.gov>; <Record@jpo.goi.gov>
Sent: Saturday, August 17, 2002 2:51 PM
Subject: Trans Alaska Pipeline System right of way renewal

Dear Sec. Norton, BLM, and the TAPS renewal team:
I had the opportunity to offer some verbal comments at the public meeting held in Cordova, Alaska on July 26, 2002 re: the Trans Alaska Pipeline System(TAPS) right of way renewal.
At this time, I'd like to offer a few additional remarks on that same subject.
Essentially, I am supportive of all seven of the recommendations made by Richard Fineberg in his report entitled " The Emperor's New Hose" that was sponsored by the Alaska Forum for Environmental Responsibility.
I believe the most valuable of Fineberg's recommendations concerns the establishment of a citizen's oversight council for the pipeline. I have no doubt that a citizen's oversight council will help industry maintain the integrity of the pipeline and environmental quality in all lands and waters that would be threatened by an oil spill.
I think back to the events that preceeded the Exxon Valdez Oil Spill (EVOS) especially the climate of complacency that prevailed
within the state regulators, the Alyeska Corp., and even the U.S.Coast Guard.
I've had first hand experience with Exxon during the aftermath of EVOS and know of their duplicity re: their operational capabilities.
Frankly, we were lied to. It is my belief that industry must be watched carefully. Oversight of industry takes on meaning and value only when those whose livelihoods are threatened by industry's mishaps are directly involved.
I strongly urge your creation of a citizen's oversight panel for TAPS and the adoption of the other recommendations made by Fineberg.

69-1

Sincerely,
Kenneth Adams

8/17/02

Responses for Document 00069

00069-001: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00070

510-540-4163

TO: BLM Director Kathleen Clarke

FROM: Suzanne Stensaas
2460 Lynwood Dr
Salt Lake City, UT 84109

SUBJECT: Aging Pipeline Requires Environmental Safeguards

DATE: August 12, 2002

Dear BLM Director Kathleen Clarke:

I am a full time working professor of brain anatomy and enjoy the outdoors. We have made two trips to Alaska. We want to return to the same Alaska we left. We want to stop drilling in the refuge, we want Katchmak bay preserved along with other areas from Jet skis, we need wilderness for our sanity and our children. Please consider the the damage a corroding pipeline could cause.

Recent corporate events make the public suspicous that anything would be done voluntarily. The renewal must have mandated clauses in the contract that take into account past leaks, new seismic data generated by newer scientific advances, and the economic disaster of the Valdes spill on Alaskan fisherman would be remiss on the goverment's part. Clear finanacial liablilty and responsibility along with inspection should be included. The form letter below expresses many of the point much better than I . I just wish to add my voice. 70-1

I wish to comment on the important Draft Environmental Impact Statement for the future safety of the aging Trans-Alaska Pipeline (TAPS). Before any pipeline renewal or lease agreement, government agencies must ensure critical safeguards are established.

The 25 year-old pipeline has suffered from serious operational and maintenance failures such as the delayed response to the Livengood bullet hole spill, and the 2 foot shift in a section of pipeline at Atigun Pass that went undetected for several months, corrosion and support instability from accelerated thawing of permafrost and future seismic activities. These are only some of the serious concerns that call for renewal conditions. 70-2

Sincerely,

Suzanne Stensaas

Responses for Document 00070

00070-001: Thank you for your comment.

00070-002: The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

Integrity of pipeline structural supports is closely monitored. See Section 4.1.3.2.1 for a discussion on the design, monitoring, and repair of pipeline structural supports and heat pipes. Ongoing monitoring of pipeline corrosion is also discussed in Section 4.1.3.2.1.

Impacting factors such as those that may cause movement in the pipeline are identified in Section 4.2 and are incorporated in analyses presented in Section 4.3. Rather than address each historical event, the analyses used selected events to determine whether pipeline design parameters and ongoing monitoring programs are adequate to identify potentially destabilizing impacts on the pipeline.

00071

August 16, 2002

BLM TAPS Renewal EIS
Argonne National Lab EAD/900
9700 S. Cass Ave
Argonne, IL 60439

To the members of the BLM TAPS Renewal EIS,

My name is Becky Clausen and I live in Cordova, Alaska, a community greatly affected be the operation of the Trans-Alaska Pipeline System. I am writing to submit comments on the TAPS Renewal EIS which should be incorporated into the final EIS.

One fifth of the Pipeline crosses through my watershed. It crosses streams that I fish, waters that I drink, and land on which I hunt. I realize the importance of the Pipeline to our state, and I also realize the importance of an intact ecosystem to my health and livelihood. It is your responsibility to safeguard these elements for the people, fish, and wildlife which rely on the public land for which this lease is being requested.

I have not been able to study the entire DEIS due to the ridiculously short public comment period that has been slated by BLM. However, I do have comments based on what I have learned so far. 71-1

(1) The Grant and Lease MUST establish a Citizen's Oversight Group, funded by the TAPS Owners through the Department of the Interior to ensure the pipeline is maintained and operated in a safe manner. 71-2

(2) Funds MUST be established in an escrow account for preventative maintenance. 71-3

(3) The reviewers should convene an advisory panel to consider how best to provide a single, responsible managing party and a stable source of funding for TAPS. 71-4

(4) Grant and Lease renewal should be made conditional on satisfactory completion of an evaluation, including a technical review and audit every five years to assure that the operators of TAPS employ best available technology to address any problems that may be encountered. 71-5

(5) Establish and ensure a viable Employee Concerns Program. 71-6

(6) Review stipulations so they reflect current science, including a legitimate analysis on the effects of global climate change on VSM. 71-7

(7) Before the EIS is approved, an independent evaluation of the current 71-8

condition of the Pipeline needs to be conducted, preferably by the National Academy of Science.

Thank you for considering these comments,

Becky Clausen

Becky Clausen
PO Box 2512
Cordova, AK 99574

Responses for Document 00071

00071-001: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00071-002: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00071-003: The reader is directed to the discussion of escrow funds found in Section 2.5.

00071-004: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00071-005: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00071-006: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent’s office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00071-007: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

The reader is also referred to Section 4.1.3.2.1, for a discussion of VSM engineering.

00071-008: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

August 20, 2002
Testimony of Dennis M. Dooley to the
Hearings Panel for the review of
Draft Environmental Impact Statement--TAPS ROW Renewal Permit

Before I begin this testimony tonight, I wish to make a couple of preparatory statements –First, I have already attended the hearings held in Valdez, Glenallen and Anchorage. 2) I acknowledge the pride of all Alaskans in the importance of TAPS to the economic well being to the State and Nation. 3) I share vicariously the pride of all those who have been a direct part of the TAPS history during its design and operations and 4) I have yet to hear at any of these hearings, any suggestion that there should be no renewal of the ROW permit. I am here to testify that a new condition should be placed on any ROW extension—that new condition is the creation of a citizen oversight committee to oversee the efforts of TAPS management as well as those of the state/federal oversight agencies.

I come to this table with 30 years of experience involved with the TAPS project. The first was evaluating the marine leg to the West Coast from Valdez for SOHIO. That effort defined the requirements for the fleet to serve Valdez to have to average 120,000 DWT, four berths at Valdez and the fact there was inadequate berth capacity at that time on the West Coast. Since then, positions with the Governor's office of Budget & Management, where I was the agent for correcting false revenue expectations TAPS had given the state in terms of severance tax. Later, I was the staff person responsible for organizing the west coast Port Oil Policy Group, a forum composed of representatives of the West Coast Governors and British Columbia to evaluate the marine transportation leg from Alaska along the west coast. As an Alaska Pipeline Surveillance Officer, I was charged with the responsibility to evaluate Alyeska's initial concept of an oil spill contingency plan. Later, as the Technical Studies Director for the Alaska Oil Spill Commission and most recently attempting to digest this DEIS.

The DEIS

This document is a prime example of "**minimization**", the art of minimizing facts while presenting a picture that appears to be adequate while containing basic flaws. For example, the discussion of an oil spill affecting the Yukon notes the villages downriver will suffer some impact. Nowhere does it acknowledge the impact for those communities upriver from the spill! It should be noted such a calamity would have international implications.

But, I am not going to insult this panel nor myself any further in reciting the numerous factual flaws or misrepresentation of facts contained in the DEIS. I will focus on a basic flaw in the logic in the organization and development of the DEIS. The basic flaw in the Argonne document is it does not attempt to balance anywhere the immense benefits the pipeline brings to the economy against the risk of a major calamity. Nor does it attempt to measure the impact of any size spill. Rather, it takes the obscure tack a major spill incident would have to be viewed as an economic boon to the area! For legitimate analysis of risk there must be an attempt to array the cost of lost resources in the case of a catastrophic event against the perceived benefits of the pipeline. Without such portrayal, this document does not meet the prime purpose of creating a DEIS—namely, that of ranking benefits against potential costs.

My principle concern today is to question why (or how) the scoping for this document would not address the possibility for a citizen oversight committee that has subpoena powers similar to the committee(s) established for the marine leg after the Exxon Valdez incident. Somehow, the oil patch has erroneously attached the creation and financing of such a committee to be such an onerous financial burden as to put in peril the ability to sell North Slope production. Nothing could be farther from the truth—the creation of such a committee could only be associated with greater confidence in the continued safe operations of the pipeline. To assume the miniscule financial burden on the pipeline operators for financing such a

committee would be the death knell for North Slope production is akin to blaming a flea on the steer to not being marketable!

After reading *The Emperor's Hose*, I am struck by the array of similar corporate conduct by Alyeska and its governmental oversight agencies as they exercised concern regarding the potential of catastrophic oil spills. Namely, the long period of little pollution activity led all concerned (including corporate owners and political leaders) to treat their responsibilities with little real incentive for pursuing real pollution abatement strategies. The parallels here for the overland segment of the transportation system are striking. I confess to a certain naivety here...this shouldn't have been a surprise. TAPS ownership's traits in this regard have infected the entire project systemically. What is surprising, is the degree to which the oversight agencies have become reluctant to enforce drills for oil spill containment, prompt maintenance and training of personnel (as required in the ROW permit) on a schedule which reflects the turn-around of both managers and line employees.

As a further example of the inadequacy of the DEIS, I have considerable concern how Argonne (with its nuclear plant design and operations expertise) could dismiss the human factors in pipeline operations—especially a pipeline that has been experiencing considerable turnover of its in-house expertise. Dr. Todd LaPorte, UC Berkeley (member of recognized interdisciplinary group analyzing high risk organizations) examining the effects of technology on large technical systems (such as nuclear plants) that operate technology that is beneficial, costly and hazardous so that their **benefits are importantly dependent on failure free operations**. During his telling testimony to the AOSC he emphasized, "We're insisting increasingly that organizations operating such systems do not make serious errors. But then work's too important. The effects of failure are so disastrous that we press them to never fail." He went on to explain, "...probably for the first time in history, the consequences and costs associated with major failure are greater than the value of the lessons we learn from the failure. The time for these organizations to learn from trail and error is past" He characterized the pipeline structure of the organization as one which:

1) The individuals involved share a common goal of efficiency;
2) They share a goal of avoiding operational failures altogether;
3) They perform complex demanding tasks under considerable time pressure, and
4) They do this with very low failure rates and almost total absence of catastrophic failure.

He went on to suggest there are at least two strategies for such organizations to prepare for the failure event. First, there must be acceptance by the organization for an "all eyes on failure mode". In other words everyone involved must be empowered to watch and comment without fear of punishment. Secondly, the use of contingency plans with repeated response exercises. In other words, **a contingency plan that is taken seriously.** One that asks the question "what about this?", before you ever have the problem. The question about what you would do to contain the problem with a minimum of damage. The organization would have thought about that ahead of time, tested the scenario, seen the inadequacies or technical opportunities well before you had to try to solve it in a rushed way.

A further distinction he made regarding these organizations was they could be characterized as **high hazard/low risk.** This is the basic fault of the Argonne Report—it is only portraying the low risk side of the pipeline structure with no real effort to apply criteria in the event of a major calamity. Pipelines are extremely reliable and low risk—but it isn't the technologies in their design that makes them that way. **It is the human beings operating them that make them this way.** Thus there is a requirement for a series of **watching groups.** Sometimes they are formal regulators they are formal regulators such as DEC or the FPO. The danger evident today, I see here is the same danger we observed in retrospect while examining the *Exxon Valdez* incident. That of the watching groups becoming benign—either through political pressures such as budgets and or just plain reluctance to pursue their duties with diligence. The solution the AOSC came up with was to develop an independent watching group composed of stakeholders to review the actions of both the formal regulatory agencies as well as the operations of Alyeska.

Evidence abounds in how are these pipeline regulators have been compromised.—for instance, the reluctance to require meaningful oil spill response drills as part of a meaningful contingency plan as required in the ROW permit. The reluctance to require immediate attention to VSM maintenance is another example. And, there is ample evidence that if personnel pursue their regulatory responsibilities with some zeal there exists a real risk they will be demoted or forced to resign.

The need to put some emphasis on human factors is revealed in *The Oil Pollution Research and Technology Plan* by the Interagency Coordinating Committee On Oil Pollution Research (a 13 member interagency committee), which lists as their **number one research** priority to be **"Prevention through understanding Human Factors related to spill accidents."** Their **number three research** priority is **"Onshore Facility and Pipeline Design, Inspection, Monitoring and Spill Prevention.** Fixed facilities account for over 60% of oil spilled from inland sources with 50% due to equipment failure. 25% of oil spilled from inland sources is from pipelines. The plan goes on to enunciate a need for public perception and participation in the decision-making process. A suggestion of addressing this problem is to recognize the importance universities and non-profit institutions in finding solutions to oil spill problems.... It goes on to say, **"Federal cooperation with various stakeholders should continue with the aim of leveraging both knowledge and resources."** "Why," I ask, "Does the Director of the BLM feel that TAPS is immune from considerations involving human factors?"

The report lists the impact of pipeline spills during the 1987-1995 period to be 13,771 incidents totaling 33.7 million gallons. A number that is difficult to reconcile with the benign magnitude listed in the Argonne report. Given the number of high velocity streams and rivers the pipeline traverses, the inadequate preparations by Alyeska for oil spill response and the values associated with the associated riverine ecology it seems prudent for agencies and TAPS to endorse a citizen oversight committee. The report goes on to state, "Present work indicates that while recovery capability in currents up to three knots has been achieved, containment (in contrast to diversion) with conventional booms in currents much above one knot is extremely difficult outside a test facility." An additional point illustrated in the report cites the great concern over the potential effects on the permafrost that could result from pipeline spills. Lately, you have heard testimony from developed from studies being conducted by the National Research Council on *Arctic Climate Assessment* regarding concerns about widespread permafrost degradation upon the integrity of the pipeline. As explained in *The Emperor's Hose*, this is a concern that appears to be readily dismissed by Alyeska. Another example of minimization—if we don't acknowledge it—it doesn't exist!

Stakeholders view assurances from the existing regulatory regimes with considerable trepidation. News reports of bureaucrats pursuing their duties with diligence and being forced out of their areas of responsibility does not condone a sense of well-being. Nor, do announcements of TAPS owners cutting maintenance/operations budgets. Reassurance is not found in the statistics kept by the Federal Office of Pipeline Safety either. Abstracts provided by that Office are attached to this testimony. The following chart shows the nationwide annual percentage of incidents by major cause for the past 12 years.

Date	Corrosion	Failed Pipe/Weld	Human Error	Malfunction of Equipment	Other	Outside Force Damage
1990	28.32	10.54	5.55	6.11	26.66	41.00
1991	30.54	11.56	6.01	8.33	18.51	25.00
1992	20.27	12.25	7.07	5.18	29.24	25.94
1993	24.01	7.41	6.11	7.42	29.25	25.76
1994	19.63	14.05	3.67	8.97	31.42	22.85
1995	19.14	12.22	13.82	2.65	23.93	28.19
1996	30.92	9.78	5.67	3.09	25.25	25.25
1997	29.22	8.18	6.43	4.09	28.65	23.39
1998	26.13	8.49	4.57	5.88	27.45	27.45
1999	21.33	10.11	9.52	4.16	37.50	17.26
2000	22.44	12.24	6.12	3.40	31.97	23.80
2001	29.44	5.42	6.20	2.32	34.88	21.70
Avg. %	25.12	10.19	6.73	5.13	28.73	25.63

It is interesting to note that despite major emphasis by industry and purportedly the Office of Pipeline Safety that the percentage of failures due to corrosion are nominally the same now as in 1990 as are the failures due to human error. In fact, there is no appreciable change in any of the failure categories with the exception of improvement due to outside force damage in 1990. Despite qualitative assurances from Argonne, the above data does not offer substantive relief to concerns expressed by stakeholders. Particularly, given the aging pipeline, turnover of personnel, the industry's incident record, and reduced funding for maintenance by the TAPS owners. None of the publicly available data lends itself to creating credible risk modeling for pipelines, which simultaneously operate over discontinuous permafrost, active seismic zones and 150-170°F temperature ranges

In closing:

- Decisions made upon the presentation of the Argonne DEIS will be seriously flawed given the lack of accuracy to details regarding the impact of a system failure. Further, the inability to measure the magnitude of a failure constitutes a serious breach in presenting a DEIS which should provide an accurate measure of the cost of the risk. The lack of addressing the cost to various stakeholders is a serious flaw. 72-1
- Further, it is regarded by those professionals who review the structural framework of highly reliable organizations as a major error to postulate future probabilities of error free operations upon past performance. 72-2
- There is a need for more time to review the DEIS. To foist such a voluminous document upon Alaska citizens during the most intense season for work and subsistence activities does not jibe with the spirit of environmental review as Congress envisioned it. The comments of the BLM Director notwithstanding, reminds me of the Alyeska commercials prior to the *Exxon Valdez* incident where they crowed to Alaskans how well they were doing the job. That rhetoric died when the ship hit Bligh Reef. Yesterday's record is not germane to the issue of tomorrow's safety record. Yesterday's record is not the reassurance Alaskans need. Rather we need the commitment of Alyeska and the regulatory agencies to anticipate thoroughly the appropriate response to a potential catastrophic leak. 72-3
- It is manifest a need for a well funded independent citizen commission with subpoena powers composed of stakeholders to perform competent research, audit maintenance activities and review the adequacy of contingency plans as required by the ROW permit. The oversight should be extended to both the operators and regulators of the pipeline. 72-4

Thank you for this opportunity to testify

Responses for Document 00072

00072-001: For the purposes of analysis in the EIS, a spectrum of spill scenarios ranging from high frequency/low consequence to low frequency/high consequence events is considered. The scenarios and the estimated impacts associated with them are discussed in Section 4.4 of the EIS. Among the initiators considered to lead to spills are systems failures including valve failures, system over pressurization, maintenance-related damage, corrosion, and tank loss at TAPS pump stations.

The potential cost of any spill, measured in terms of potential impacts to the state, in terms of potential oil revenue losses to local communities in the pipeline corridor, in terms of the demand for additional public services, property values, and recreation and tourism is included in Section 4.4.4.13 of the EIS.

00072-002: For the purposes of analysis in the EIS, a spectrum of spill scenarios ranging from high-frequency/low-consequence to low-frequency/high-consequence events is considered. The scenarios and the estimated impacts associated with them are discussed in Section 4.4 of the EIS. Many of the scenarios considered have not occurred during the 25-year operation of the TAPS, but have been postulated to occur with certain frequencies in the EIS. Therefore, contrary to the suggestion made by the commentor, the future performance of the TAPS is not assumed to be based strictly on past performance.

00072-003: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00072-004: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

August 20, 2001

Reply To
Attn Of: ECO-088

Ref: 01-054-BLM

Rob McWhorter
Joint Pipeline Office
410 West 4th Avenue, Suite 2
Anchorage, AK 99501

Dear Mr. McWhorter:

The Environmental Protection Agency (EPA) has completed its review of the draft Environmental Impact Statement (EIS) for the proposed **Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way** (CEQ No. 020274) in accordance with our authorities and responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. The draft EIS evaluates the no action alternative and two (2) action alternatives related to the continued operation of the 800-mile pipeline system that transports oil from the North Slope of Alaska to the marine terminal in Valdez, Alaska. The draft EIS identifies the renewal of the Federal Grant for an additional 30 years as the agency-preferred alternative.

Our review of the draft EIS has not identified any potential environmental impacts that would require substantive changes to the proposal. As a consequence, we are assigning a Lack of Objections (LO) rating to the proposed project. This rating and a summary of our comments will be published in the *Federal Register*. A summary of the rating system we used in our evaluation of this EIS is enclosed for your reference. 73-1

While we have no objections with the proposed renewal of the Federal Grant, we recommend that the EIS clarify whether existing stipulations and mitigation measures are proposed to be continued with the renewal of the Grant/Lease or a revised set of stipulations and mitigation measures would be implemented with Grant/Lease renewal. We presume that the current set of stipulations and mitigation practices would be carried forward with the renewal, however, we do not believe that EIS is sufficiently clear on this point. Additionally, we recommend that the EIS expand its discussions to reflect the broad range of laws and treaties applicable to subsistence hunting and gathering rights by Alaska's Native peoples and integrate their provisions/requirements into the analyses presented in the EIS related to subsistence issues. These topics are discussed in greater detail in the enclosure to this letter. 73-2

Thank you for the opportunity to provide comments on the draft EIS. Should you have any questions, please contact Bill Ryan of my staff (206-553-8561) at your earliest opportunity.

Sincerely,

Judith Leckrone Lee, Manager
Geographic Unit

Enclosures

cc: Argonne National Lab

Printed on Recycled Paper

EPA Comments on the
Draft Environmental Impact Statement (EIS)
for the
Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way

Mitigation Measures and Stipulations

Section 4.1 of the draft EIS presents a discussion of the existing mitigation measures/approaches that are being applied under the current Federal Grant and State Lease. A general characterization of the stipulations in the Federal Grant related to mitigating impacts to biological systems is presented in Table 4.1-2. With respect to the discussion of mitigation measures, we recommend that the EIS clarify whether existing mitigation measures are proposed to be continued with the renewal of the Grant/Lease or a revised set of measures would be implemented with Grant/Lease renewal. We presume that the current set of mitigation practices would be carried forward with the renewal, however, we do not believe that EIS is sufficiently clear on this point. 73-3

While Table 4.1-2 does provide a general sense of what is to be done to avoid or mitigate impacts to biological resources under the current Grant/Lease, the EIS is not clear in defining stipulations that are proposed to be included in the renewed Grant/Lease. As with the mitigation measures and practices discussed in Section 4.1 of the draft EIS, we presume that the current Agreement and Grant Right-of-Way (including stipulations) presented in Appendix F of the draft EIS would be continued as the agreement governing the renewed Grant/Lease. We recommend that the EIS clarify that this is the case or if a revised agreement and new stipulations would be developed. Because the stipulations are essentially mitigation measures that would be a requirement of the renewed Grant/Lease, they should be included (in their entirety) in the EIS as required by the implementing regulations for NEPA (see 40 CFR 1502.16). 73-4

Subsistence

The subsistence discussion presented in Section 3.24 of the draft EIS (including the "Evolution of Subsistence Regulation in Alaska" box on page 3.24-2) is framed very narrowly within the context of the State's definition of subsistence and federal parameters under ANILCA. Please note that there are many federal statutes and treaties that have evolved prior to and during statehood. The description included in the draft EIS is incomplete in providing information related to the history of subsistence in Alaska. Significant information related to the continued protected rights of Alaska Natives for subsistence food gathering under these laws and treaties should be included in this discussion.

We recommend that you consult the following statutes and treaties that protect (or have protected) subsistence hunting and gathering rights by Alaska's Native peoples and integrate their provisions/requirements into the discussions and analyses presented in the EIS related to subsistence issues. 73-5

- Treaty of Cession, Art. III, 15 Stat. 539, 542;
- 16 Stat. 180 (1870), Fur seal hunting;
- 32 Stat. 327 (1902) amended, 35 Stat. 102 (1908), State of Alaska's first game law;
- 39 Stat. 1702, 1703, Migratory Bird Treaty (1916);
- 43 Stat. 739, 744 (retained, 54 Stat. 1103, 1104 (1940); 57 Stat. 301, 306 (1943)) State of Alaska Act creating the Alaska Game Commission;

- 43 Stat. 474, 477 (§§4-5) White Act regarding fisheries (1924, amended 1934);
- 57 Interior Dec. 461, 474 (2/13/42) *Aboriginal Fishing Rights in Alaska*
- Alaska Constitution, Art. XII, §12;
- 16 U.S.C. §1371(b) Marine Mammal Protection Act (1972);
- 43 U.S.C. §1653(a)(1), Trans-Alaska Oil Pipeline Act (1973);
- 16 U.S.C. §1539(e)(1), Endangered Species Act;
- 16 U.S.C. §712(1), Fish & Wildlife Improvement Act (1978);
- 14 of the Executive land withdrawals for national monument proclamations direct the Secretary of Interior to protect subsistence culture in those monuments 43 Fed. Reg. 57009 (12/5/78), reprinted in 1978 U.S.C.C.A.N. 9589-9628; and
- 43 Fed. Reg. 60252-60258 (12/26/78) National Park Service & Fish & Wildlife Service, interim regulations for subsistence protection mandates under ANILCA.

73-5 (Cont.)

We recommend that the term "Alaska Native group(s)" used throughout Section 3.24 of the draft EIS be replaced with terms or descriptions that more accurately describe the type of group being discussed. For example, if individual Alaska Natives are discussed, then that description should be used. If the discussion is actually referring to Alaska Native groups, then further definition of the "groups" should be provided because there are many different types, each with its own identity/purpose etc. If Tribes are discussed, then use the term Tribe.

Alaska Native Corporations

The first portion of Section 3.23.6 of the draft EIS should be revised to more clearly describe the genesis of the Alaska Native Corporations. We recommend replacing the first two (2) sentences of the section with the following:

A substantial portion of Alaskan land is owned by Alaska Native corporations, which were established under the terms of the 1971 Alaska Native Claims Settlement Act (ANCSA) (see Section 3.25). Through the terms of this federal statute, Congress settled recognized aboriginal land claims, providing for the exchange of money for lands lost by Alaska Natives. The payment of $462.5 million and 2% of the value of federal and state leasable mineral revenues were made to the state-chartered regional and village corporations that were established under the ANCSA.

73-6

Responses for Document 00073

00073-001: Thank you for your comment.

00073-002: Sections 1 and 2 of the FEIS have been revised to more clearly indicate the role of BLM and JPO in oversight of the Federal Grant. In addition, Section 4.1 outlines current mitigation that is an integral part of implementing the Federal Grant. Subsistence activities in Alaska are guided by laws and treaties specific to that state, including Title VIII of the Alaska National Interest Lands Conservation Act in the case of federal land. (See Section 3.24.1 and Appendix E). The EIS focuses on these Alaska-specific laws as more pertinent to subsistence issues addressed for the alternatives considered.

00073-003: Section 2.2 has been modified to state that all special requirements (Appendix G of the FEIS) and stipulations (Appendix B) would be carried forward under the proposed action. These stipulations are part of the proposed action. In addition, additional suggested mitigation is included in section 4.8.4.

00073-004: Biological resources would continue to be managed and protected under the proposed action because all of the current stipulations would be carried forward (see Appendix G of the FEIS). In addition, the Federal Grant under the proposed action allows BLM to implement new protective measures at any point during the renewal period, if deemed necessary to protect biological resources.

00073-005: The subsistence section (3.24) has been modified to reflect input received during the public comment process on the DEIS. The FEIS subsistence sections do not state that other laws and regulations are not germane to Alaska, but rather that ANILCA is the fundamental driver of Federal subsistence oversight in Alaska. The other laws cited in the comment form the foundation of specific resource regulations in the United States, but the focus on ANILCA in the FEIS helps presents a clearer picture of subsistence issues in Alaska.

00073-006: The text presented in the FEIS on Alaska Native Corporations captures the intent of the comment (see section 3.23.7). Importantly, the baseline information on the current situation of Alaska Native Corporations is presented.

TANANA CHIEFS CONFERENCE, INC.

122 FIRST AVENUE, SUITE 600
FAIRBANKS, ALASKA 99701-4897
PHONE 907/452-8251 • FAX 907/459-3850

00074

August 20, 2002

BLM TAPS Renewal Scoping
Argonne National Laboratory EAD/9100
9700 South Cass
Argonne, IL 60439

Re: TAPS draft EIS

Enclosed you will find our comments on the TAPS Right-of-Way Renewal Draft EIS.

Sincerely,

TANANA CHIEFS CONFERENCE, INC.

Josephine Huntington/for
Harold "Buddy" Brown
President

TANANA CHIEFS CONFERENCE, INC.
COMMENTS ON TRANS-ALASKA PIPELINE SYSTEM RIGHT-OF-WAY RENEWAL DRAFT ENVIRONMENTAL IMPACT STATEMENT

This document is a compilation of the comments of several departments of Tanana Chiefs Conference, Inc. ("TCC") on the Draft Environmental Impact Statement ("DEIS") for the Trans-Alaska Pipeline System ("TAPS") right-of-way ("ROW" and collectively "TAPS ROW") renewal. TCC previously commented during the scoping phase of the EIS process in a letter submitted to Argonne National Laboratory. The following document includes some follow-up comments and concerns as well as additional comments and concerns regarding the DEIS and the EIS process to date.[1] These comments will provide several general observations on the DEIS, and follow with comments of more specific topics that are addressed in the DEIS.

General comments

The BLM decided to require an EIS for the TAPS ROW renewal because the renewal constitutes a major federal action as defined by the National Environmental Policy Act (NEPA). Its decision to prepare an EIS undoubtedly factors in the significant social, economic, political, and environmental change that has occurred in Alaska during the past 30 years. The decision to prepare an EIS also signals that there are significant known impacts, and the EIS is the process by which to lessen or mitigate those impacts in order to come up with a better decision on a major federal project. In spite of the purpose driving the EIS process, the TAPS ROW DEIS generally fails to identify and analyze

74-1

[1] These comments do not represent or bind the sovereign interests of the individual member tribes of TCC.

significant impacts and associated mitigating measures to lessen those impacts for the preferred alternative, the 30-year renewal of the TAPS ROW. 74-1 (Cont.)

The DEIS also overemphasizes the natural environmental and underemphasizes the cultural and human environment. This may be due, in part, to the fact that the preparers of the DEIS do not reside in Alaska and therefore lack intimate knowledge about contemporary social and political issues in Alaska. It also shows that the preparers have failed to recognize the human connection to the natural environment in Alaska.

The result of the preparers' unfamiliarity with current issues in Alaska shows throughout the DEIS. For example, the assessment of adverse consequences on the cultural environment is not persuasive. The weak arguments are partly based on a provisional assessment of the affected environment and, especially, its reliance on secondary sources of data. TCC requested during the scoping period that the preparers of the EIS avoid relying so heavily on previously issued government reports. An appropriately prepared EIS for the TAPS ROW renewal needs to rely on primary sources of data, such as first-hand accounts with Alaska Native peoples, especially for gathering Traditional Ecological Knowledge. 74-2

The DEIS treatment of the human environment also needs to include a more broad discussion and comprehensive review of cultural resources. The topic of cultural resources from a federal viewpoint concerns cultural heritage sites, or archaeological historic properties. The initial cultural resources investigations preceding construction of the TAPS largely concerned the inventory of and data recovery at pre-contact archaeological sites. The DEIS provisionally describes that initial work that was compiled in a report entitled "Pipeline Archaeology". However, since that initial report 74-3

was issued, the National Historic Preservation Act has been amended and new statutory and regulatory requirements include new provisions for inventory and evaluation, historic contexts, Tribal consultation, cataloging of traditional cultural properties, and so forth. It is also well recognized the National Historic Preservation Act, as amended, requires an update on cultural resources for renewed major federal undertakings such as the TAPS ROW renewal. Accordingly, there is a need for programmatic agreement on cultural resources that integrates the various requirements of the amended National Historic Preservation Act. The programmatic agreement should be prefaced by an updated professional report that synthesizes the initial cultural resources work on the pipeline and subsequent cultural resources work during the initial 30-year grant period. That document would then guide negotiations for a programmatic agreement on the management of cultural resources for the next lease period including consultation with affected federally recognized Tribes.

74-3 (Cont.)

Another major short-coming of the DEIS concerns the need to more thoroughly address scoping comments. The document fails to provide an adequate rationale for why suggestions during the scoping period were disregarded, especially since NEPA requires that the environmental impact statements be guided by public comment received during the scoping period of the EIS process.

74-4

Robert Sattler, Tanana Chiefs Conference, Inc. – Realty Program[2]

The DEIS Fails to Adequately Address Adverse Impacts on Restricted Native Allotments.

[2] Text adopted from testimony presented at the public hearing on the TAPS DEIS concerning restricted Native allotments on August 6 in Fairbanks.

TCC holds a real estate services contract with the federal government to provide realty functions for Native owners of restricted town sites and allotments. There are approximately 2,400 Native allotment parcels and 500 town sites amounting to more than 225,000 acres of restricted land in the TCC region. At least 27 Native allotments are located within one mile of the TAPS ROW, and two are intersected by the TAPS ROW. The Real Estate Services program at TCC provides a full range of services to restricted land owners including appraisals, environmental, cultural resources, cadastral survey, probate, and processing of several types of realty transactions such as land sales, right-of-ways, leases, and gift deeds. The renewal of the TAPS ROW has provided the TCC Realty program a need to review environmental issues concerning allotments located in the vicinity of the TAPS and a short schedule in which to do it. The following comments share some of our provisional observations based on an analysis of environmental issues concerning Native allotments in the sphere of the TAPS renewal, and compare our analysis to that ascertained by the preparers of the DEIS.

TCC has previously participated in the NEPA process for the TAPS ROW renewal. Early on, the Realty staff at TCC identified issues concerning restricted lands that require appropriate treatment in the TAPS NEPA process. Consequently, TCC requested during the scoping period to be designated a cooperating agency for the purpose of sorting out environmental issues concerning Native allotments potentially affected by the TAPS ROW. The Realty program at TCC works under a tribal compact with the Bureau of Indian Affairs and is guided by the statutory and regulatory requirements of the BIA, the federal agency that has jurisdiction by law over restricted lands. BLM denied the request based on its evaluation of a provision in NEPA that

74-5

directs lead federal agencies to designate Indian Tribes as cooperating agencies upon request when the undertaking crosses an Indian reservation. TCC understands that the federal designation of formal Indian reservations are not used in Interior Alaska, and that TCC is not a federally recognized tribe. What the BLM, through the Joint Pipeline Office ("JPO"), and its contractor Argonne National Laboratories failed to do is follow the provision in NEPA that allows any local agency to be designated a cooperating agency when it has jurisdiction by law or possesses special expertise with respect to any environmental issue. Argonne National Laboratories entirely misconstrued the point behind the request for cooperating agency status: TCC's expertise with regard to an area of environmental impact.

74-5 (Cont.)

The DEIS fails to substantively mention Native allotments anywhere in its 1500 pages. The only reference to Native Allotments in the DEIS is the single phrase on page 3.27-2 that states that since the TAPS authorization act, lands have been conveyed to individual owners pursuant to the Alaska Native Allotment Act, and goes on to say that the pipeline owners have acquired easements for the TAPS ROW across all parcels except one, which is currently under negotiation. The failure to address past and future impacts on Native allotment owners is a significant omission.

74-6

Notably, the DEIS asserts that TAPS owners were able to accommodate private parties through perpetual ROW agreements. This wording alone is contradictory from a real estate point-of-view. Nevertheless, the phrase implies that the easements were forged in a congenial manner in favor of the private landowners. We can only assume that the private parties include Native allotment owners.

Although the Alaska Native Allotment Act is hardly mentioned again in the entire body of the DEIS, it is cited in Chapter 9.1 entitled "Federal laws" and is listed as "Alaska Native Allotment Act of 1906". Surprisingly, the document entirely neglects to mention the applicable federal regulations that authorize pipelines and the renewal of pipeline agreements across restricted Indian lands. Ironically, the DEIS states that allotments are used for subsistence purposes and on the same page references the state statute that "prohibits hunting with firearms within 5 miles of either side of the highway between the Yukon River and the Arctic Ocean." Is this an adverse effect? More significantly, there is no mention at all of the US code, Title 25, entitled Indians, in the entire 1500 page DEIS. The DEIS fails to define the Bureau of Indian Affairs, Native allotment, right-of-way, perpetual easement, trust responsibility, and cooperating agencies. In fact, the only other place where "Native allotment" appears in the DEIS is in the legend of the Atlas of Maps showing the TAPS ROW, but even those maps fail to illustrate all allotments along the TAPS ROW. 74-7

The silence over Native allotments in the DEIS indicates that individual Indian allotment owners are unimportant to the preparers of the DEIS and the lead federal agency. Apparently, both the preparers of the DEIS and the lead federal agency believe that there have been no direct, indirect, or cumulative effects on Native allotments during the initial 30-year ROW grant period, nor are any posed by the renewal of the TAPS right-of-way. This position is astonishing since the BLM has and continues to carry out inherent federal functions on Native allotments, and also because the BLM issued the deeds to the allotment owners that do not reserve ROW's for the TAPS. This is most striking in the context of the federal trust responsibility since BLM and Argonne lab, 74-8

which is a branch of the Department of Energy, have those obligations to perform for individual Indian land owners. Perhaps even more ironic to this oversight is the fact that the litigation involving the allotees and the TAPS owners created some of the most controversial environmental issues regarding the management of Native allotments in the entire TCC region, and possibly in the State of Alaska. Nowhere in the DEIS is there mention of the rationale by which Argonne decided to exclude a review of allotments in the DEIS. The failure to address issues regarding allotments is opposed to TCC's request during the scoping period that environmental issues regarding allotments be included in the EIS.

74-8 (Cont.)

Both of the allotments that are intersected by the TAPS in the TCC region were involved in litigation with the TAPS owners. With one allotment, the allottee entered into an agreement that allowed access for the period of the TAPS authorization after which she was told that the terms of the TAPS ROW would be renegotiated. In the other case, the allottee had to endure approximately 15 years of litigation that eventually resulted in a condemnation proceeding in federal court. It is important to note for purposes of the DEIS that the summary judgment in that case prescribed fees for the taking and added punitive damages in an amount the allottee believed was insufficient. Had the TAPS owners accommodated the allottee, as purported in the DEIS, a punitive damage amount would have been renegotiated and paid to the estate. To this day, the punitive damages established by the court in the mid 1980's have not been paid to the estate. These examples alone indicate that there are significant effects to the land ownership in the human environment that need to appear in the affected environment,

74-9

environmental consequences, and cumulative effects on a class of landowners: Native allotment owners. 74-9 (Cont.)

Probably the most significant issue regarding Native allotments is the status and validity of the ROW's across the two allotments that are intersected by the TAPS ROW. The DEIS states that the owners have perpetual easements across the allotments for construction and operation of the TAPS. However, as stated elsewhere in the DEIS, since the original agreements were put into place, the lands have been certified to the allottees. It is noteworthy to point out that BLM issued deeds to the individual Indian owners without a reserved right-of-way, easement, convent, or any mention of the TAPS. 74-10 Further complicating the matter, the purported agreement on one of the allotments has never been approved by the Secretary of the Interior or its designee, as required by law. Thus, it is unclear under which legal authority the TAPS owners acquired their easements across the allotments, especially since the statutory authority limits pipeline ROW's across allotments to 20-year periods. It is for these reasons that TCC offered its assistance as a cooperating agency.

Thus, the DEIS appears to initiate the NEPA process to renew the ROW across state and federal land. However, the TAPS owners may not yet have initiated the process of renewing the ROW across restricted Indian allotments. We believe that the NEPA process needs to be initiated for the renewal of ROW across allotments in good faith with current market conditions and within the applicable statutory and regulatory procedures governing pipelines across restricted Indian lands. 74-11

TCC worked in good faith this past spring with the TAPS owners to negotiate a lease on one of the referenced allotments in order to replace a faulty gate valve. The 74-12

allotment owner set aside the problems of the past and agreed to terms of a lease to allow construction activities outside of the TAPS ROW in the interest of the natural and human environments. The BLM, JPO, Argonne National Laboratories need to follow this example and reciprocate the good will in the interests of all Native allotment owners who are potentially affected parties in the TAPS renewal process. 74-12 (Cont.)

The failure on Argonne's part to follow up with scoping comments on allotment lands brings into question its capacity, or perhaps competency, to understand and evaluate Native issues in Alaska. At the same time, its oversight further strengthens the need for Native Alaskan-based cooperating agencies to assist it in preparing an appropriate EIS for the TAPS ROW renewal. In conclusion, the DEIS needs to include a section on Native allotments, and invite Alaska Native entities as cooperating agencies. 74-13

Jerry Woods, Tanana Chiefs Conference, Inc. – Employment Department

Issues regarding Section 29 – Training and Employment of Alaska Natives

The Alaska Native Utilization Agreement (ANUA) requires the recruitment, testing, training, placement, employment, and job counseling of Alaska Natives and that the Permittees shall conduct a pre-employment and on-the-job training program for Alaska Natives. Although this goal has been in place throughout the history of the TAPS, the reality of Native hire has been quite different.[3] 74-14

In recent years, the most appropriate example of one of the "greatest impacts" to Alaska Natives in Interior Alaska under Section 29 was the October 4, 2001, Oil Spill

[3] The Tanana Chiefs Conference Employment & Training Department provided verbal testimony (#32) before the Hearing Committee on Tuesday, August 6, 2002, during a public hearing held at the Chena River Convention Center.

Incident in Livengood when there was an immediate need to activate a qualified Oil Spill Response (OSR) Team from the local area. In this case, Minto was the most logical community, due to not only its close proximity and location along the TAPS Corridor, but also because of the direct effects that the spill had on the community.

Unfortunately, due in part to the "underutilization" of Alaska Natives for employment and training opportunities under Section 29, Alyeska failed to plan for or organize such an OSR Team. Therefore, there was no qualified, specialized or certified Oil Spill Response Team organized within the tribal community of Minto. Consequently, TCC was asked to help mobilize such a team on an emergency response basis. Once a Minto team was in fact mobilized, it had to be trained and state certified before it could be deployed to the spill site. Had Alyeska fulfilled its original obligation under Section 29, this last minute and emergency effort by TCC, the Native Village of Minto, and the relevant unions could have been avoided. 74-14 (Cont.)

Recommendation: That Alyeska fund and train Oil Spill Response Teams, modeled after EFF Hot Shot Crews. These teams would be certified and ready for instant mobilization in their immediate area or, on an itinerant basis, along the length of the pipeline corridor. 74-15

Other concerns and recommendations by TCC to be requested for consideration include the following:

- Section 29 should implement provisions for compliance reviews to occur more often than the current three-year period; 74-16
- Section 29 should be amended to include additional provisions addressing not only monetary penalties for non-compliance under ANUA by Alyeska and its

Contractors, but also provisions for pursuing non-compliance with alternative oversight or penalties;

- Section 29 should include stipulations requiring the accurate collection of relevant training and employment data, available to the public, which shows Alaska Native employment statistics with a breakdown reflecting administrative, professional, technical, clerical, skilled, and unskilled positions; the hiring of Alaska Native residents of corridor and non-corridor communities; and which corridor communities have trained Oil Spill Response Teams;
- Provisions requiring the participation of at least one Alaska Native representative from each of the villages located in or around the TAPS Corridor, to be appointed to the Section 29 Advisory Board; and
- A provision requiring periodic, formal meetings between the Tribes and Alyeska (and its contractors) to be held in designated TAPS corridor communities.

74-16 (Cont.)

74-17

Donna Dwiggins, Ph.D., Applied Cultural Anthropologist, Tanana Chiefs Conference, Inc. – Natural Resources Department

The DEIS fails to Address Significant and Known Impacts Upon the Culture and Cultural Resources of Interior Athabascan Tribes.

The DEIS is written with little regard for Alaska Native cultures in the areas affected by the TAPS ROW, and the tone of the document reflects preconceived ethnocentric biases of Euro-American cultural origin. The DEIS assumes continuing the current structure, organization, and operations of the TAPS ROW with all of its contiguous installations and roadways into the future. Although two other possibilities are

74-18

mentioned, the depth of research into those two alternatives is minimal. Impacts to humans, by contrast, are given little consideration; even less attention is given to impacts on Alaska Natives specifically. Only about two pages of the entire DEIS are dedicated to the discussion of "Sociocultural Impacts". This paucity of treatment reveals inadequate consideration of the direct and secondary human impacts of the TAPS ROW renewal.

74-18 (Cont.)

Subsistence received inadequate or inappropriate treatment and analysis by the DEIS.

The subject of "subsistence" is treated trivially and haphazardly throughout the DIES, although the document acknowledges that it is one of the most significant direct and secondary impact subject areas of the TAPS renewal. One of the most significant omissions with regard to subsistence is that the DEIS does not have a valid base of information from which to perform an analysis of impacts on subsistence.

74-19

The DEIS, by its own admission, uses outdated statistics mostly from AF&G surveys done 10-20 years ago. Moreover, the statistics used do not separately examine the competing fish and game usages by subsistence users and sport hunting and fishing users. Finally, the DEIS preparers made no attempt to incorporate available Traditional Ecological Knowledge ("TEK") in the analyses despite the fact that the Alaska Department of Fish and Game ("ADF&G") is now incorporating TEK into its surveys.

The DEIS treatment of subsistence is further complicated by its selective reliance on Federal and state definitions of the term "subsistence". For instance, when the DEIS chooses to follow Federal designations, subsistence applies only to rural residents, Native and non-Native. This designation is underinclusive and inaccurate because it omits the subsistence needs and activities of Native peoples who have been forced to move to urban areas to supplement subsistence resources, or whose subsistence areas had their

74-20

character changed by the TAPS. Once Native people reside in urban areas, they are no longer considered subsistence users under ANILCA and the TAPS DEIS, as they are no longer categorized as "rural". Nevertheless, they may either travel to their home area to provide for their families, or they must utilize hunting and fishing areas closer to the urban areas – areas that are excluded in the DEIS discussion of subsistence impacts. This arbitrary divide must be reconsidered, fully analyzed, and incorporated in the EIS to reflect the true extent of impacts on subsistence.

74-20 (Cont.)

In Section 3.23.5, the importance of subsistence is mentioned (35% to 60% of daily caloric intake for rural residents), but the DEIS then states that "it is difficult to establish the relative economic importance of subsistence harvests." Further, the DEIS uses ADF&G attempts to provide equivalent economic amounts for subsistence at "between $160 and $267 million." The figures are misleading and difficult to use for a number of reasons. First, the ADF&G economic value estimate is not adequately contextualized for those families using subsistence as a percentage of their income. Second, the range is too large and the uncertainties about its accuracy are too great. Third, the commodification of subsistence resources disregards the cultural importance of subsistence resources and a traditional subsistence way of life. Thus, the DEIS's economic analysis of subsistence is flawed and perpetuates long-standing biases.

74-21

Faulty logic and poor statistics cited in Section 3.24.1 compound the problem. The statistics used in the DEIS were based on ADF&G numbers taken at individual community levels, but its methodology eliminated any tribes and communities that did not meet a narrow set of criteria – "the 21 tribes identified by the BLM as those that would be potentially directly affected by renewing the TAPS ROW ... [plus] 23 largely

74-22

non-Native communities…for which data exist." And, "Eleven of the 23 communities defined by geographic proximity to the TAPS … would have been excluded from this analysis anyway because of their location in non-rural portions of Alaska by the Office of Subsistence Management." Also, as the DEIS admits, "the information examined is, in many cases, several years old and likely suffers from inaccuracies such as underreporting." And also, "variability over time makes use of quantitative characterizations of subsistence activities …and depictions of geographic harvest areas of limited utility because of the inherent variability and flexibility of subsistence." This merely reveals the circular nature of the argument. The DEIS further admits that although the data presented in this DEIS are the best available on subsistence, they are dated and of limited utility. It goes on to note that one must use caution in drawing firm conclusions for the early 21st century from an examination of this data.

74-22 (Cont.)

74-23

If data does not exist, the preparers should seek and provide available data that is current and relevant. ADF&G and USF&W are able to provide the personnel to do these surveys, and they currently have data on some subsistence practices and TEK.[4] Excuses as to the availability of relevant data do not meet BLM's responsibility to examine adverse impacts and mitigation measures.

Information that has been tapped from TEK sources is dismissed by the DEIS as unacceptable: "Information from interviews and testimonies on subsistence concerns is offered to help fill gaps in more conventional data, but this information in most cases never has been confirmed independently by systematic studies." This is not true, as US F&W has had an ongoing project to gather TEK information and include it into its recent

74-24

[4] Note: We support AFN's suggestion to develop systematic data collection and establish a protocol similar to its Attachment 2.

reports, and TCC is assisting in this effort.[5] The casual dismissal of available TEK information creates doubt about the DEIS preparers' desire and ability to understand the subsistence impacts given the acknowledged absence of current and relevant "scientific" data on the subject. 74-24 (Cont.)

Section 3.24 mentions the "sociocultural" and ceremonial usage of subsistence hunting and fishing, however the section only deals with the *economics* of subsistence, ignoring its sociocultural importance that is central to cultural lifestyles. More in-depth consideration of the total impacts to the cultures, family structures, spiritual, ceremonial, clothing, customs, traditions, and other uses should be included for a complete picture of subsistence losses to cultural impacts. 74-25

DEIS also fails to consider Alaska constitutional rights granting priority for subsistence practices as enacted under AS 16.05.940, choosing instead to follow the federal Title VIII of ANILCA, 16USC § et seq. that grants a subsistence priority to rural residents over nonrural residents in subsistence activities on federal public lands. Urban residency, as we know, does **not** preclude subsistence harvesting of fish and game, and, therefore, the statistics gathered for this DEIS are skewed incorrectly omitting Native urban residents from consideration. 74-26

The DEIS fails to adequately consider the secondary impacts of TAPS infrastructure on subsistence.

Increased sport fishing and gaming as a result of TAPS facility and roads development, represents a challenge to increasingly distressed and limited subsistence resources. This "secondary" impact is not addressed, nor is mitigation suggested. On the contrary, language used in the document implies continual increases in usage from 74-27

[5] See, e.g., P. Wheeler's work and contracts with ADF&G.

sportsmen and other nonlocals. No plan is in place to prohibit, regulate, or mitigate negative impacts to subsistence users. 74-27 (Cont.)

Section 3.24.2, which is supposed to address access to subsistence resources, doesn't really say anything. This section needs to be strengthened to include a discussion and analysis of specific data. No input was apparently received from villagers, or if so, it has not been incorporated in the DEIS. 74-28

Section 4.2.1 lists numerous environmental impacts that also impact subsistence activities, but the connection is not adequately addressed. Instead the known impacts and potential impacts are simply recited: "The mere existence of TAPS facilities has a continuous impact.... Both ROW facilities and off-ROW facilities have been and will continue to be sources of potential impact.... Other impacting factors include the potential alteration of animal habitats and migration patterns. Altered habitats and migration patterns also have continuing impacts on subsistence and on commercial and sport hunting and fishing." 74-29

As previously noted, the DEIS lumps sport and subsistence activities apparently because those two categories were not separated for data recording until recently by ADF&G, so they cannot separate the data. But as discussed above, sport and subsistence are competing uses. Subsistence uses may be harmed by certain impacts of the TAPS infrastructure – such as increased access for urban hunters – that may benefit sport hunters. To the degree that there are known differences, these categories of resource users and the TAPS impact on them need to be separately examined in the final EIS. 74-30

In section 4.3.15.1 the DEIS details how the construction of the TAPS, including the ROW, pump stations, and Valdez Marine Terminal resulted in the elimination of 74-31

extensive areas of terrestrial and wetland communities. It also notes that this loss and alteration of terrestrial and wetland vegetation communities would persist throughout the renewal period. This statement without an analysis of its impacts on the loss of subsistence species habitats does not address a known set of direct and indirect adverse impacts.

74-31 (Cont.)

Summary and conclusions from subsistence analysis in villages

Sixty to ninety percent of the populations of the Interior Athabascan villages that border or are affected by the TAPS ROW rely upon subsistence, with some areas reaching as much as 92% provisioning from subsistence activities. All of the communities report disruptions as a direct result of the TAPS ROW, or as a collateral effect such as competition for subsistence resources from TAPS employees (although they are specifically prohibited by contract from using these resources) or non-locals who can now gain easy access because of roads or clearings built to support TAPS operations. In spite of the prevalence and importance of subsistence to these communities, AND to urban residents who rely on subsistence practices (omitted in the document), the DEIS fails to consider these needs seriously by completing a well-rounded study.[6] The rationale for this lack of thoroughness is repeatedly cited as a "lack of data available" (*cf.* Section 3.24.3); however, the sources used – namely AF&G statistics, mostly gathered two decades ago – preclude an analysis based on current and relevant information. The DEIS compounds its available information problem by stating that: "Information from interviews and testimonies on subsistence concerns is offered to help fill gaps in more conventional data, but this information in most cases never has been confirmed

74-32

[6] Note: See AFN's comments, at p. 6: "The DEIS takes great pain to gloss over the problems rural residents face in harvesting subsistence resources."

independently by systematic studies."[7] TEK is thus dismissed as "unreliable" or "unsystematic" even though it may be as reliable as the scientific data. The DEIS states, "This data problem is particularly unfortunate, because during public scoping, several individuals pointed to reduced access to caribou, primarily because of changing or disrupted migration patterns, as being an important TAPS-related impact on subsistence." And further, "Data also indicate that caribou are sensitive to human activity, particularly to movement by people on foot or in some type of vehicle." Yet the DEIS does not usefully consider this information in its final analysis. Paradoxically, the report acknowledges in many ways that subsistence is "an important source of food for many rural Alaskans" in some sections (e.g. 3.24-27), but then it summarily dismisses these subsistence-based populations because general population ratios make these smaller figures appear less significant. 74-32 (Cont.)

The following is a list of specific defects in the village-by-village commentary of Annex D:

- The DEIS failed to gather relevant data or perform a meaningful analysis regarding subsistence impacts in the villages most directly affected by the pipeline; 74-33
- No information was researched or included on seasonal changes, bag limit patterns, area changes, and other impacts to subsistence patterns; 74-34
- No baseline information regarding proximity of game prior to TAPS is established for comparison; 74-35
- "Perceived impacts" are mentioned, but there is no follow-up in attempt to give credibility for these perceptions; 74-36

[7] Has the "scientific" or "conventional" data been independently confirmed?

- Data is incomplete. Villages and communities within urban or urban-influenced areas were excluded, when in fact the greatest impacts were experienced by those nearer to urban areas (areas such as Fox, Salcha, etc.). People were forced to go further for their subsistence resources; 74-37

- Additional security concerns (9/11/01) now will expand TAPS impacts even further into hunting and fishing areas. This is not even mentioned; and 74-38

- Data utilized by the DEIS is obsolete, it was mostly compiled in the 1970s and '80s. 74-39

The DEIS fails to draw a reasonable connection between the relevant facts and the sociocultural consequences that affect the human environment.

The population figures recited in section 3.25.1 of the DEIS indicate nearly 20% of the State population is of Native heritage who "rely heavily on harvesting available resources for subsistence" and close to half of the communities likely to be affected by TAPS operations (19 of 45) have over 30% Native populations. Despite these significant statistics on the Native populations likely to be impacted by the TAPS ROW renewal, relevant concerns are not reflected in the sections on subsistence (see above). Instead, the DEIS evades analysis of the direct and indirect adverse impacts on subsistence by noting that subsistence activities comprise only 2% of the State population's provisioning. 74-40

This off-the-cuff dismissal is a reflection on the methodology and analysis of the DEIS, especially on subsistence issues. It also indicates that the DEIS preparers failed to parse out the regional nature of commercially available foods and commercial harvests of fish and game. The final EIS should examine the regional dependence on subsistence foods along the TAPS corridor and not rely on gross statistics that are heavily skewed by the habits and preferences of urban Alaskans, particularly Anchorage residents, who are

neither subject to the adverse impacts of the TAPS ROW renewal nor dependent on subsistence foods. 74-40 (Cont.)

The last sentence of section 3.25.1-2 is offensive and ethnocentric, it implies that Euro-American cultural systems are "more" evolved than Native cultural systems and suggests that Alaska Natives are therefore evolving (or perhaps should be evolving) toward the standards and modes of Euro-American culture. This reference exemplifies the Euro-American ethnocentric cultural bias throughout the document, and the *a priori* assumptions present that assume a singular, linear, pre-determined path toward western industrialization. It would be more accurate to say that "Native cultural systems have been damaged and their natural development has been perilously disrupted during the past century or two." If the EIS is going to use the term "evolved" it should be defined. 74-41

Approximately two pages of the DEIS deal with human socio-cultural impacts, mitigation, and scenarios. This is entirely inadequate. The result is that consideration of the human impact of the TAPS ROW renewal on Native cultures is essentially brushed aside. 74-42

Section 4.4.4.15 presents a cavalier attitude toward losses or damages to sociocultural structures that may be suffered during, or as an aftermath of, accidents or spills. Many tribal communities now are experiencing precarious continuity in their cultural traditions due to impacts to subsistence resources, pressures for lifestyle changes, and disruption of value systems. Further disruptions that might require relocation, loss of traditional fishing/hunting grounds, loss of subsistence resources, or departure from ancestral locations would aggravate and gravely endanger tenuous cultural systems. Re-grouping in another location, or expenditure of resources and energies to correct disasters 74-43

could push some groups into the necessity for urban relocation, essentially jeopardizing continuity of the group's life-ways and value system. Similarly, less obvious impacts, such as undiscovered groundwater contamination, could quickly deplete communal human resources and Elders' counsel with medical expenses, care-giving for the ill, and infrastructure needs for cleanup. As has been stated by scholars, the loss of an Elder to a tribal community is the equivalent of losing a major library to Euro-American academic communities. Eliminating the culture bearers (elders) by the upheaval of moving, or debilitating accidents and illnesses, is tantamount to cultural annihilation. 74-43 (Cont.)

Cultural resources stand a high probability of being significantly impacted or obliterated in the case of a major spill or catastrophic event. But the DEIS fails to factor in the fact that the quantity of cultural resource heritage sites is considerably less in the recordation of Native histories, hence a loss would be many-fold greater in proportion to the loss of a library which could be duplicated and regenerated again. There would be no possibility of regeneration of these cultural losses. Instead of addressing the potential impacts along with possible mitigation measures in Section 4.4.4.16, the DEIS assures that such grave events are "very unlikely" and that APSC has an archaeologist standing by for such a case. This is grossly inadequate treatment of a known impact issue. 74-44

Summary and general comments

In spite of the considerable history and background information given in the DEIS on the cultures and villages along the TAP ROW, there is little attempt to analyze impacts to these cultures and villages in the context of their life ways and cultural systems. For instance, the DEIS makes no attempt to incorporate TEK or other information available from affected villages – that information is summarily discredited. 74-45

Worse still, the entire document fails to reach an acceptable degree of inclusivity and objectivity toward these cultures. The document appears to be a "one-size-fits-all" recitation of simple facts that does not fit the particular circumstances, cultures, and needs of Native Alaskans from the Interior region. By it's size, the DEIS appears to be an impressive academic exercise, but the impacts of the TAPS ROW strongly affect real people, real Alaskans, and real concerns that seem to be swept under the rug of proformity and procedures. The concerns and needs of peoples of Interior Alaska are not adequately considered nor addressed in the DEIS, especially regarding Subsistence concerns and cultural survival. 74-45 (Cont.)

Recommendations:

- We ask that appropriate consideration and protection be given to cultural resources, and preventative measures be included in the EIS for "just in case" scenarios; 74-46
- The DEIS should be reviewed and revised by professionals experienced in recognizing and understanding cross-cultural biases. Also, Argonne National Labs should provide a mechanism for meaningful input by Native voices in all phases of planning and executing the formalization of the EIS; 74-47
- The DEIS should incorporate detailed information on traditional cultural property data gathering that has been ongoing in the TAPS ROW areas, as well as develop a projection for an estimated amount of sites that will be recovered based upon data currently available; 74-48
- Because of the significant known and possible adverse impacts, the thirty-year TAPS renewal period should be accompanied by adequate mitigation requirements. 74-49

- That during the renewal period, sincere efforts be made to provide baseline data for subsistence; including information about cultural significance of subsistence resources; 74-50

- Data gathering and systematization of Traditional Ecological Knowledge should be carried out and incorporated into the EIS process; 74-51

- Archaeological and other cultural resource inventories should be vigorously pursued to ascertain traditional cultural properties; 74-52

- Appropriate treatment of all potentially affected cultural and historical sites should precede accidents and spills, emphasizing preparedness and mitigation of adverse effects; 74-53

- Safety and health concerns should be researched and documented; 74-54

- Cultural disruptions as a result of TAPS should be documented, integrated into its environmental calculus, and included in the EIS; and 74-55

- Mitigation plans for significant impacts should be addressed and more thoroughly analyzed in an interdisciplinary fashion in the final EIS. 74-56

Michael Smith, Staff Researcher, Tanana Chiefs Conference, Inc. – Wildlife & Parks Department

Subsistence activities have been the cultural and spiritual center of Alaska native life for centuries. The unique knowledge of the land and it's resources that Alaska's Natives possess, provides them with an unparalleled understanding of the effects that the TAPS has had on their environment. This knowledge and expertise has provided them 74-57

the unique understanding that since the construction of the TAPS their lifestyle, and the fish and game upon which they depend, has been profoundly affected.

Federal law requires the TAPS EIS to scope, analyze, and determine consequences that TAPS has had on subsistence resources and other human activities. The Mineral Leasing Act of 1920, the Alaska National Interest Land Conservation Act (ANILCA) and the Federal Grant of Right-of-Way itself have specific requirements for analysis and, if needed, mitigation efforts to protect subsistence users and resources.

The DEIS seeks to fulfill these requirements by establishing the following five categories on which to base its evaluation:

1. A decline in the population or amount of harvestable resources;
2. Changes in the geographic distribution of subsistence resources;
3. Competition for potential subsistence resources;
4. Disturbance of subsistence activities; and
5. Constraints on access to subsistence resources.

The DEIS states that any one of the previous stated categories or any combination of them "might" result in an adverse effect upon subsistence resources or users. It then goes on to qualify its evaluation by declaring that as a result of limited information or data the preparers could not "assign particular consequences to the TAPS as opposed to some other cause" and that they "could not determine the net effects of potential consequences". As a result of these "problems" the DEIS states that it could not make a "conclusive final evaluation", yet it then goes on to use this lack of data to conclude – in a circular and erroneous manner – that with regard to the five categories, there will be little or no impact upon the subsistence resources potentially affected by the TAPS.

Additionally, there are a number of other problems associated with the analysis used by the DEIS to arrive at the conclusion that there has been little or no impact upon subsistence resources. It is a statistical fact that any comparative analysis must first have an established baseline on which to base the comparison. The DEIS has no such scientific baseline and explicitly refuses to incorporate TEK as a form of baseline information and thus is suspect and in no way offers realistic or accurate comparison. Information used by the DEIS was acquired from ADF&G using the definition of a subsistence user under state law which makes no distinction between urban and rural users as well as combining sport and subsistence users into one category. This treatment dramatically alters the outcomes. The DEIS, while recognizing the importance of Traditional Ecological Knowledge and the availability of such data, refuses to offer any credence to it by declaring it to be unscientific and unverifiable, and thus ignoring it. While this knowledge may be unscientific and unverifiable it offers the most practical information, since there is no technical data available, as to any impact, and, therefore, should be used with or without the availability of other information or data.[8]

74-58

Conclusion

The DEIS falls short in several regards, most particularly in its inadequate treatment of subsistence, its failure to gather current and relevant information, and its lack of consideration of significant, but subtle, secondary effects on the human environment. It is our hope that the final EIS addresses these failures of the DEIS.

74-59

[8] Please note that the DEIS also picks from the Federal or State definition of subsistence and its associated information when convenient.

In the big picture, given the controversy behind the initial proposal to construct the TAPS and the aboriginal land claims settlement that paved the way for actual construction of the TAPS, there is a need for additional mitigating measures that adequately assess Native issues. The most effective means by which that may be achieved is to designate a Native Alaska representative in the JPO. This should include a member on the executive committee and staffing for that person. The purpose of this representation would be to improve the oversight of the TAPS with regard to compliance issues such as Section 29 and Section 30 of the TAPS agreement, and other relevant issues. This level of representation will also improve the institutional culture regarding the management of the TAPS among the pipeline owners, state and federal agencies, and Alaska Natives. 74-60

Responses for Document 00074

00074-001: The decision to prepare an EIS was based on the consideration that renewal of the Federal Grant of right-of-way constitutes a major Federal action. The decision to prepare an EIS does not mean that the BLM recognized that significant environmental impacts had already been recognized and analyzed. The BLM released the DEIS for public comment to ensure that all aspects of the analysis would be subject to public review and comment, including comments on the issues and analyses presented in the EIS. The FEIS has addressed comments on the issues and analyses received from the public.

00074-002: The EIS addresses the human environment in several areas, including transportation, economics, subsistence, sociocultural systems, cultural resources, land use, recreation, wilderness, aesthetics, and environmental justice. In so doing, the EIS made extensive use of a variety of primary and secondary sources of data. Among the primary sources of data used were Alaska Department of Fish and Game subsistence surveys, which included traditional ecological knowledge, and a number of taped interviews with Alaska Natives and rural non-Natives pertaining to subsistence and related issues. In April 2002, project personnel contacted the 21 directly affected villages/tribes to explore the possible acquisition of additional information related to traditional ecological knowledge and traditional cultural properties. To date, no response to those certified letters has been received.

00074-003: The limitations of the early archaeological surveys are addressed in Section 3.26.2. A synthesis of all archaeological research conducted along the pipeline appears in Potter et al. 2001, which is cited in Section 3.26.2 of the EIS. A programmatic agreement is being developed for cultural resources associated with the TAPS, as stated in Section 4.3.22. Beyond providing summary data, the EIS is limited in terms of how much specific information (particularly locational) it can provide on cultural resources because that information is protected under the Archaeological Resources Protection Act.

00074-004: Public scoping comments provided the BLM with a wide breadth of information, issues, and concerns. The BLM, as required under NEPA regulations, carefully considered the material received under public scoping and developed the impact analysis to reflect those issues. In addition, the BLM specifically responded to alternatives presented by the public Section 2.5 of the EIS. The BLM is not required under NEPA to provide a specific response to all the scoping comments received by the agency.

The BLM clearly understood the request presented by the TCC and stands by the decision not to allow TCC to become a cooperating agency. Argonne National Laboratory has no authority to grant cooperating agency status to TCC.

00074-005: The BLM clearly understood the request presented by the Tanana Chiefs Conference (TCC) and stands by the decision to not allow TCC to become a cooperating agency. Argonne National Laboratory has no authority to grant cooperating agency status to TCC.

00074-006: The Native Allotment Act of May 17, 1906, as amended, was repealed by the Alaska Native Claims Settlement Act on December 18, 1971. The Agreement and Grant of Right-of-Way (ROW) for the Trans-Alaska Pipeline System (TAPS) took effect on January 23, 1974. Under the Mineral Leasing Act, the Secretary of the Interior did not have authority to grant the TAPS ROW across lands held in trust for an Indian. Native allotment applicants and certified allotment holders had prior rights that the federal government could not make subject to the TAPS.

Therefore, the federal government could not and did not authorize the TAPS across lands that were subject to a Native allotment application or that had been certified as a Native Allotment. The pipeline owners could only acquire access across the allotments by purchase, subject to approval by the Bureau of Indian Affairs, or by condemnation under the State of Alaska's laws.

The TAPS crosses seven Native allotments.

The pipeline owners acquired access rights across five Native allotments from the allottees. The Bureau of Indian Affairs approved these acquisitions. These are private access rights and are not subject to federal renewal of the TAPS ROW.

The pipeline owners acquired access across one Native allotment by condemnation under Alaskan Statute. The owners acted as agents for the State of Alaska. The access rights were acquired for and belong to the State of Alaska; they are not subject to federal renewal of the TAPS.

The pipeline owners are negotiating access rights from one certified allotment holder. They will acquire private rights or go to court and acquire access rights by condemnation that will belong to the State of Alaska. Neither will be subject to federal renewal. The original TAPS ROW grant did not and TAPS renewal will not authorize the TAPS on this allotment.

Finally, all the above Native allotments have been certified. The federal land status records do not show any Native allotment applications on the TAPS. Moreover, the effects of renewal on all lands along the pipeline—public, private, and Native allotments—are evaluated in the EIS.

00074-007: Many regulatory and statutory requirement relating to Native (e.g. Title 25) are not specifically listed in the EIS. The issues raised relate to the process BLM used in determining renewal or nonrenewal of the Federal Grant. The EIS only defines terms pertinent to the evaluation of the proposed action and alternatives to that action. Native allotments are not examined extensively because none of the access rights are subject to federal renewal of the TAPS ROW.

00074-008: The Certificates of Allotment ("deeds to the allotment owners") were not issued subject to the TAPS ROW because the TAPS ROW was not granted on Native allotments. BLM could not reserve a TAPS ROW on the Native allotments because the allottees' rights predate TAPS. The Mineral Leasing Act prohibits the Secretary of the Interior from granting ROWs on Native allotments because they are trust lands. Rights not granted cannot be reserved.

00074-009: Access across Native allotments in the Tanana Chiefs Conference (TCC) region was acquired legally. Court-approved compensation was awarded either by condemnation or by negotiation, as approved by the Bureau of Indian Affairs.

00074-010: The Secretary of the Interior did not grant TAPS ROW across Native Allotments or reserve the TAPS ROW in Certificates of Allotment because, the allotments are trust lands not subject to Mineral Leasing Act ROWs and the allottee's rights predate TAPS. The federal government cannot renew TAPS on Native allotments anymore than it can on private lands such as homesteads, home sites, and trade and manufacturing sites.

Access across one parcel was acquired by condemnation. Condemnation is approved by the court; the Secretary of the Interior does not have authority to approve or deny access acquired by condemnation.

00074-011: BLM did not grant the TAPS ROW across Native allotments and is not renewing the TAPS ROW across Native allotments. Access issues on Native allotments are negotiated between the allottees, their representatives and the pipeline owners.

00074-012: Issues about the TAPS on Native allotments are resolved between the allottees, their representatives, and the pipeline owners. The BLM has not reserved TAPS across Native allotments and does not manage TAPS on Native allotments.

00074-013: The BLM has conducted extensive government-to-government consultations with affected Alaska Native villages and tribes (see Section 5.3). The BLM stands by its decision to not allow cooperating agency status for Native Alaska tribes and villages. Section 4.3.23.1 of the FEIS contains a section on Native-owned lands.

00074-014: Neither Section 29 nor the current Alaska Native Utilization Agreement specifies that residents of Minto will receive training in oil pipe response. Thus, their fulfillment has nothing to do with activities following the incident near Livengood.

How the APSC meets their Section 29 hiring targets is beyond the scope of this EIS.

00074-015: The current procedures used by the APSC to respond to spills were considered in the DEIS. Approaches to hiring, training, and deploying spill response personnel in the future is beyond the scope of the EIS.

00074-016: Section 29 is a specific provision in the Federal Grant of Right-of-Way for the TAPS that addresses aspects of Alaska Native employment on the TAPS. The EIS considers Section 29 under impacts of the proposed action on sociocultural systems (see Section 4.3.21). This is consistent with the purpose of this document, which is to evaluate environmental impacts of the proposed action and alternatives. Modifications to Section 29, as well as various provisions for monitoring compliance and penalties for non-compliance, are beyond the scope of this EIS.

00074-017: Thank you for your comment.

00074-018: The purpose of an EIS Statement is to provide decision makers with an accurate and concise discussion of the likely environmental consequences of a proposed action and its reasonable alternatives. It should highlight the most important consequences. The EIS discusses the effects of TAPS ROW renewal on sociocultural systems throughout the environmental consequences section. Likely impacts on sociocultural systems are discussed in Sections 4.3.21, 4.4.4.15, 4.5.2.21, 4.6.2.21, and 4.7.8.2. Effects on subsistence, a vital component of sociocultural systems are found in Sections 4.3.20, 4.4.4.14, 4.5.2.20, 4.6.2.20, and 4.7.8.1, as well as Appendices D and E. In addition there are discussions of consequences on the economy, land use, recreation, wilderness, aesthetics, and environmental justice. All these topics are part of sociocultural systems. In short, there is considerable information provided in the EIS regarding the likely effects of TAPS ROW renewal on sociocultural systems. In the interest of accuracy, the commentor should re-count the number of pages employed in this discussion, which is well in excess of the total (two) claimed in the comment. Revisions in the FEIS have expanded virtually all sections of the EIS dealing with human impacts in general, and Alaska Natives in particular.

00074-019: For the DEIS, a community-based, or village-based, evaluation of subsistence data was conducted based on the best available statistical data and detailed geographic descriptions of traditional use areas. Although the absence of longitudinal statistical data on subsistence practices, beginning before the TAPS was constructed and extending to the present, precluded a more definitive assessment of possible impacts of the TAPS on subsistence, available data do enable the identification of TAPS-associated activities that have a potential impact on this activity. As discussed in greater detail in Sections 3.24 and 4.3.20 of the FEIS, the largest sources of potential impacts on subsistence resources have nothing to do with the TAPS. Revisions of Section 3.24.4 provide additional evaluations of data on subsistence and sport harvests, including an approximation of how the two have changed over time in the vicinity of the TAPS.

In general, the EIS attempted to provide a thorough, balanced picture of potential impacts of the proposed action and alternatives based on the information available. That information included an explicit consideration of traditional ecological data, in the form of comments provided to various members of the team preparing the EIS as well as taped interviews of Alaska Natives and rural Alaskans pertaining to subsistence. Throughout the EIS process the BLM sought and incorporated additional traditional ecological knowledge from all parties, especially federally recognized Tribes and other Native organizations (including Tanana Chiefs Conference). For example, in April 2002 the 21 directly affected tribes associated with the TAPS were contacted by certified letter to invite their participation in providing additional traditional ecological knowledge explicitly associated with subsistence issues in the EIS. To date, no response has been received to any of those letters.

00074-020: There are many possible definitions of subsistence, in general and particularly in Alaska where the issue of its official designation has generated considerable attention over the past few decades. This EIS is a federal document, and as such, the federal definition of subsistence was used.

Sections 3.24 and 4.3.20 have been revised to discuss the multiple roles of subsistence in the Alaska Native and rural non-Natives more completely. Text in Section 3.24 also has been modified to note that nonrural Alaskans also may rely on harvesting wild resources, though in keeping with the federal definition, this is not identified as subsistence. Contrary to the claim made in this comment, there is no evidence to indicate that the TAPS has had led to change in subsistence use areas. Although the two sections named above acknowledge that there have been impacts to subsistence, they also point out that these impacts tend to be due to many other causes other than the TAPS (which available evidence indicates has had only a small impact).

00074-021: The cited section attempts to provide a rough sense of the economic importance of subsistence resources, and acknowledges at the onset of the second paragraph in that section the difficulty in measuring this importance. It makes no attempt to analyze economic contributions at the household level, both because the analysis conducted is at a much larger scale and because adequate data do not exist to support such an analysis for the directly affected tribes. The range presented was to preempt complaints that the initial figure was too low, and provides the conversion factor used — again to provide a rough sense of the economic value of subsistence resources in Alaska.

The cultural importance of subsistence, one of the most important contributions of subsistence to Alaska Natives, is not the issue upon which Section 3.23.5 focuses. Such considerations appear in Sections 3.24 and 3.25, and are carried through the impact analyses for subsistence (e.g., Sections 4.3.20, 4.4.4.14, and 4.7.8.1).

00074-022: The Tribes included in the analysis of subsistence (and sociocultural systems) are those Alaska Native Tribes who likely would experience impacts in several issue areas: subsistence, employment, culture, and land selection (see revised versions of Sections 3.25.1.1 and 5.3). This list includes Tribes well removed from the TAPS (more than 200 mi away, in some cases). The EIS also considered subsistence in other rural communities in the vicinity of the TAPS and likely to experience TAPS-related impacts, though their evaluation was limited to those for which subsistence data exist (see Section 3.24.2). Subsistence data presented in the expanded version of Section 3.24.3 provide additional insights on possible impacts in communities close to areas heavily exploited by sport hunting and fishing.

00074-023: In response to public comments on the DEIS, the subsistence analysis was reexamined carefully. The revised version of Section 3.24 of the FEIS discusses a variety of subsistence data, including community harvest data, approximated subsistence harvests of selected game by geographic area, information on resource populations (see also Sections 3.19, 3.20, 3.21, and 3.22), and traditional ecological knowledge. Sections 4.3.20 and 4.7.8.1 refer to studies that have focused on impacts related to the oil industry on subsistence, thus providing an interpretation of key situational data on subsistence. The available data are adequate for purposes of evaluating impacts of the proposed action and all alternatives considered in this EIS.

00074-024: Noting an absence of independent confirmation was not intended as a judgmental statement, but rather as a statement of fact. Although the U.S. Fish and Wildlife Service has had a program to collect traditional ecological knowledge, that program has not provided independent confirmation of the traditional ecological knowledge references cited in the DEIS. Traditional ecological knowledge was not dismissed, casually or otherwise, but rather used to augment more conventional data, such as the statistics collected by various government agencies. The text in Section 4.3.20 has been revised to discuss the role of traditional ecological knowledge more clearly with respect to causality.

00074-025: Section 3.24, as well as sections discussing subsistence impacts (e.g., Section 4.3.20, 4.4.4.14, 4.7.8.1), have been revised to discuss the range of subsistence roles more explicitly. Moreover, Section 3.25 and other parts of the document dealing with sociocultural systems have been modified to acknowledge the role of subsistence (and subsistence impacts) in the broader context of such systems.

00074-026: There are many possible definitions of subsistence, in generally and particularly in Alaska, where the issue of its official designation has generated considerable attention over the past few decades. This EIS is a federal document, and as such it uses the federal definition of subsistence. The FEIS notes that some urban residents also harvest and use subsistence resources for personal and traditional uses (see Section 3.24.1).

00074-027: Original versions of Sections 4.3.20, 4.5.2.20, and 4.7.8.1 all discuss indirect or “secondary” (as the comment terms them) impacts of TAPS-related roads and infrastructure; revised versions of each section elaborate on such impacts. The magnitudes of these impacts are anticipated to be very small. Mitigation measures which would have a significant effect on subsistence resources, or competition for these resources, involve steps such as changes in predator management, the management of commercial fishing, the management of sport hunting and fishing in certain geographic areas—all of which involve government agencies other than those involved here and which are beyond the scope of this EIS.

00074-028: Section 3.24.2 does discuss the topic of access to different categories of subsistence resources, the importance of this topic is noted in the final paragraph to the section. Some information has been received from villages and incorporated into the EIS. In an attempt to acquire additional information from Alaska Natives, representative of the 21 directly affected tribes/villages were contacts by certified mail in early April specifically to solicit information on traditional ecological knowledge pertaining to subsistence. Such information could have included issues associated with access. To date, no response has been received from any of the tribes.

00074-029: The purpose of Section 4.2.1 is to identify those factors associated with the TAPS that could potentially affect the various resources considered in the EIS, including subsistence. Identifying more specific connections between these impacting factors and subsistence is left to those sections of the EIS that address such matters specifically—such as Section 4.3.20 for impacts to subsistence under the proposed action.

00074-030: The comment indicates some possible confusion by the commentor concerning Section 3.24.4. Game harvest data maintained by the Alaska Department of Fish and Game do not distinguish between recreational and subsistence harvests, regardless of the year. The revised version of that section uses an approximate distinction to provide a sense of sport harvest pressure. Section 3.24.4 in the FEIS discusses approximations of patterns of sport harvests versus subsistence for areas within the subsistence use areas for rural communities considered in this EIS. These data indicate varying degrees of competition, with units particularly close to populated areas (e.g., Fairbanks) and near highways showing evidence of greater sport harvests.

As the revised version of Section 4.3.20 now states more clearly, many impacts associated with opening the Dalton Highway to public use are mistakenly associated with the TAPS. That decision was made by the state, based on a road that they owned and managed, and is not associated with the pipeline.

00074-031: Sections 4.3.16, 4.3.17, and 4.3.18, immediately following the section cited in the comment, consider impacts due to habitat loss, alteration, or enhancement for fish; birds and terrestrial mammals; and threatened, endangered, or protected species; respectively. In no case are long-term, negative impacts anticipated at a population level.

00074-032: The EIS presents data on participation and harvest levels, which should not be equated with levels of reliance. TAPS employees are prohibited from hunting or fishing while on site, be they working or not, but are not prohibited from these activities during off-periods provided they have obtained the proper license(s). The decision to restrict the evaluation of subsistence impacts to rural residents, which is consistent with the federal definition of subsistence in Alaska, was made because this document is being prepared by a federal agency. The EIS has completed as well-rounded a study as possible, in the process considering both the statistical data as well as traditional ecological knowledge pertinent to the study. In April 2002, preparers of the EIS met with Alaska Federation of Natives and Tanana Chiefs Conference officials and informed them of data inadequacies, among other things appealing to these organizations to provide any additional data (or recommendations on where such data may be acquired) that the EIS team may have overlooked or otherwise been unaware of. No substantive data were identified. In addition, all 21 directly affected tribes were contacted by certified mail in April 2002 to discuss additional traditional ecological knowledge pertaining specifically to subsistence. To date no response has been received to any of those letters.

It is inaccurate to state or otherwise suggest that the EIS considered traditional ecological knowledge "unreliable." On the contrary, the EIS considered all pertinent types of information in evaluating subsistence, both in the interest of thoroughness and because of the importance of this topic to rural Alaskans (including Alaska Natives). In characterizing the logic used in the EIS assessment, the comment fails to note conflicting evidence, such as the absence of declining populations of subsistence resources for fish, birds, and terrestrial mammals during the empirically observed operation of the TAPS (see Sections 3.19, 3.20, and 3.21). Just as we felt obliged to consider traditional ecological knowledge, we also felt obliged to consider data that were not in the realm of traditional ecological knowledge. The assessment of impacts under all alternatives and the cumulative case stated available evidence as clearly as possible, as well as the difficulty in using them to come to particular conclusion. The conclusion stated was what preparers of the EIS felt the data supported.

00074-033: The EIS compiled data from existing sources that provide quantitative and qualitative information of subsistence patterns on communities in the vicinity of the TAPS, and related causes of impact on subsistence in those communities. Information consulted included taped interviews of Alaska Natives and rural non-Natives discussing subsistence and related issues, and other sources of traditional ecological knowledge (including statements made during public scoping for this study).

00074-034: Section 4.3.20.2 has been revised, and includes a brief discussion of possible impacts of changing bag limits and changes in seasons, which is a more logical location for this discussion than Appendix D (which contains descriptive data).

00074-035: Data on specific game locations (and numbers available) are unavailable for years prior to TAPS construction. Population data on several species are presented in Sections 3.19, 3.20, 3.21, and 3.22. Available information from traditional ecological knowledge concerning proximity of game and its possible relocation due to the TAPS and other activities is presented in Section 3.24.1 for certain rural communities.

00074-036: Traditional ecological knowledge, such as the judgments of individuals about ecological variables, is presented in Section 3.24.1.1 as well as Appendix D. It was assumed to be credible, with certain limitations, as discussed in Section 4.3.20. Considerable attempts were made to "follow-up" the assessment of these data, in the form of evaluating subsistence from other perspectives and with other information (including the statistical and cartographic information presented in Appendix D).

00074-037: The EIS used the current federal definition of subsistence, as the document is being prepared by a federal agency. This definition excludes nonrural settings, as defined by the Federal Subsistence Board. Moreover, subsistence harvest data for individual communities tend to be unavailable for nonrural settings—including Fox and Salcha.

The revised version of Section 3.24.4 includes an approximation of subsistence versus sport harvests in uniform coding units associated with subsistence use areas for the rural communities examined in this EIS, as well as a discussion of increased pressures on resources in these areas (which include areas near urban settings). Section 4.3.20 has been expanded to include an additional discussion of impacts on subsistence.

00074-038: As discussed in revised text in Section 4.3.20, TAPS-related restrictions on subsistence are extremely small. Additional constraints on access to hunting and fishing areas following the attacks on September 11, 2001, in the form of further restrictions on use of access roads, are noted in Section 4.3.20. However, the effect of these constraints would be lessened by impacts on hunting and fishing areas by making them less accessible to sport hunters and anglers from the main road system.

00074-039: Most of the statistical data presented were collected by the Alaska Department of Fish and Game in the 1980s and 1990s. Although dated, they are the best, most detailed village-specific data available on subsistence harvest levels and participation rates for individual subsistence resources. Other statistical data presented were collected as the late 1990s and additional data on subsistence have been added to the FEIS that date to 2001 (Section 3.24.4). Traditional ecological knowledge presented dates primarily from the 1990s, though some also was obtained by members of the EIS team in the past year while developing the impact assessment.

In all cases, the EIS presented the best and most appropriate data available. Recognizing data inadequacies, in April 2002 preparers of the EIS met with Alaska Federation of Natives and Tanana Chiefs Conference officials and informed them of data inadequacies, among other things appealing to these organizations to provide any additional data (or recommendations on where such data may be acquired) that the EIS team may have overlooked or otherwise been unaware of. No substantive data were identified. In addition, all 21 directly affected tribes were contacted by certified mail in April 2002 to discuss additional traditional ecological knowledge pertaining specifically to subsistence. To date no response has been received to any of those letters.

00074-040: Although Section 3.25.1 does discuss statistics on total population and Native population, neither that section nor any other in the EIS states that all of these individuals "rely heavily on harvesting available resources for subsistence," as stated in the comment. No data presented in the document supports this assertion. The EIS did not evade analysis of direct and indirect impacts, but rather did the best possible analysis with all pertinent data available—including both traditional ecological knowledge and statistical data. The figure of 2% of total fish and game harvested being used for subsistence was presented to provide a relative sense of how subsistence harvests compare to other forms of harvest, including sport harvests. There is no way of knowing if this amount of subsistence harvest is equivalent to the State's "provisioning." To avoid the inherent problems of using general statistics and other forms of data to examine a practice that differs greatly among rural communities, the EIS presented village-specific subsistence harvest, participation, and use data to incorporate local differences. Document preparers felt that participation and use statistics better reflected the importance of subsistence in individual communities than availability of commercial food sources. Data reflecting habits and preferences of urban Alaskans are not apparent in the EIS.

00074-041: The final sentence of Section 3.25.1.2 in the DEIS refers to the emergence of Alaska Native political awareness, as a further outgrowth of the Alaska Native Claims Settlement Act. It was not intended to be offensive or ethnocentric, and makes no implications about Euro-American cultural systems level of development with respect to Alaska Native (or any other) sociocultural systems. The terms "evolution" and "evolve" in this EIS with respect to culture refer to change, with neither positive nor negative connotations nor implication that sociocultural

00074-042: The EIS addresses impacts to Native sociocultural systems as a whole in Sections 4.3.21.1, 4.4.4.15, 4.5.2.21, and 4.6.2.21. Native subsistence a core component of Native sociocultural systems, with implications far beyond economics, is treated in Sections 4.3.20, 4.4.4.15, 4.5.2.20, and 4.6.2.20, along with Appendices D and E. Cultural resources including impacts of areas of cultural importance to Alaska Natives are treated in Sections 4.3.22, 4.4.4.16, 4.5.2.22, and 4.6.2.22. In addition, effects on Native cultures are also taken into account in other topical areas. The EIS examines those cultural areas most likely to be affected by TAPS renewal and presents them to the decision makers in a concise manner as part of a complex set of factors likely to be affected by TAPS renewal.

In part because of comments on the DEIS, all of the above issue areas have been revisited carefully in the process of developing the FEIS. As appropriate, revisions have been incorporated into the text of the FEIS.

00074-043: The EIS identifies the potential for "severe" impacts on aquatic subsistence resources, and "substantial" negative consequences to sociocultural systems as a result of major spills, which was not intended to be cavalier. The commentor has specified a number of examples of these major consequences. Although the sociocultural consequences of certain accidents would be severe, the risk of any one of these unlikely to very unlikely events occurring along a particular stretch of pipeline is extremely small. The calculation of risk takes into account both the predicted frequency and the predicted severity of consequences (see Section 4.4.1.1). The chance of these scenarios occurring is extremely small, as small as 1 chance in 255 million in the case of a severe spill into a particular river (see Section 4.4.4.3). Therefore the likelihood of a substantive effect on Alaska Native cultural systems is small.

The aim of the analysis of impacts from spills to subsistence and sociocultural systems was not to discount the severity of potential accidents. By the same token, the EIS attempts to treat impacts in an evenly balanced manner. To ignore a possible reaction to a spill through relocating subsistence efforts within a region where subsistence already occurs for a particular rural community would be incomplete treatment of the impacts. Moreover, to speculate on the impact of the death of certain tribal members would require development of scenarios with no basis in any of the analyses conducted. The text in Sections 4.4.4.14 and 4.4.4.15 has been changed to discuss impacts to subsistence and sociocultural systems more completely, but those modifications do not include speculations about extremely unlikely events resulting from other extremely improbable occurrences.

00074-044: Section 4.8.3 states that cultural resources are nonrenewable. Section 4.4.4.16 states that a spill could adversely affect cultural resources. The determination of such an effect relies on combining specific spill simulations with locational data for cultural resources. Section 4.4.4.16 also states that a programmatic agreement is in place for considering cultural resources during a spill event. The APSC has generated and maintains spill contingency plans for the entire pipeline.

00074-045: The EIS attempts to address sufficient specifics for individual villages to provide a basis for the evaluation of impacts under the various alternatives considered. In the process of preparing the FEIS, sections in the document dealing with subsistence and sociocultural systems were both revised and expanded, in part to direct further attention towards community-specific concerns. One aspect of this has been to organize discussions regionally, to enable a focus on problems that may not be well-defined for each individual community, but are understood at a regional level. With regard to traditional ecological knowledge, the EIS considered that information available.

However, this type of information is not used to explain issues that likely are beyond its capability—such as conducting complex exercises in assigning causality of subsistence impacts. An appeal to all 21 federally recognized tribes considered in the EIS to provide additional information on traditional ecological knowledge, by certified letter mailed in April 2002, has received no response.

00074-046: Section 3.26 identifies the laws and procedures which protect cultural resources along TAPS. In addition to the laws and normal procedures for considering cultural resources, a programmatic agreement for protecting historic properties during emergency spill response is discussed in Section 4.4.4.16. The programmatic agreement requires spill contingency plans to be in place for the entire pipeline. The APSC maintains these plans.

00074-047: The EIS has been prepared by, and reviewed by, individuals whose professional training, work activities, research, and writing involves the evaluation of other cultures.

With regard to Native input, Alaska Native groups were contacted in April 2001 informing them that an EIS was being prepared for TAPS ROW renewal. In the year that followed, Alaska Natives were met with on numerous occasions in an attempt to incorporate Native concerns and perspectives into the EIS. This includes a meeting in April 2002 with representatives of the Alaska Federation of Natives to discuss issues in the EIS associated with subsistence, also participated in (via teleconference) by commentor. The 21 federally recognized tribes were contacted again by registered mail in April 2002 requesting input on traditional knowledge regarding subsistence and traditional cultural properties. This letter included an offer to meet with representatives of Alaska Native groups individually at the convenience of the Alaska Natives. To date, no response to these requests was received by Argonne National Laboratory, the BLM, or any other agencies in the Joint Pipeline Office.

00074-048: The EIS relied on all current information held by the Alaska State Historic Preservation Office on traditional cultural properties. No contacts made during the preparation of the EIS indicated that additional traditional cultural properties were being examined in areas that could be affected by the TAPS. Formal requests in April 2002 to the 21 federally recognized tribes identified as likely to experience direct impacts from the TAPS failed to provide any additional information on this topic.

00074-049: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide the BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the grant and lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (“Adaptive Nature of the Grant in Compliance Monitoring”), 4.1.1.3 (“Risk-based Compliance Monitoring”), 4.1.1.4 (“JPO Comprehensive Monitoring Program”), and 4.1.1.8 (“Coordinated Planning and Response to Abnormal Incidents”) for more information on the role of adaptive management as a JPO business practice.

00074-050: The revised version of Section 3.24 of the FEIS discusses a variety of subsistence data, including community harvest data, approximated subsistence harvests of selected game by geographic area, information on resource populations (see also Sections 3.19, 3.20, 3.21, and 3.22), and traditional ecological knowledge. Sections 4.3.20 and 4.7.8.1 refer to studies that have focused on impacts related to the oil industry on subsistence, thus providing an interpretation of key situational data on subsistence. The available data are adequate for purposes of evaluating impacts of the proposed action and all alternatives considered in this EIS. The acquisition of additional subsistence data, and how these data would be collected, are beyond the scope of this EIS.

00074-051: Sections 3.24.1 and 4.3.20 both contain references to traditional ecological knowledge in the description of subsistence behavior and the evaluation of subsistence impacts. In an attempt to acquire additional traditional ecological knowledge, all 21 directly affected Tribes were contacted by certified mail in April 2002 to discuss processes for obtaining such information with particular regard to subsistence. To date, no response has been received to any of those letters.

00074-052: Numerous surveys have been conducted for cultural resources along the TAPS. Surveys attempt to identify all cultural resources in the area being surveyed. The difficulty in identifying traditional cultural properties is that there may not be any physical evidence of their existence.

In recognition of the scarcity of data on traditional cultural properties, preparers of the EIS contacted all 21 directly affected Tribes by certified letter, in April 2002, to begin the process of obtaining additional information on such resources. To date, no Tribes have responded to that inquiry.

00074-053: Guidance and procedures for consideration of cultural resources during spill events are presented in the following reference, cited in the EIS:

Programmatic Agreement, 1997. Programmatic Agreement on Protection of Historic Properties During Emergency Contingency Plan, Annex M. Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases. Agreement between 10 federal and state agencies.

In addition, APSC's current contingency plans for spills are presented in a different document, also cited in the EIS:

Alyeska Pipeline Service Company, 2001, TAPS Pipeline Oil Discharge Prevention and Contingency Plan CP-35-1, Anchorage, Alaska.

These documents provide general procedures, because the number of variables associated with spills makes it impossible to address every situation, and are cited in the EIS. The location and nature of the spill will dictate the threat to cultural resources. APSC's plan does provide guidance on a milepost-by-milepost basis.

The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

Section 4.4 in the FEIS addresses spills for the proposed action generally. See Section 4.4.4.16, which discusses the impacts of spills on cultural resources.

00074-054: Section 4.4.4.7, "Human Health and Safety," provides a detailed analysis of the potential effects of oil spills on human health.

The BLM and member agencies of the JPO are committed to the protection of human health and the environment. The Federal Grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of TAPS) within the Federal Grant contain numerous provisions that are protective of human health and the environment.

00074-055: The effects of the proposed action and alternative measures are discussed in Sections 4.3.21, 4.5.2.21, and 4.6.2.21 of the DEIS, and the potential consequences of spills are discussed in Section 4.4.4.15. In addition, consequences to cultural systems are considered in the sections on subsistence, economics, wildlife, health, and environmental justice. These sections have been reviewed in response to this and other comments, and the information presented has been amended or modified as appropriate.

00074-056: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00074-057: The statement of Alaska Native unique knowledge of their environment is consistent with the position assumed in the EIS. Evaluation criteria for subsistence under the proposed action appear in Section 4.3.20, though the connection with impacts is stated definitively (rather than using the term "might," as stated in the comment). The remainder of the comment is duly noted.

00074-058: Although it is not necessarily a "statistical fact," an analysis of impacts indeed does require comparison to a baseline and the absence of this baseline is a major constraint to the evaluation of subsistence impacts, as stated explicitly in Sections 3.24.1 and 4.3.20. The EIS does not discount the validity or credibility of traditional ecological knowledge, but tries to point out certain considerations that one should keep in mind when employing such data (such as the assignment of causality). Although traditional ecological knowledge points to TAPS-related impacts, as discussed in Sections 4.3.20 and 4.7.8.1 there are indications that some subsistence resources are present in greater numbers than before the pipeline, while examinations of current fish, birds, terrestrial mammals, and other subsistence resources (see Sections 3.19, 3.20, and 3.21) do not indicate that any resource populations have suffered under nearly 30 years of TAPS operation. The existence of contrasting conclusions to those posited by traditional ecological knowledge sources makes it impossible to rely solely on the former. Any conclusions based solely on a single source of information while ignoring other valid sources of information while ignoring other valid sources of information could not be defended.

00074-059: The DEIS conducted a community-based, or village-based, evaluation of subsistence data based on the best available statistical data, detailed geographic descriptions of traditional harvest areas, and traditional ecological knowledge available (see Sections 4.3.10, 4.4.4.8.1, and 4.7.8.1)

In the interest of obtaining additional information with which to evaluate impacts to the TAPS on subsistence, a meeting was held with representatives of the Alaska Federation of Natives and Tanana Chiefs Conference in April 2002 to discuss this and other issues associated with the evaluation of subsistence impacts. Although some information was provided during and following that meeting, no actual data were forthcoming that would enable the improvement of the subsistence analysis. That same month, the 21 directly affected tribes associated with the TAPS were contacted by certified letter to invite their participation in providing additional traditional ecological knowledge explicitly associated with subsistence issues in the EIS. To date, no response has been received to any of those letters.

Impacts on the human environment are discussed for transportation, economics, subsistence, sociocultural systems, cultural resources, land use, recreation and aesthetics, and environmental justice.

00074-060: The BLM employs an Alaska Native to assist with issues related to Section 29 and Section 30 issues and to facilitate communication with Alaska Natives (including government-to-government consultations). As this comment is written, that position had recently become open and BLM is in the process of filling it with a qualified individual.

TOM LAKOSH P.O. BOX 100648 ANCHORAGE, AK 99510 Ph/Fax 563-7380
August 20, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory, EAD/900
9700 South Cass Avenue
Argonne, IL 60439

State of Alaska
Department of Natural Resources / JPO
Joint Pipeline Office
411 West 4th Avenue, Suite 2
Anchorage, Alaska 99501-2343

Re: Public Comment on *Draft Environmental Impact Statement, Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way* (BLM/AK/PT-02/026+2880+990, U.S. Department of Interior, Bureau of Land Management, July 2002) and *Commissioner's Statement of Reasons and Proposed Written Determination for the Renewal of the Trans-Alaska Pipeline Right-of-Way Lease* (ADL 63574, July 5, 2002).

Dear BLM and State of Alaska:

This letter is sent as a supplement to my comments presented on August 5, 2002, at the Anchorage Hilton Hotel, and on August 20, 2002 by phone to 1-866-542-5903. This writing is necessitated by the material omission in the 7/5/02 JPO News Release which failed to mention a time limit on the phone in comment option. I found myself limited, time and again, to reciting my name and address and little else, and without the opportunity to personally contact anyone to provide for a continuous and comprehensive comment. Discovery of this omission at approximately 4:18 PM on 8/20/02 did not leave sufficient time to put my comments in writing. I therefore request a written authorization to supplement my comments as a mitigating measure to compensate for this material omission. 75-1

I adopt and incorporate by reference the written and/or oral comments provided by:
Richard A. Fineberg/AFER on 8/6/02, 8/7/02, 8/9/02 and 8/20/02;
Richard Charter/Environmental Defense Fund on 8/20/02;
Tom Copeland on 8/20/02;
Bob Randall/Trustees for Alaska on 8/20/02, and;
Walter Parker on 8/6/02. 75-2

The DEIS and Commissioner's Statement must be redone and resubmitted for public comment due to their incomplete assessments, illogical and unscientific conclusions, failure to comply with applicable law and failure to provide for the constitutional rights of Alaska's citizens and users of Alaska's natural resources. Neither the Grant nor Lease may be renewed where they fail to provide for reasonable concurrent uses of Alaska's resources as a matter of law and fact. The use of federal and state lands by Alyeska Pipeline Service Company, (APSC), cannot be certified as "reasonable" pursuant to the mandates of Article VIII, Section 8 of the Constitution of the State of Alaska where it has actively chosen to evade, and continues to evade, the provisions of law, Grant and Lease regulating the quality of oil spill response equipment, timeliness of spill response and degree of response effort. Similarly, the 75-3

Grant and Lease may not be renewed where no authorized regulatory or oversight agency of government is willing to enforce these applicable provisions of law, Grant and Lease. The records of the litigation and administrative appeals that I have incorporated into my comments clearly establish the following un-refuted material issues of law and fact:

1) DNR has deferred to DEC its obligation to enforce Lease provisions regulating oil spill contingency planning;
2) The Alaska Supreme Court, Case No. S-09619, has determined that DEC has never properly interpreted its obligation under law to deny approval of oil spill contingency plan permits that do not utilize the best technology available at the time permits are submitted or renewed.
3) DEC has never enforced the quality standards for spill response equipment under any and all law codified to date.
4) The Alaska Legislature and the Supreme Court of Alaska have determined that oil spills present an imminent threat to Alaska's natural resources: "In 1980 the Alaska legislature, finding that it is a matter of the highest urgency and priority to protect Alaska's coastal and inside water, estuaries, wetlands, beaches, and land from the damage which may be occasioned by the discharge of oil, enacted Alaska's Oil Pollution Control Act.1", Alaska Supreme Court Opinion 5589 at p.1, Lakosh vs DEC Case # S-09619. 75-4
5) Given this imminent threat of damage from oil spills, all potentially affected natural resource users must be provided due process and due compensation prior to effective divestment of their interests pursuant to Article VIII, Section 16 of the Constitution of the State of Alaska.
6) I still have active due process adjudications which must be fully resolved **prior** to any additional state or federal action, such as Grant, Lease and contingency plan approval, that could constitute an effective divestment of my interests.

The DEIS presents two mutually exclusive statements: APSC is in compliance with all Lease and Grant provisions, and; the Alaska Supreme Court, Case No. S-09619, has determined that DEC has never properly interpreted AS 46.04.030(e). Both the Grant and Lease require that APSC be in compliance with applicable law as a primary condition of compliance with the Grant and Lease. No assertion of compliance may be proffered where, as a matter of law, DEC has not enforced applicable statutory or regulatory compliance. A lack of compliance, in fact, must be presumed where the defect in enforcement is established as a matter of law. The instant DEIS must be rejected and redone where it contains such false and misleading statements. Indeed, Argonne National Laboratory, JPO personnel and any other persons authorizing the distribution of these false statements should be prosecuted under state and federal law for providing false statements in federal and state investigations. Such false statements and disregard of my comments on EIS scoping are likewise, a violation of my rights to fair and just treatment in executive investigations pursuant to Article I, Section 7 of the Alaska Constitution. 75-5

There are several other misleading statements and omissions that could/may well be deemed fraudulent by misrepresentation and/or omission under state and federal statutes and would at least reach the level of unjust treatment. The underlying report of the State Pipeline Coordinator, upon which the Commissioner's Determination is based, and the JPO's report on Grant and Lease compliance, integral to the DEIS, (Reports), misrepresent APSC's full compliance. The reports fail to even mention several of the provision of law, Grant and Lease that are at issue in the incorporated pending, and prior, litigation and administrative appeals. The fact that these provisions are omitted from the reports establish that: the authorized oversight agencies are oblivious to their mandated duties; have never enforced their mandated duties; and/or are actively suppressing disclosure of specific duties in an attempt to unlawfully subsidize APSC, owners of the transported oil and the State of Alaska at the expense of the rights of Alaska's citizens and other natural resource users. The latter accusation, although a very serious allegation, is clearly supported by the dismissive treatment given to DNR's 75-6

obligations under the Lease, my oral testimony, affidavits and other evidence submitted in the incorporated documents. 75-6 (cont.)

The Reports failed to adequately disclose and address agency obligations pursuant to the Coastal Zone Management Act, Alaska Coastal Zone Management Act and Coastal District Management Plans, given the potential for spilled oil to adversely affect well over 1,000 miles of coastline in at least six coastal districts, as has been established in the Exxon Valdez Oil Spill. It is patently absurd to presume that a catastrophic spills from TAPS facilities reaching open waters less than 30 miles from Bligh Reef could not adversely affect the same area as the EVOS. The fact that the VMT must regularly suspend loading of tankers due to an inability to conduct effective spill response establishes that TAPS/VMT spills during these periods could reach Bligh Reef unabated, and from there the rest is history. 75-7

The DEIS presumption that catastrophic spills should be totally discounted in assessment of potential resource damages is likewise absurd given the report's failure to consider the material facts of: APSC's and other relevant lease/permit holders' inability to timely contain, control, recover and mitigate oil spill damage from any actual water-borne spills and several land spills; failure to perform in conformance with standards set forth in contingency plans during spill response drills; failure of agencies to enforce mandated duties; outstanding compliance measures and conditions of approval to TAPS/VMT contingency plan approvals; the known terrorist threats to U.S. petroleum facilities/vessels; the potential for unabated vandalism against TAPS that have a high potential for development into catastrophic spills subsequent to ignition of spilled oil and a resultant structural failure of TAPS; the increase potential for these catastrophic fires given the increasing content of natural gas liquids in North Slope Crude Oil. Given these glaring deficiencies in the DEIS analysis of potential spill damage, the report must be deemed well outside the minimum standards necessary to qualify it as a scientific and reasoned study of the material issues under evaluation. The standards of cited law and scientific integrity demand that all of the material factors be reconsidered in a re-issued DEIS subject to professional and public scrutiny. This re-issued DEIS should not, as a matter of scientific integrity, and cannot, as a mater of due process and fair treatment, be completed until I have fully exhausted all legal recourse afforded to protect my potentially affected interests as established by precedent, law and constitutional right. 75-8 75-9

Where DNR, BLM and DEC have abandoned their mandated duties for 25 years, or at least feign ignorance thereof, it is incumbent upon the Secretary of the Interior and Commissioner of DNR to construct, and present as an alternative in a new DEIS, Grant/Lease provisions/stipulations that substantially clarify and specify the obligations and rights of all interested with respect to the quality, quantity and timeliness of oil spill response. Given DNR, BLM and DEC's failure to fully enforce, and APSC's failure to fully comply with, cited spill response obligations, it is clearly unduly burdensome to impose another 30 years of ambiguous enforcement obligations. The Grant and Lease should only be renewed for five years so that affected parties may be fully insured that detailed guidelines for implementation of new provisions/stipulations are fully developed and enforced by the authorized oversight agencies. The Lease and Grant should not, thereafter, be renewed if APSC is not fully compliant with requirements to employ, to their best efforts, state-of-the-art and the "best" technology capable of immediately abating damage from oil spills **in addition to** employment of all required spill prevention measures. Although spill prevention is typically preferable to, and more cost effective than, spill response, virtually all informed parties agree that prevention of known threats of intentional damage to the TAPS is impossible. The Livengood Spill is living proof of this vulnerability and APSC's incompetence and misrepresentation of response capability. Full compliance with response obligations is necessary now, more than ever. Immediate authorization and funding of a Citizens' Oversight Group could substantially accelerate and coordinate representation of the interests of those persons/entities that are continually subject to adverse accumulative impacts from TAPS. 75-10 75-11 75-12 75-13

Sincerely,

Tom Lakosh

Responses for Document 00075

00075-001: Although 45 days is understandably a short time to review a document of this size, it is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule, and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period. A decision to not extend the comment period has already been announced and it is inappropriate to provide an exception for individuals.

00075-002: Thank you for your comment.

00075-003: The Federal Grant, TAPAA, and the Mineral Leasing Act provide the foundations on which decisions to renew the Federal Grant are made. If the applicant is in compliance with all laws and regulations, the BLM is required to renew the Federal Grant.

00075-004: Thank you for your comment.

00075-005: Thank you for your comment.

00075-006: Thank you for your comment.

00075-007: The responsibilities of BLM relative to the Coastal Zone Management Act and the Alaska Coastal Management Plan (ACMP) are described in the EIS in Section 4.3.23.2, “Coastal Zone Management.” The Valdez Coastal Management Plan requires oil spill prevention and response plans consistent with the statewide Alaska Coastal Management Program standards. Spill scenarios for the proposed action and potential impacts on coastal zones are discussed in Section 4.4.4.17.2.

00075-008: The possibility of pipeline failure is addressed in the spill analysis. (See Sections 4.4 and 4.7.1.10 of the EIS.) In estimating the frequencies and spill volumes for future spills, both the historical data from past spills and the potential for catastrophic spills of large consequence were considered. As with any other engineering project, there is no 100 percent proof that the pipeline will not fail. However, the owners of the pipeline and the federal and state agencies with oversight responsibilities for TAPS are doing everything possible to keep the likelihood and consequences of future spills at acceptable levels.

The Oil Discharge Prevention and Contingency Plan for the pipeline (C-Plan) provides for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline. (See Section 4.1.4 of the EIS.)

The TAPS C-Plan is updated periodically and lessons learned from actual occurrences, as well as from regular exercises conducted along the pipeline, which are incorporated into the plan. In addition, the plan is reviewed annually by the BLM, every three years by ADEC, and every 5 years by DOT. EPA also reviews the plan as it applies to pump stations. As part of this process, APSC and the federal and state agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment is made available along the TAPS.

Changes to spill plans are made when problems with the existing procedures or equipment are noted. For an example, see the text box in Section 4.1.1.8 for a synopsis of the Livengood bullet hole incident and changes made to the C-Plan.

Security along the TAPS ROW has been increased in response to concerns over potential vandalism and terrorist acts. There are elaborate security measures and plans in place, involving numerous federal and state agencies. The BLM has reviewed these confidential plans and agrees with them. Opportunities to strengthen these measures will always be pursued diligently by the agencies involved.

The potential fire hazard always exists. That potential was considered in the design of fire prevention and suppression systems for TAPS and in developing spill contingency plans. (See Section 4.4.3.)

00075-009: The BLM has followed all of the requirements of the National Environmental Policy Act and all of the implementing regulations of the Council on Environmental Quality in preparation of the DEIS and FEIS.

00075-010: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

The Trans-Alaska Pipeline System Pipeline Oil Discharge Prevention and Contingency Plan, CP-35-1, prepared in 2002 by the APSC (C-Plan) provide full disclosure of spill planning, reporting, and response. The C-Plan is approved by the member agencies of JPO, C-Plans are reviewed continually and major revisions are subject to public review and comment. See Section 4.1 for additional discussions on spill contingency planning.

00075-011: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00075-012: The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

00075-013: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

BLM's Trans-Alaska Pipeline System Right-of-Way Renewal

00076

Draft Environmental Impact Statement

Public Hearing Comment Form

Use this self-addressed form to submit your TAPS Renewal Draft EIS comments. Please give this completed form to one of the meeting hosts or take it with you and mail it. Make your comments, fold the form, tape it shut, place a stamp on the outside and drop it in the mail. *Comments must be postmarked no later than August 20, 2002.*

Please provide this information:

FOLD HERE

Name: NIILO E. KOPONEN Ed.D

Title/organization: CIRCUMPOLAR RESEARCH

Mailing address: POB 70252

City: FAIRBANKS

State: ALASKA Zip+four 99707 - 0252

E-mail (I wish to receive TAPS Renewal EIS information by e-mail at this address) _____

I oppose renewal of Alyeska's permit, our first elected Governor, Bill Eagan, proposed construction and operation of the pipeline by the State of Alaska. History has proved Egan's proposal to have been the best alternative given both the fiscal impact on state revenue and the less than satisfactory maintenance and operations record from safety and environmental standards. 76-1

Whether the permit to operate the pipeline is reissued to Alyeska or turned over to the State of Alaska (along with fiscal and managerial control), the problems reviewed in the June 2002 report of the Alaska Forum for Environmental Responsibility are serious enough to require the adoption of the report's recommendations:

FOLD HERE

1) the establishment of a Citizen's Advisory Group including representatives of communities along the pipeline route; blue collar workers elected by their fellow workers on the pipeline itself and – if state ownership and control is not established – representatives of the state government itself; 76-2

2) establishment of a trust or escrow account for DR & R funds; 76-3

3) completion of an audit and technical review every 5 years; 76-4

4) state or community ownership and management of the pipeline; 5) establishment of an open work environment including "whistle blower" protection; 76-5; 76-6

6) full consideration of scientific research and technical advances relevant to crude oil transport. 76-7

WITHHOLDING OF PERSONAL INFORMATION

It is BLM's practice to make comments, including names and addresses of commenters, available for public review during regular business hours. Individuals may request that their home address be withheld from the public record, and BLM will honor such requests to the extent allowable by law. Circumstances may also arise in which BLM would withhold from the public record a commenter's identity, as allowable by law. If you wish BLM to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, BLM will not consider anonymous comments. BLM will make all submittals from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

Responses for Document 00076

00076-001: Thank you for your comment.

00076-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00076-003: The reader is directed to the discussion of escrow funds found in Section 2.5.

00076-004: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00076-005: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00076-006: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent’s office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00076-007: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

BLM's Trans-Alaska Pipeline System
Right-of-Way Renewal 00077
Draft Environmental Impact Statement
Public Hearing Comment Form

Use this self-addressed form to submit your TAPS Renewal Draft EIS comments. Please give this completed form to one of the meeting hosts or take it with you and mail it. Make your comments, fold the form, tape it shut, place a stamp on the outside and drop it in the mail. *Comments must be postmarked no later than August 20, 2002.*

Please provide this information:

FOLD HERE

Name: Dick Farris
Title/organization: Alaska Research Group
Mailing address: POB 73329
City: FAIRBANKS
State: ALASKA Zip+four 99707 - 3329

E-mail (I wish to receive TAPS Renewal EIS information by e-mail at this address) rtfarris_99708@yahoo.com

I am adamantly opposed to the renewal of Alyeska's permit for the pipeline unless a Citizen's Advisory Group is created to provide on-going review and oversight. This Group should be made up of a cross section of workers who reside in communities in which the pipeline passes through, i.e., a professional worker, construction worker, retail worker, government worker. I would propose that the maximum number of members on this Group be 15. 77-1

My own preference would be for the State of Alaska to own and operate the pipeline as this would directly allow public access to all records and financial information and allow for better and safer monitoring of the pipeline. 77-2

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WITHHOLDING OF PERSONAL INFORMATION

It is BLM's practice to make comments, including names and addresses of commenters, available for public review during regular business hours. Individuals may request that their home address be withheld from the public record, and BLM will honor such requests to the extent allowable by law. Circumstances may also arise in which BLM would withhold from the public record a commenter's identity, as allowable by law. If you wish BLM to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, BLM will not consider anonymous comments. BLM will make all submittals from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

Responses for Document 00077

00077-001: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00077-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

8/20/02

These are my comments on the DEIS. I suggest substantial revisions to it before going final. The draft has a number of areas that expose it to litigation, and this could lead to court-imposed ROW terms.

The scoping record shows a number of concerns that someone at BLM or Argonne has decided can be safely ruled outside the scope of this NEPA process. By what standard, or on what basis did that person determine that concerns such as adequate funding, a citizens' oversight group, and escrow of the funds required for dismantling the pipeline were beyond the scope of review? 78-1

In fact, there appears to be an assumption that renewal should be automatic unless the regulating agencies make findings of problems. Please cite the language that justifies such complacency. There have been problems so clear and obvious that we who were there do not need agencies to tell us about them.

There was a colossal oil spill less than15 years ago, for which the Alyeska Pipeline Service Company was outrageously unprepared. They had successfully eroded the regulatory process to the point where they were allowed to equip themselves with nothing better than skimmers which were ineffective against this grade of oil, booms buried under snowbanks and insufficient equipment and personnel for uncovering them, and no barge capable of holding any oil they collected. They were forced to improve that. Within a year the industry was back in Juneau fighting a law that would have allowed un-announced state inspections of its facilities.

Last year a drunk shot a hole in the pipeline and it took 3 days to stop the leak, because Alyeska never acquired a large enough clamp for such pressure conditions, despite its promises. Yes, Alyeska had succeeded in eroding the regulatory process again. Over the years of the pipeline's life there has been an electrolytic effect that led to substantial corrosion and required large parts of the pipeline to be sheathed. There has been shifting and thumping. Even such a simple thing as the Remote Gate Valve system somehow can not attain proper functionality. Regulation has failed again. I do not believe that placing the sole weight for ruling all those comments outside the scope of the review on findings by those same regulators is prudent.

Even after all these insults, we still do not really know at what point these monitors would finally find the operators in violation of, for example federal Section 24, which requires them to abate hazards, or state Section 22, which requires them to prevent and abate hazards.

The Joint Pipeline Office has never seen it as its mission to let the public know what was really going on with the pipeline. How many years of its jargon-laden minimalist reports, many of which contain field data that on its face clearly contradicts the report's own conclusions, would you like me to provide for you?

We are asked to rely on some vague concept of "reliability centered maintenance" to identify and remediate problems in a timely manner. A

process is not a performance standard.

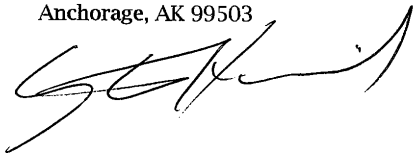
These are my recommendations. The terms of the pipeline's right of way across public lands should be substantially altered, and the length of time is questionable. The technical studies I have been able to see in the short time in which they have been available do not provide sufficient basis for a 30-year renewal period. Alyeska must have effective citizen oversight, or there will be an environmental catastrophe well within the next 30 year renewal frame. The terms do not sufficiently compensate the public for the use and risk to its lands. The analyses of risk to public and subsistence resources from potential spills into streams the pipeline crosses are certainly voluminous but once you boil them down they are still unrealistic. Conditions change, and so does human knowledge. There should be independent reviews every 5 years by a panel of the National Academy of Sciences of Alyeska's performance in the context of changing conditions and new understanding. 78-2 78-3 78-4 78-5

The justification for renewal without change is insufficient. The pipeline is going far beyond its design life, and the terms need a serious examination. This has not happened. AS 38.35.110 says renewal shall be granted if the operator is in full compliance with the law. This has not been the case. Even the less than strict JPO can only bring itself to call it "substantial compliance." 78-6

On what basis did the authors rule out the possibility of modifying grant and lease terms? Surely such things as the experiences of the past 30 years, changing physical conditions, and the emergence of new scientific understanding and technologies warrant examining changes in those terms. It is asserted that these can all be accomodated within the existing powers and flexibility of JPO. I don't think so.

NEPA requirements have not been satisfied in the draft EIS. The treatment of good faith comments provided during the scoping process has been disrespectful and dismissive.

Steve Heimel
3503 Dorbrandt St.
Anchorage, AK 99503



Responses for Document 00078

00078-001: The rationale for finding several proposed alternatives to be out of scope for further analysis in the EIS is explained in detail in Section 2.5 of the FEIS.

00078-002: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00078-003: Thank you for your comment.

00078-004: The comment does not address how the spill analyses are unrealistic. It was the intent of the authors that the analysis be conservative but realistic. This was accomplished by applying assumptions and models that tend to overestimate the impacts, but still keep them at reasonable levels.

00078-005: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00078-006: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00079

August 20, 2002

To Whom it may concern,

I am writing as a citizen of Cordova, Alaska who is concerned about the impending lease renewal for the TAPS. I understand these comments will have no effect other than to enable me to sue.

It is a dangerous idea to keep TAPS running in the same condition it is in currently. The amount of spills that have already occurred attest to that. The fact that a large number of the support members are in jeopardy due to permafrost melting as a result of global warming, which scientists agree is affecting Alaska to a much greater degree than anywhere else in the world. Before the pipeline lease is renewed, there needs to be an independent audit of TAPS. Otherwise, the lease should not be renewed. 79-1 79-2 79-3 79-4

The economy of Cordova would collapse if the Copper River Salmon runs were harmed by an oil spill in the Copper River, which seems likely since 20% of the pipeline runs through the Copper River watershed, for which there is no oil spill response plan. This is an unacceptable risk. The pipeline crosses 76 salmon bearing streams in that watershed. The pipeline should not be allowed to operate without a spill response plan for the 79-5

entire Copper River Watershed and all other watersheds that the pipe passes through, especially the Yukon River watershed as well. A significant spill on the Copper would make Cordova a ghost town. 79-5 (cont.)

There need to be independent studies of the health effects of oil on people, and these need to be paid for by the TAPS involved oil companies before the lease is renewed. 79-6

As a resident of Cordova I would like to testify that the claim in the DEIS that Cordovans do not participate significantly in subsistence is absurd and a classic example why the DEIS is horribly flawed and inaccurate. Everyone I know here is involved in subsistence activities from berry picking to moose hunting, every year. Studies have shown that at least 85% of Cordovans do subsistence. Studies have also shown that the Exxon Valdez oil spill dramatically decreased subsistence by contaminating subsistence foods. 79-7 79-8

So the pipeline's questionable condition is a threat not only to our money economy, but also to our subsistence economy, which is very real to us, and should have been represented in the DEIS. It would have been easy to get the average number of salmon harvested in our local subsistence fishery, per capita, from Fish and Game. 79-9

research, although the document does not reflect that. I believe the information was deliberately altered. Also innaccurate is the description of the "twin communities of Cordova and Eyak." There is no such community as Eyak. Obviously, whoever wrote that description has not visited Cordova, or spoken with anyone who has. This misunderstanding of the nature of our community, economy, and way of life is unacceptable because it means the DEIS does not recognize or analyze the very real threats TAPS poses for us, which by law it was supposed to do. 79-9 (cont.) 79-10

The meeting held in Cordova at the Moose Lodge was not a public meeting, as required by law. That building is not handicapped accessible. The meeting was held during a gillnetting and a seining opener, which means that the majority of the people who work here, and a huge fraction of the total population (the public) were on the fishing grounds and were unable to attend. Many of those people work much more than full time and would not have had enough free hours to read the document anyway. The comment period should be extended another 80 days, so that fishermen can have the opportunity to participate, and a real public meeting should be scheduled after the fishing 79-11 79-12

is drafted, but that won't happen because the document was deliberately drafted to deceive and misinform. It is too outrageously flawed to be a mistake. 79-12 (cont.)

The public needs proof that the pipeline will not fail, and history has proven otherwise. 79-13

The lease should not be renewed under the current circumstances because the concerns of commercial fishing have not been heard and the pipeline is a disaster waiting to happen. 79-14

Sincerely,

Sierra Drake, commercial fisher
PO Box 1464
Cordova AK
99574
(907) 424-4394

Responses for Document 00079

00079-001: The age, condition, operation, and maintenance of the TAPS were considered in the preparation of the EIS.

00079-002: The pipeline is continuously monitored and maintained. In addition, a proactive maintenance program, called reliability-centered maintenance (RCM), that systematically evaluates critical components of TAPS and takes measures to rectify any identified weaknesses both materially or in procedural matters, has been initiated. The spill analysis within the EIS considers the probability and consequences of future spills (See Section 4.4 of the EIS). In estimating the frequencies and spill volumes for future spills, both the historical data from past spills and the potential for catastrophic spills of large consequence were considered.

00079-003: VSM stability is obviously critical to TAPS integrity. As such, it is the focus of extensive monitoring and surveillance. Please see Section 4.3.2 of the FEIS (Soils and Permafrost) for additional information.

00079-004: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00079-005: The EIS recognizes that there would be potential for impacts to salmon resources if an oil spill occurs in a salmon-bearing stream or river (Section 4.4.4.10). The extent of the impacts would be related to the amount of oil spilled, the size of the receiving stream, and the location of various salmon resources and life stages relative to the spill location. The estimated probabilities of various oil spill scenarios occurring at particular locations along the TAPS are presented in Section 4.4.1.1. APSC's oil spill response capabilities and plans for the TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in "TAPS Oil Discharge Prevention and Contingency Plan" for the pipeline and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" for the Valdez Marine Terminal. The plans are available to the public at various libraries in several major cities in Alaska. Oil spill prevention and response capabilities and related activities specific to the Copper River drainage area are discussed more fully in a text box that has been added to Section 4.4.4.3.

00079-006: Section 4.4.4.7, "Human Health and Safety," provides a detailed analysis of the potential impacts of oil spills on human health. The BLM and other member agencies of the JPO are committed. The federal grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of TAPS) within the federal grant contain numerous provisions that are protective of human health and the environment.

00079-007: The EIS does not state that "Cordovans do not participate significantly in subsistence." On the contrary, it states that many residents participate in subsistence as a means of supplementing wage income, and notes (among other figures) that nearly 80% of the households (sampled) in Cordova engaged in subsistence fishing in 1997, the year for which data were considered "representative" by the Alaska Department of Fish and Game (see Section 3.24.2.4.2; see also Tables 3.24-1, 3.24-2, and D-26). The EIS is thus in agreement with, and generally supports, the comment.

00079-008: Current studies do not indicate that subsistence foods in the vicinity of the TAPS pose a threat to human health, including those from Prince William Sound (as discussed in Section 3.17.2; see also Section 4.3.13.2). The EIS also concluded that for subsistence resources from marine environments (fish, shellfish, and marine mammals), food that is not noticeably unfit for human consumption (e.g., visible oil on the surface or smell of oil) would not be expected to cause adverse health affects (Section 4.4.4.7.4). However, the EIS also noted the potential impact on subsistence of perceived contamination of various foods, as continued in Prince William Sound several years after the Exxon Valdez oil spill (see Section 4.7.8.1). Note that text in Section 4.7.8.1 has been expanded to discuss impacts on subsistence systems due to the Exxon Valdez oil spill in greater detail, including references to figures in Section 3.24 that show pre- and post-spill subsistence levels for the three Prince William Sound rural communities considered in the EIS. This discussion reveals a substantial decline in subsistence harvests in 1989 and 1990, followed by recoveries of varying degrees documented through 1997.

00079-009: Potential impacts to subsistence due to pipeline condition are reflected in Sections 4.3.20 ("Subsistence Impacts Under the Proposed Action") and 4.4.4.14 ("Subsistence Impacts of Spills"). The DEIS presented data for salmon and many other resources harvested for subsistence purposes, in terms of edible pounds harvested, percentage of households participating in harvesting, and percentage of households using. As a result of comments, additional data from the ADF&G subsistence fisheries harvest database have been examined and incorporated. In no case were data deliberately altered.

00079-010: The FEIS corrected the misstatement that Eyak is a separate community, as it was in the past, bringing the text in line with a statement (later in Section D.2.3.4.2, the section to which the comment refers) that Eyak was annexed by Cordova in 1992. Section D.2.3.4.2 has been corrected to identify Eyak as the Alaska Native Village of Eyak, a federally recognized Native village within the city boundaries of Cordova that is designated by the U.S. Bureau of the Census as an "Alaska Native Village Statistical Area."

00079-011: The meeting room at the Moose Lodge in Cordova is provided with universal access via a ramp to the rear entrance.

00079-012: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00079-013: The age, condition, operation, and maintenance of TAPS were considered in the preparation of the EIS. The possibility of pipeline failure is addressed in the spill analysis. In estimating the frequencies and spill volumes for future spills, both the historical data from past spills and the potential for catastrophic spills of large consequence were considered. As with any other engineering project, there is no 100 percent proof that the pipeline will not fail. However, the owners of the pipeline and the federal and state agencies with oversight responsibilities for TAPS are doing everything possible to keep the likelihood and consequences of future spills at reasonable levels.

00079-014: Thank you for your comment.

8/18/02

Rose Bloch
P.O. Box 204
Cordova, AK 99574

Dear Ms Norton, Argonne EIS team and 50 of AK DOR TAPS team,

The TAPS renewal permit request is a necessary step in the process of safeguarding our beautiful and wild state. a 45 day review period is not enough time for us Alaskans to not only get a copy of the DEIS and read it, but respond in an intelligent accurate manner, but race ages, anyway. 80-1

From what I've been able to discern, the DEIS is full of misstatements and inaccurate. The discussion of "economic benifits" of an oil spill is absurd. Even the stated two billion dollars that Exxon spent in '89 attempting to clean up Prince William Sound and the North Gulf coast of AK, did NOT benefit many local Alaskans. On the contrary, entire towns are suffering the economic impact of Exxons' refusal to pay what a court of law found as appropriate compensation for their GROSS negligence. If their continued refusal is any indication of oil companies CEO's true feelings for doing what they said they'll do, the TAPS renewal should be denied, with not further discussion necessary. 80-2 80-3

But with your narrow scope of focus, let me continue. The DEIS neglected & discounted the native Peoples of our the TAPS area. I would like to assure you that the 80-4

People of the Native Village of Eyak are very much alive and well and quite capable of contributing to an accurate assessment of the impacts of 30 more years of an old pipeline through their land. (Section 3.25.1.1.2 pg 3.25-11). 80-4 (cont.)

I would strongly encourage the regulatory bodies charged with review of this application to mandate a fully funded & empowered local citizens oversite committee. Funding for the committee would be provided by the TAPS group. The oversight committee would be comprized of citizens living along the pipeline route & given access to maintainance & safety records of the pipeline inspection teams and have the power to ensure an ongoing safe and structurally sound system. 80-5

Establish a "reward" fund which would be given to TAPS employees who discover safety hazards & shutting foundations before an oil spill would happen.

Before the rights-of-way permits is renewed plans & funding for a replacement of the entire pipeline with thicker & stainless steel pipe, thus drastically reducing the potential of corrosion based oil spills is needed. 80-6

Roughly 20% of the pipeline travels ~~over~~ through the Copper River watershed & over 76 salmon bearing streams. The Copper River is a world famous and very fragile eco-system supporting a great number of fishers with food 80-7

and a livelyhood. When oil spills happen, permanent damage occurs to the land and water the oil touches, (there are still lots of ~~oiled~~ oiled beaches in PWS 13 years later). No amount of money can repair polluted land and stream. Prevention of oil spills is the only answer. 80-7 (cont.)

The permafrost is melting, or haven't you heard. Replacements of fittings & support structures is vital for prevention of oil spills. TAPS should have inspection & replacement plans in writing before the renewal is granted. 80-8

We all want cheap oil. The oil companies extracting crude from Prudhoe Bay want their expenses as little as possible as well. But, the environmental devistation of a spill can not compare to the few dollars saved by renewing the lease agreement to the oil companies preferance. This renewal application is YOUR chance to ensure and prevent future oil spills into the future - for the next 30 years. 80-9

If the TAPS lease is approved to the oil company's request and the inevitable oil spill occurs, the death and destruction of not just land and water, but people's lives & livelihoods will be on your hands 80-10

as well as the oil billionare CEOs.

May God help you with this most important health and safety decision.

Don't allow the oil companies to save a few dollars at the expense of our ever fragile & shrinking wilderness.

Thank you, in advance, for implementing my ideas as the only viable option to preserve & protect our environment.

80-10
(cont.)

Sincerely,

Rose Black

Rose Black
P.O. Box 204
Cordova, AK
99574

Responses for Document 00080

00080-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00080-002: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

00080-003: Thank you for your comment.

00080-004: The EIS explicitly examined Alaska Natives in the vicinity of the TAPS, with the discussion focusing on 8 Native sociocultural systems and 21 directly affected tribes. Additional information has been added concerning the Native Village of Eyak; see Section 3.25. It also examined issues closely associated with Alaska Natives, including subsistence (see Section 3.24).

Alaska Natives (including the Native Village of Eyak) have received ample opportunities to contribute to the EIS, involving interaction associated with the NEPA process as well as government-to-government consultations (see Section 5.3, Table 5.3-1). In April 2002, an explicit invitation to contribute additional information (on subsistence and traditional cultural properties) to the EIS was sent to the 21 directly affected tribes in the form of a certified letter. To date, no response to that letter has been received.

00080-005: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00080-006: While replacement of the entire pipeline is a possibility, a more scientifically based approach is being followed. BLM and member agencies of JPO in close cooperation with Alyeska Pipeline Services Company have begun a systematic process to identify the critical functional components of TAPS. The process, called reliability centered maintenance (RCM), is an on-going system-by-system audit that determines function, failure modes, consequence and preventative maintenance of critical systems. The BLM is committed to RCM and believes that this process represents a pro-active approach to oversight and regulation of TAPS. In addition, RCM is the industry standard for reducing risk of failure to critical system components. Reducing risk in TAPS critical systems directly translates to reducing safety and environmental risks.

00080-007: Section 4.4 of the EIS discusses the spill scenarios considered and the estimated impacts from these scenarios. The scenarios range from high frequency/low consequence events to low frequency/high consequence occurrences. The discussion includes potential impacts in the Copper River Drainage area. Depending upon the timing and the quantity of oil, it is true that major impacts could occur to salmon in the Copper River if a large amount of oil from a pipeline break were to reach the Copper River. Text has been added to Section 4.4.4.10.1 to reiterate the importance of the Copper River for salmon production in the area and to recognize the potentially severe impacts to salmon in the event of a large spill entering the basin. Oil spill prevention and response capabilities and related activities specific to the Copper River Drainage area are discussed more fully in the text box “ Oil Spill Planning for the Copper River Drainage” in Section 4.4.4.3.

00080-008: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00080-009: Thank you for your comment.

00080-010: Thank you for your comment.

August 14, 2002

Bureau of Land Management
TAPS Renewal EIS
Argonne National Lab. EAD/900
9700 S. Cass Ave.
Argonne, IL 60439

Dear Board Members,

I am a member of the Native Village of Eyak and a commercial fisherman reliant on the Copper River and Prince William Sound natural resources. My family has been supported by local fisheries for sixty years. Natives in Prince William Sound have a wealth of knowledge and history that is not being considered by TAPS operators. We have subsisted off the resources of the Copper River and Prince William Sound for over 10,000 years. Our use of natural resources and their annual return is important to our culture. Conservation of this environment is a high priority for me, my family and for this community. 81-1

The DEIS wrongly represents my subsistence uses. Any renewal of the TAPS permit must require TAPS companies to fund research into the effects of the pipeline on subsistence and the scope of subsistence harvest in the affected areas for a better understanding of this issue. 81-2

The research on Tribes represented in the DEIS is shallow and inaccurate. Federally Recognized Tribes need to be recognized and consulted in this process. 81-3

TAPS owners have not complied with original permit requirements for Native hire. In this renewal there need to be more stringent consequences for enforcement of the Native hire requirement. You need to assure Native hire in the spirit of this agreement not just as a quota. We need to see true Native employment, not just partial scholarships being unjustly considered as fulltime employment. 81-4

Respectfully,

William Reid
Wm K Reid

BX 1234
Cordova AK 99574
907 424 7448

Responses for Document 00081

00081-001: The degree to which the Alyeska Pipeline Service Company considers knowledge and history of Natives in the Prince William Sound area is outside the scope of this EIS. With respect to the EIS, and the Alaska Native sociocultural systems in the Prince William Sound area, the document reviewed what it considered pertinent information on the peoples concerned. Most of this information was published, although members of the EIS team met on multiple occasions with people in the Prince William Sound area and recorded any information provided during those meetings. Depending on its relevance to the evaluation of impacts of the alternatives considered in the EIS, this information could have contributed to the EIS. With respect to the evaluation of subsistence in the EIS, the document included traditional ecological knowledge from certain Alaska Native villages in the Prince William Sound area (see Section 3.24). In an attempt to acquire additional traditional ecological knowledge specifically associated with subsistence, in early April 2002, the 21 directly affected tribes/villages were contacted by certified letter to begin a process of collecting such information. Those contacted by letter included the tribal governments of the villages of Chenega Bay, Eyak, Nanwalek, Port Graham, and Tatitlek. To date, no response to that letter has been received from any of the tribes contacted.

00081-002: In preparing this EIS, analysts have reviewed a wide body of historic and contemporary documentation about subsistence harvest patterns. A small number of new studies were identified, and other data were reanalyzed in response to comments on the DEIS. As a result, the EIS is able to draw reasonable conclusions on the basis of existing information.

00081-003: A discussion of federally recognized tribes has been added to Section 3.25.1.2, along with additional information regarding Alaska Native political self-assertion and civic capacity.

00081-004: The issue of Alaska Native hiring on the TAPS is discussed in Section 4.3.21.1. Section 29 is a specific provision in the Federal Grant of Right-of-Way for the TAPS that addresses aspects of Alaska Native employment on the TAPS (APSC and contractor employment). The need for this provision arose in the early 1970s in conjunction with the settlement of Alaska Native land claims and the construction of the TAPS.

Section 29 of the Federal Grant requires four things of the permittees:

1) An agreement with the Secretary regarding recruitment, testing, training, placement, employment, and job counseling of Alaska Natives;

2) A training program for Alaska Natives designed to qualify them for initial employment and later advancement;

3) Try to secure employment of successful trainees and report to the BLM's Authorized Officer regarding discharge of Alaska Natives; and

4) Furnish required information about Alaska Native employment to the Authorized Officer.

The agreement referred to above is known as the "Alaska Native Utilization Agreement" (ANUA) and was first executed in 1974 and more recently updated on a triannual basis, starting in 1995. The most recent agreement was signed in 2001 (see Appendix F of the FEIS). The agreement provides the basis for implementing the requirements of Section 29. The BLM has a Native Liaison Officer whose responsibilities include close oversight of the Section 29 program at APSC. Any shortcomings or other agreement goals not being met are highlighted for special attention. As is the case for any other provision of the Federal Grant, the BLM can enforce this provision by requiring permittees to take actions to remedy any deficiencies noted.

William T. Black ①
Box 204 Cordova 99574
907 424-5316

To Whom Taps renewal may concern,

As a 30+ year fisherman in the Copper River / Prince William Sound region the Taps renewal [redacted] for the next 30 years should be contingent on first and foremost the creation of a regional citizens advisory commission similar to the

82-1

PWS RCAC. ② Many people think it will be a challenge to avoid a catastrophic spill into any of the 70+ rivers and streams of the Copper drainage crossed by the pipeline over the next 30 years. The creation of an overland RCAC with guaranteed funding and teeth is needed towards that goal. 82-2 82-3

Thank you

Will Rhal

Responses for Document 00082

00082-001: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00082-002: Oil spill prevention and response capabilities and related activities specific to the Copper River Drainage area are discussed in the text box in Section 4.4.4.3,“Oil Spill Planning for the Copper River Drainage.”

00082-003: The reader is directed to Section 2.5 of the FEIS and the text that discusses citizen oversight of TAPS.

August 20, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S.Cass Avenue
Argonne,IL 60439

fax:1-866-542-5904

00083

Comment on TAPS System Right of Way Renewal, BLM Draft Environmental Impact Statement, DNR Commissioner 's Statement of Reasons and Proposed Written Determination

Dear BLM and DNR:

I am a long-time resident of Cordova[1], whose life and livelihood has been, and could again be, significantly adversely affected by oil spills from the Trans Alaska Pipeline, the Valdez Marine Terminal, and from inadequate oil spill planning and response. I believe that the terms and conditions of the federal right-of-way and state lease agreements drafted in the early 1970s are not appropriate to guide the operation of TAPS ; and that the "no action" alternative should be pursued, unless there is a significant upgrade in the pipeline and in the oil spill response; and until there is a citizens' oversight group or citizens' advisory council appointed to oversee the pipeline operation, similar to the Prince William Sound RCAC, funded by the TAPS owners. 83-1 83-2 83-3

The past funds that the TAPS owners have collected for future dismantling, removal and restoration of TAPS (DR&R) should be recovered from the TAPS owners and placed in an escrow account, and that all future funds should likewise be placed in this account. which is to be held in escrow for the life of the pipeline. 83-4

I endorse the concept of an audit, every five years, to ensure that the pipeline employs best available technology in pipeline construction, maintenance, repair and in oil spill response. In addition, I urge BLM to ensure that the management framework of TAPS is by a single responsible managing party. 83-5 83-6

Given the multitude of problems discovered through the Employee Concerns Program, I believe BLM should establish the ECP as part of the right-of-way lease terms. There are several additional specific issues to which BLM should direct its attention: 83-7

(1) BLM should require the use of SERVS fishing vessel responders and other specific response techniques, to mount a response to a spill that impacts the Copper River, and flows down to (or threatens) the Copper River Delta and Flats. There should be a specific plan to respond to such a spill mandated by the TAPS lease. This is one of the most important bird and fishing areas of Alaska, and should be mandated to be protected. 83-8

(2) a thorough analysis of the VSMs, particularly in light of climate change in the past 30 years (and anticipated changes in the future) should be undertaken prior to 83-9

[1]I am a resident of Cordova and I spend a portion of the year fishing in Southeast Alaska, visiting my daughter (who lives in Girdwood) and working part of the year outside Alaska with my son and wife. I serve as a volunteer in organizations whose primary focus is safer and environmentally sound oil transportation, exploration and development in Alaska.

renewal.

(3)In order to ensure the safe operation and maintenance of the pipeline, a minimum workforce should be established for operation and maintenance of the pipeline. The positions needed should be reviewed and analyzed, using statistics of past employees needed, current employees, and projected future needs. No diminution in workforce should be allowed, without renegotiation of lease terms, after Alyeska establishes that the workers are not necessary. 83-10

(4) A thorough cumulative impact assessment of the pipeline should be undertaken, using the principles established by the National Research Council. The cumulative impact analysis in the TAPS EIS is insufficient. 83-11

(5)A system of fines and penalties should be established for violation of lease terms, or for failure to implement audit recommendations. Those fines should be automatically imposed, with an opportunity for TAPS owners to administratively appeal those fines through the IBLA or other administrative process. 83-12

(6)areas of site-specific liquefaction potential should be reviewed, and the original design intent and compliance with project stipulations should be addressed and verified for each of these unique locations. 83-13

(7) there should be an analysis of the potential for terrorist attacks of the pipeline, and mitigation that should be imposed, prior to lease renewal. There should be an independent assessment of fire response capability at the VMT by the state fire marshall. 83-14 83-15

(8)BLM and DNR should ensure that best available technology, state of art technology to protect environment, best efforts, best practicable technology available, are used in the pipeline and VMT. 83-16

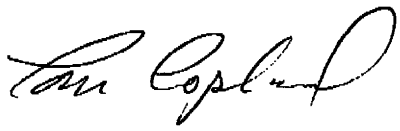
(9) the ACMP analysis should include analysis of impacts to all affected coastal districts, including the North Slope Borough, Kodiak Island Borough, Kenai Peninsula Borough, City of Cordova, Whittier. DGC should conduct an ACMP consistency review for each of those affected coastal districts. 83-17

(10) BLM/DNR should impose seasonal transportation restrictions during periods of broken ice in rivers and the Beaufort Sea which may be impacted by a spill from the TAPS. BLM previously found deficiencies in surveillance at critical river crossings but allowed a one or two year resolution of the compliance issue, spanning two or three review cycles and the renewal process. This is improper phasing. 83-18

In addition to these comments, I hereby adopt, and incorporate by reference the comments of the Alaska Forum for Environmental Responsibility, (including those identified in the AFER Report on the Status of TAPS released June 2002) the verbal and written comments of Stan Stephens, Richard Fineberg, Riki Ott, and Walt Parker and Tom Lakosh.

Thank you for your consideration of these comments. Please provide me with all public notices that BLM and DNR issue with respect to the TAPS. Please submit them to my c/o Nancy S. Wainwright, 130303 Back Road, Anchorage, Alaska 99515-3538.

TOM COPELAND
P.O. Box 2338
Cordova, Alaska 99574



Responses for Document 00083

00083-001: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00083-002: Thank you for your comment.

00083-003: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00083-004: The reader is directed to the discussion of escrow funds found in Section 2.5.

00083-005: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00083-006: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00083-007: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent’s office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00083-008: The FEIS contains information on spill planning, response, and mitigation for the Copper River Drainage (see the text box in Section 4.4.4.3).

00083-009: The reader is referred to Section 4.1.3.2.1 of the FEIS which addresses monitoring and mitigation of VSM structures under changing soil conditions.

00083-010: The TAPAA and the Federal Grant of right-of-way provide BLM with all the authority it needs to oversee operation of the TAPS and to impose strict and enforceable requirements upon APSC to comply with necessary operational procedures.

The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00083-011: The purposes of the EIS and of the National Academy of Science/National Research Council's cumulative effects study are substantially different. The purpose of the EIS is to evaluate the environmental consequences of pipeline renewal and alternatives. For this reason, the TAPS EIS addresses impacts from other actions that are cumulative with the impacts of continued operation of TAPS.

00083-012: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00083-013: A study to review and reevaluate potential liquefaction hazards for the TAPS after 25 years of operation is currently being conducted by APSC. When this EIS was prepared, the results of the study were not available.

00083-014: Security issues related to the TAPS have been added as Section 3.1.2.1.6.

00083-015: The state fire marshal is a member of JPO and conducts regular inspections of the TAPS, including the VMT.

00083-016: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00083-017: The ADGC conducted consistency reviews for North Slope Borough and Valdez Coastal Resource District, which were determined to be the affected coastal districts for the proposed rights-of-way grant renewal. The ADGC determined that the TAPS Owner’s application was consistent with the applicable coastal management programs.

00083-018: Shipping operations in the Beaufort Sea are under the regulatory control of the U.S. Coast Guard and the U.S. Department of Transportation.

The identification of need and application of appropriate mitigation measures regarding river icing issues are included in the adaptive management approach employed by BLM and the JPO member agencies, described below.

The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00084

Lauren Padawer
PO Box 460
Cordova, AK, 99574

Gale Norton
US Dept. of the Interior
1849 C Street NW
Washington, DC 20240
Gale_Norton@ios.doi.gov

BLM TAPS Renewal EIS
Argonne National Lab EAD/900
9700 S. Cass Ave.
Argonne, IL 60439
tapswebmaster@anl.gov

State of Alaska, DNR/JPO
Attn: TAPS Renewal Team
411 West 4th Ave., Suite 2C
Anchorage, AK 99501
Record@jpo.doi.gov

Dear Gale Norton, BLM and the TAPS Renewal Team,

Since the Trans-Alaska Pipeline System (TAPS) right-of-way lease permits are up for renewal for the first time in 30 years, I wanted to make sure my concerns were appropriately addressed.

First, I would like to argue the statement by federal and state regulatory agencies that the aging 800-mile pipeline and its support systems that were originally built to last 30 years *"can be sustained for an unlimited duration"* with minimal costs and change in the operating and maintenance procedures. This is hardly credible given the numerous problems with the pipeline. 84-1

The permafrost is melting, the ground is moving, the pipeline is corroding, the infrastructure is shifting, and the 800-mile Trans-Alaska Pipeline System (TAPS) was only built to last 30 years. I am concerned about the Bureau of Land Management TAPS Renewal Team's hurried push to move forward plans to renew the aging pipeline which travels across the tundra, through mountains and forests and traverses hundreds of rivers and streams, south to the Gulf of Alaska for another 30 years with no public awareness and marginal response to public concern. 84-2

The fall 2001 spills on pipeline startup, the failed response to the Livengood bullet hole spill, and the 21-inch shift in a section of pipeline that went undetected for 3 months are obvious examples of problems with the TAPS. Why the TAPS squad has given the public such a short timeframe in which to respond to concerns is beyond many Alaskans.

In Cordova, Alaska for example, the BLM TAPS Lease Renewal Team scheduled a public hearing at 7pm on a Friday night in late July in a fishing community with less than 10 day's notice? Last time there was a public hearing regarding oil transport in Cordova, the hearing began at 8am and lasted until 8pm. One testifier at the July 26 meeting commented that "scheduling a public hearing at this time in Cordova would be like scheduling an important hearing at 2:30 in the afternoon in Manhattan and expecting people to attend during work hours – it's just not going to happen – people are working." 84-3

First and foremost, 100% of the testifiers agreed that the comment period needed to be extended at least another 45 days, that another hearing needed to be scheduled after fishing season at a reasonable hour, and that there needed to be sufficient notice of such a hearing. I stand behind my fellow Cordovans on these comments.

Beyond those logistical requests, I am well-informed about concerns regarding the safety of the pipeline renewal and the toxicity of oil and what they mean for our coastal fishing community. Since the pipeline crosses 76 salmon-bearing streams in the Copper River Watershed (Watershed), 20% of the 800-mile pipeline is located within the Watershed, oil 84-4

pollution affects salmon spawning and reproduction at a tiny amount of 1 part per billion, there is no oil spill response plan for the Watershed in the case of an earthquake or an accident, and because the TAPS was an engineering feat only built to last 30 years, I, along with fishers and subsistence-users am concerned about the potential and very-likely threats to the world-famous Copper River salmon fishery. No wonder they scheduled this meeting during fishing season and neglected to give sufficient notice to Cordova residents. 84-4 (cont.)

We Cordovans have already been devastated by oil pollution from the infamous Exxon Valdez tanker. We depend enormously on the Watershed to make a living, to feed our families, and for clean drinking water. Perhaps the TAPS squad is so concerned because we Cordovans know all too well that there is no way to clean up an oil spill once it has happened. If there were and earthquake that ruptured the TAPS, there is no way Alyeska, the state, or the Federal agencies could mobilize cleanup operations in a timely enough manner that would make a difference. Oil spill contingency plans for the overland portions are sorely inadequate or lacking. The potential for disaster is magnanimous and Alaskans have already felt its effect on the social and economic fabric of the Prince William Sound communities from the Exxon Valdez 1989 spill. Everyday, and each day the TAPS ages, Alaskans fear another accident. 84-5

In addition, our coastal fishing community depends increasingly on tourism as a source of lost revenue resulting from the 1989 Exxon Valdez tanker spill. Many people come here to enjoy the serenity and magic of the Copper River Delta and the myriad of wildlife it boasts, including eagles, trumpeter swans, dusky Canada geese, black and brown bears, marmots, goats, wolves and moose. It would devastate us further if our unspoiled wildlands were destroyed. Many US citizens would be outraged to know about the potential for disasters across the pristine landscapes surrounding the 800 miles of pipeline, especially since the North Slope only provides 3 percent of US oil needs. 84-6

Last but not least, Cordovans and local Native villages were not cited on the TAPS Draft Environmental Impact Statement (DEIS) as dependent on subsistence in the region as a valuable resource. Bruce Cain, Executive Director of the Native Village of Eyak mentioned that the DEIS "lacks recognition of federally recognized tribes and relies inappropriately on the *Handbook of North American Indians* rather that the Tribes themselves for information about their history and culture." The DEIS stated that, "Because so few Eyak remain, a discussion of Eyak culture in the 21st century is impossible." (*Section 3.25.1.1.2, p. 3.25-11*) Not only should Cordovans see the logical and sustainable reasons for improvements to or removal of the TAPS, but they should also be offended by the negligence of the TAPS Team to disregard their culture and heritage. 84-7 84-8

Several major conservation, public safety, and corporate watchdog groups are concerned about the affects of the aging infrastructure, the possibility of additional terrorist attacks and global warming's melting permafrost along the 800-mile pipeline corridor. Oil is toxic to fish, wildlife and the pipeline workers. Past oil spills, as large as the Exxon Valdez, and as small as bullet hole last October have taken far too long to cleanup, have polluted inland and coastal waters and have cost millions to contain. All in all, once oil is spilled, Alaskans lose their food supply, fishing economy, clean water and natural heritage – oil is impossible to clean up and its damage lasts untold generations. 84-9

The Alaska Forum for Environmental Responsibility (AFER) in its report, The Emperors New Hose, by Richard Fineberg, details some of the serious operational and maintenance problems

facing Alyeska and the pipeline over the last couple of years. In this report AFER makes **seven recommendations** about how to change and improve pipeline operations and they insist that these changes be implemented prior to the Grant and Lease renewal of the right of way lease for the Trans Alaska Pipeline System. These 7 recommendations include:

- The public comment period must be extended by at least 45-days to ensure ample time for meaningful input. 84-10
- There needs to be a Citizen's Advisory Council established to oversee operations of the pipeline. The grant lease should establish a citizens oversight group (COG) funded by the TAPS Owners through the Department of the Interior. 84-11
- Secondly, the TAPS owners should be required to place the dismantling, removal, and restoration funds directly into an escrow account so that they no longer continue to profit off of these funds, and a portion of these funds should be used to fund a Citizens Advisory Council 84-12
- Grant and Lease renewal should be made conditional on satisfactory completion of an immediate comprehensive independent field audit, as well as an independent technical review and field audit every five years for the duration of the life of the pipeline. 84-13
- The ownership of the TAPS should be transferred to a single owner with no connections to North Slope crude oil production. 84-14
- A TAPS Employee Concerns Program should be incorporated into lease and right-of-way renewal to ensure critical problems are adequately addressed to prevent spills. 84-15
- Stipulations attached to the original federal and state Grant and Lease agreements should be carefully reviewed to ensure that they reflect **a)** scientific and technological advances during the last three decades and **b)** experience with the operation of TAPS. 84-16

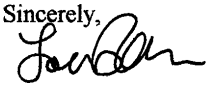
I fully support these recommendations to be implemented before the Grant and Lease renewal is approved that were complied by the Alaska Forum for Environmental Responsibility.

TAPS is a national security issue affecting all US citizens, not only those who live in Alaska. We must reduce our dependence on oil, not only as a national security issue, but also as a public health issue. How long will it take for our communities and our country as a whole to connect the dots between oil and public health? How long will it take people to realize the government subsidizes oil corporations to pollute our water supply, destroy our fisheries, and cause the myriad health problems associated with air pollution? 84-17

We must fight to keep our last remaining wild places intact so that they may filter our water, spawn our Copper River salmon and serve as a reminder of what is pristine and natural. The TAPS Lease Renewal is not only an urgent issue in Alaska, but it is a symbol our ill-ecological fate.

Thank you for the opportunity to submit my concerns and comments.

Sincerely,



Lauren Joy Padawer
Cordova Resident

Responses for Document 00084

00084-001: The BLM and member agencies of the JPO are committed to the protection of human health and the environment. The Federal Grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. This authority allows the BLM and JPO to ensure that operation and maintenance are done properly if TAPS is to operate.

00084-002: The EIS covers the design of TAPS, corrosion monitoring, geotechnical issues, and monitoring of the aboveground pipe. It is correct that the effects of aging have the potential to impact the integrity and reliability of any mechanical system. However, age alone does not dictate reliability or performance. Myriad factors can impact system performance. For example, the manner in which mechanical systems are operated and maintained can greatly influence their long-term integrity, reliability, and performance.

Utilizing its oversight authority, the JPO ensures that APSC's operating and maintenance procedures take all potential impacting factors into account and are sufficient and appropriate to maintain TAPS integrity. The JPO also has the authority to direct APSC to undertake changes, repairs, or upgrades when that is not the case. Under the reliability centered maintenance (RCM) program, all TAPS subsystems are being carefully evaluated for the consequences of their failure and will have maintenance regimens or remanufacture, overhaul, or replacement schedules established that preclude such failures from occurring, if they would have an adverse impact on public safety or the environment.

The warming in Alaska in the last several decades is recognized. Evidences of warming in areas surrounding Alaska, including the Arctic Sea, as well as air temperatures, permafrost temperatures, and field observations in thermokarst lakes and glaciers are presented in Section 3.12.7.

Factors that could impact pipeline integrity are identified in Section 4.2 and are incorporated into analyses presented in Section 4.3. The JPO and APSC have entered into memoranda of agreement committing APSC to using reliability centered maintenance (RCM) protocols to form the basis for APSC's maintenance decisions and clarifying expectations on the use of RCM. See the discussion in Section 4.1.1.7.

00084-003: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00084-004: The Copper River Drainage is one of several traversed by the Trans-Alaska Pipeline System (TAPS). Several individuals and organizations commented on the Draft Environmental Impact Statement "Renewal of the Federal Grant for the Trans-Alaska Pipeline System Right-of-Way," expressing concern about the impacts that would be associated with a potential oil spill in the Copper River Drainage, and APSC's plans to prevent or respond to such a spill. See the text box in Section 4.4.4.3, "Oil Spill Planning for the Copper River Drainage."

See Chapter 5.2 of the FEIS regarding notice of the DEIS.

00084-005: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan." The estimated response times for various spill locations considered in the DEIS are provided in Table 4.4-13 on page 4.4-44 of the DEIS. The C-Plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline or at VMT. They are available to the public through various libraries in several major cities in Alaska. Oil spill prevention and response capabilities and related activities specific to the Copper River Drainage area are discussed more fully in the text box in Section 4.4.4.3,"Oil Spill Planning for the Copper River Drainage."

Since the Exxon Valdez Oil Spill in 1989, and the enactment of the Oil Pollution Act in 1990, significant improvements have been made in the procedures, staffing, and the equipment needed to prevent and respond to potential oil spills from tankers in the Prince William Sound. Among the improvements made are the following: (1) APSC's Ship Escort/Response Vessel System was established in July 1989 to help tankers navigate through the PWS and to respond to potential oil spills, (2) New procedures were established and regulations put in place by the United States Coast Guard to better control the tanker traffic in the PWS, (3) PWS Regional Citizens' Advisory Council was created to help plan for and oversee the oil spill prevention and response operations, (4) The amount of equipment and personnel available for oil spill prevention and response was increased, (5) more stringent training and personnel monitoring programs were established, (6) Government oversight was increased, and (7) the spill prevention and response budget was increased dramatically. The currently available oil spill response capabilities and plans for the PWS are summarized in Section 4.1.4 of the EIS and are provided in detail in the Prince William Sound Oil Discharge Prevention and Response Plan (Prince William Sound Tanker Plan Holders 1999).

00084-006: Thank you for your comment.

00084-007: Text and tables in Section 3.24.2 and D.2.3.4 discuss and present data on subsistence harvest levels and participation for Chenega Bay, Cordova, and Tatitlek. The text and data presented indicate that these three communities harvest a broad range of resources, and that the vast majority of households harvest and use these resources. Tables 3.24-1, 3.24-2, and D-26, and Sections 3.24.2.4.2 and D.2.3.4.2 specifically deal with Cordova. As the rural Alaskan economy was characterized as mixed (that is, combining subsistence and cash economies), the economy of no village was viewed as entirely dependent on subsistence, though the data clearly show a heavy reliance on subsistence for all three localities.

Because subsistence is defined in the EIS based on rural residency, Alaska Natives are not singled out in these communities with regard to their particular reliance on subsistence, though Section 3.24 notes that Alaska Natives have a special relationship to subsistence activities. Table 3.29-1 shows the percentages of populations in each of the three listed communities who claim Native heritage.

00084-008: A discussion of federally recognized Tribes has been added to Section 3.25.1.2. A clarification of differing perspectives on Eyak heritage has been added to Section 3.25.1.1.8.

00084-009: Thank you for your comment. Cleanup and toxicity of spilled oil is addressed in Section 4.4 of the EIS.

00084-010: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00084-011: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00084-012: The reader is directed to the discussion of escrow funds found in Section 2.5.

00084-013: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00084-014: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00084-015: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent's office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00084-016: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00084-017: Thank you for your comment.

BLM's Trans-Alaska Pipeline System
Right-of-Way Renewal
Draft Environmental Impact Statement
Public Hearing Comment Form

Use this self-addressed form to submit your TAPS Renewal Draft EIS comments. Please give this completed form to one of the meeting hosts or take it with you and mail it. Make your comments, fold the form, tape it shut, place a stamp on the outside and drop it in the mail. *Comments must be postmarked no later than August 20, 2002.*

Please provide this information:

FOLD HERE

Name Sandra P. Wassilie
Title/organization Citizen
Mailing address P.O. Box 1576
City Seward
State AK Zip+four 99664-1576

FOLD HERE

E-mail (I wish to receive TAPS Renewal EIS information by e-mail at this address) swassilie@seward.net

I support giving the renewal process wider public exposure. Given TAPS crosses most major watersheds, it spans the state. TAPS to date has served the state well. However, it is 25 years old. Ironically, its maintenance budget has been reduced, increasing risks to watersheds and coastlines that support other economies. Every citizen needs to understand the degree of oversight given TAPS. This can be done by extending the comment period and by bringing the draft EIS into more communities,

85-1

85-2

85-3

WITHHOLDING OF PERSONAL INFORMATION

It is BLM's practice to make comments, including names and addresses of commenters, available for public review during regular business hours. Individuals may request that their home address be withheld from the public record, and BLM will honor such requests to the extent allowable by law. Circumstances may also arise in which BLM would withhold from the public record a commenter's identity, as allowable by law. If you wish BLM to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, BLM will not consider anonymous comments. BLM will make all submittals from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

Responses for Document 00085

00085-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00085-002: The age, condition, and maintenance (past, current, and projected) of TAPS was considered in preparing the DEIS.

00085-003: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

To whom it may concern,
As a commercial fisherman in Prince William Sound / Copper River Delta, and resident of Cordova I feel threatened by the TAPS and [redacted] the way in which the lease renewal seems to be pushed through without full consideration of the very real external costs of the system. I [redacted] think that the people of Cordova and those who might want to ~~raise~~ voice concerns about the TAPS are deliberately being pushed aside & not given a full chance to provide input. The timing of the public hearing in Cordova was particularly disturbing. Before I [redacted] would consent to renewing a lease, that would pump oil across 76 salmon streams in my watershed, in [redacted] an aging pipeline, there needs to be some changes made.

1. Independent Audit of TAPS seperate, DEIS 86-2
2. [redacted] Citizens Oversight Committee 86-3
3. Detailed spill prevention Plan 86-4
4. Detailed spill Mitigation Plan 86-5
5. Compensation Program for victims of a spill (The Alyeska Consortium needs to be held responsible financially) 86-6

86-1

These external costs must be taken into account now. Once the pipeline beneficiaries to be

An oil spill in the Copper River Watershed would be truly devastating Financially & culturally in the region. The Ahtna people will have lost if we soil another of Alaska's Wilderness gems. The people who live here, who make a living from commercial fishing, and/or feed themselves & their families with these fish & other subsistence resource will be pushed closer towards the loss of a beautiful lifestyle. What has our Nation lost when it no longer raises a children in this manner? - One of the many "external" costs that need to be addressed before renewing this lease.

86-7

Thank you

Michael J. Mahoney

Mike Mahoney
PO Box 2416
Cordova, AK 99574

Responses for Document 00086

00086-001: Although 45 days is understandably a short time to review a document of this size, it is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule, and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period. In addition to holding public hearings in Cordova for the purpose of receiving comments on the DEIS, five other ways were provided to submit comments during the 45-day period.

00086-002: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00086-003: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00086-004: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

The TAPS Oil Discharge Prevention and Contingency Plan for the pipeline (C-Plan), prepared by APSC (2001g—see Section 3.30 of the FEIS for the reference), provides for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline, including at river crossings.

The C-Plan is updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline are incorporated into the C-Plan. In addition, the C-Plan is reviewed annually by BLM, every three years by ADEC, and every five years by DOT. EPA also reviews the plan as it applies to pump stations. As part of this process, APSC and the federal and state agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment and personnel are made available along the TAPS.

The reader is also referred to Section 4.4.4.3 where spill planning, response, and mitigation for the Copper River Drainage are discussed (see the text box, "Oil Spill Planning for the Copper River Drainage").

00086-005: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

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In addition, please see Section 4.1 in the EIS for a detailed presentation of mitigation measures including those relating to oil spill prevention and response.

00086-006: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00086-007: Impacts to two tributaries of the Copper River (Gulkana and Tazlina Rivers) are discussed in Section 4.4.4.3. Additional information on the Copper River Drainage can be found in the text box "Oil Spill Planning for the Copper River Drainage" in Section 4.4.4.3.

BLM TAPS Renewal EIS
Argonne National Lab EAD/900
9700 Cass Avenue
Argonne, Illinois 60439

RE: Comments on Application of the Trans-Alaska Pipeline System Owners for Renewal of the Federal Grant and State Lease for the TAPS Right-of-Way

My name is Gail Osborne Steen. My father, Ben Osborne, moved to Cordova in 1908. He manufactured gold jewelry and was deeply involved in the commercial life of Cordova. My brother, Bjorne Osborne, was a commercial fisherman, as is my son, Karl O. Steen, and as is my grandson, Karl A. Steen. My daughter-in-law Ruth has a gift shop on First Street. My son Mark and his wife Lynne are also in business in Cordova. My family has been involved in the City of Cordova for almost one hundred years.

My family and my community are devastated from the aftershocks of the ***Exxon Valdez*** oil spill 13 years ago. The emotional and financial turmoil this catastrophic event brought on Prince William Sound, and Cordova, is impossible to describe.

We are VERY concerned that the next major spill will be along the overland portion of the TAPS. The risk for my community-20% of the 800-mile pipeline is within the Copper River Watershed and the main pipeline crosses 76 tributaries of the Copper River. While spill prevention and response measure have improved significantly since the 1989 spill--almost all due to citizen oversight and pressure; most of those changes are at the Valdez terminal and in Prince William Sound. On the pipeline, reliable spill prevention and response measure still do not exist. The problem is particularly acute at river crossings. TAPS crosses 800 streams and sections of pipeline over rivers have reached design capacity for sag- there is nothing left to give. This seems like an accident waiting to happen. 87-1

My comments are based on my experience living in a community that the oil company and government representatives visited in the early 70's and promised there wouldn't be an oil spill in Prince William Sound. The oil companies made many other promises such as tankers would have double hulls and we would have a state-of-the-art traffic control system in the sound. Had these promises been kept, we might not have had *the Exxon Valdez oil spill.* 87-2

Some, but not all, of the oil companies' promises were stated as a set of conditions and stipulations in the original agreements and right-of-way grants. The Interior Department and its designees were assigned the job of ensuring those promises to the American people were kept. Even a brief review of history shows that many of these promises were broken and that the companies were allowed to operate for literally years in noncompliance with their federal grant and state lease. 87-3

For example, the ballast water treatment (BWT) facility at the tanker terminal has not been reviewed at least once every 5 years to ensure state-of-the-art equipment and technology as promised the federal grant and state lease. Some improvements at the BWT facility occurred only recently and through citizen involvement and oversight. 87-4
The vapor recovery system at the tanker terminal didn't work for decades--since startup until 1998 when vapor controls were built into two of the four berthing docks. 87-5
When it didn't work it dumped literally tons of benzene into the air and jeopardized public and worker health and safety in violation of the federal grant, state lease, and operating permits. In 1993, concerned industry employees testified in Congress that the quality control program was nonexistent--since startup--and, as a result, the entire TAPS had been so poorly maintained that it posed an imminent threat to the public, workers, and the environment. Subsequent audits validated the whistleblowers' concerns. Operating without an independent quality control program is in direct violation of the federal grant and state lease. 87-6

More recent examples occurred after the *Exxon Valdez* oil spill. Still now over 13 years later, most of the species studied by the Trustee Council have not recovered from the spill. Yet the federal grant and state lease promise that damages to public lands will be promptly repaired or replaced and that damages to public fish and wildlife resources, and their habitat, will be rehabilitated. This has not happened. 87-7

The oil companies also promised in stipulations attached to the federal grant and state lease to "take all measures necessary to protect the health and safety of all persons affected by their activities..." (Stipulation 1.20.1). I believe this promise includes taking care of residents and cleanup workers after a spill. Yet, after the *Exxon Valdez* spill, Tatitlek villagers observed that Exxon was willing to spend $800,000 on each sea otter for rehabilitation, but nothing or very little on mental health care for people traumatized by the spill. Further, thousands of cleanup workers got sick during 1989, despite Exxon's worker safety program. I am just learning that hundreds of people may still be sick from overexposure to oil vapors, fumes, and aerosols during the cleanup. All the oil companies promised to "immediately abate any health or safety hazards" (Stipulation 1.20.1): it seems all the companies, not just the spiller, are responsible to ensure that people don't get sick during the cleanup--and to take care of the ones who do as per the original promise. 87-8

I think that the oil companies are now currently in noncompliance with the federal grant and state lease. For example, the fire-fighting ability at the tanker terminal is virtually nonexistent. Oily sludge (hazardous waste) has collected several feet deep in tanks at the BWT facility--and the sludge incinerator was never built as per the original facility design. There is still no independent quality assurance program. The contingency plans for river spills are grossly inadequate--drills show the plans won't work to contain and cleanup oil spilled into rivers. I'm sure this list is incomplete and pipeline regulators could add to it if they were to seriously look for problems and not just respond to ones brought to their attention by citizens or concerned employees. 87-9

In light of these past and still ongoing problems, I strongly disagree with statements made by both the state and federal regulators in the draft EIS documents. The Alaska Department of Natural Resources found the oil companies to be in compliance with the state lease. This determination is obviously a requirement for reauthorization as it has nothing to do with reality. 87-10

Federal and state regulatory agencies also stated that the aging 800-mile pipeline and its support systems that were originally built to last 30 years *"can be sustained for an unlimited duration"* with minimal costs and change in the operating and maintenance procedures. This statement demonstrates a lack of credibility--and no grasp of reality. The recent spate of accidents including the failed response to the Livengood bullet hole spill, and the 21-inch shift in a section of pipeline that went undetected for several months show that both industry and the regulators are ill-prepared for serious problems along the overland section of TAPS. The 3 spills at pump stations on pipeline startup after routine maintenance last fall clearly demonstrate this pipeline is aging and not aging well as frequent spills on startup are one sign of increasing problems that should be anticipated--not ignored--in an aging pipeline. 87-11

I was further shocked and offended by the following statement in the draft EIS. "While the *Exxon Valdez* oil spill was a significant event in the operation of TAPS, creating significant benefits to the state and local economy that more than offset the economic damage to the fishing and tourism industries in Prince William Sound, it is unlikely that a spill of such magnitude, even if it occurred again would create the same level of economic activity" (DEIS, page 4-7-116). 87-12

This offensive statement clearly shows that the government regulators have a completely different perspective of their job of pipeline oversight than we were all lead to believe by the federal grant and state lease. The original right-of-way documents do not mention that economics of spill cleanup would be weighed against economic damages to the few communities at risk. Instead the oil companies promised to protect, repair, replace, rehabilitate, etc. fish and wildlife resources, and their habitat--and the regulators are supposed to hold the companies to this promise. Specifically, the

companies also promised to protect subsistence resources, lands, and users, which have a zero dollar economy and can't be compared to economics of spill cleanups at all.

Oil spills are expensive to clean up--I'm sorry that I can't see this as good for the economy, but that's really irrelevant. Even if there was zero economy as measured by exchange of dollars, the oil companies are authorized to operate only if they take steps to minimize risk of oil spills and damage from spills. It's the government regulators' job to see the oil companies are held to this standard--the statement in the draft EIS seems to indicate that the regulators are not doing their job and are out of compliance themselves with the federal grant and state lease. 87-12 (Cont.)

Finally, I must state that I feel this 45-day public comment period for a project of such national and state significance is counterproductive at best and a sham at worst. I did not have time to thoughtfully review the 1,700 page draft EIS because I have been busy trying to earn a living and put up winter food in Alaska's short summer. It appears from statements in the draft EIS that the government regulators did not have time to thoughtfully review nearly 30-years of TAPS history and compare performance with promises, conditions, and stipulations in the federal grant and state lease. Why the rush on a project of such significance? Over a year ago, the Joint Pipeline Office stated that the comment period would run from July to September, but in keeping with 25 years of broken promises by TAPS operators and government regulators, the regulators have broken that promise too. 87-13

Despite all the obstacles for public testimony, I offer the following recommendations for improving TAPS operations for the next 30 years--and I believe all my comments are well within the scope of this National Environmental Policy Act hearing process. I can only support reauthorization for another 30 years if these recommendations are fully addressed and included in the next federal grant and state lease.

#1 Stiff meaningful penalties for failure to comply.

All the laws, regulations, stipulations, and oversight in the world are forever inadequate without meaningful penalties and enforcement. Monetary fines are dwarfed by enormous profits, and the regulators are certainly not going to shut down the oil flow as a penalty for noncompliance--the nation has become too dependent upon this energy source. The track record of the oil companies show that it has acted like a child who knows it is never going to be disciplined. This was not what the American public was originally promised or led to believe would happen.

Some possibilities for meaningful penalties for noncompliance by the oil companies include requirements for: 1) reporting the circumstances of noncompliance to their shareholders in quarterly newsletters as the events unfold (not after the fact); 2) CEOs 87-14

and other responsible officers of oil companies to conduct public service in the TAPS corridor communities most at risk from the consequences of the noncompliance; 3) accruing penalties with interest on a daily basis as long as the infraction occurs; and tying penalties in with the cost of the fixing the problem so that penalties are 10 times the money saved by failure to do the maintenance work in a timely manner. This latter would force owners to change perspective and view maintenance as a *cost savings* compared to prospective penalties. 87-14 (Cont.)

#2 Establish a TAPS Citizens' Oversight Group.

Following the *Exxon Valdez* tragedy in 1989, the State of Alaska created the Alaska Oil Spill Commission to investigate the root causes of the spill and recommend changes to the oversight system. One of the Commission's central findings was that institutional complacency, both in industry and government, was a root cause of the spill. The Commission found that citizens were essential to an effective oversight system because they bring urgency to protecting the resources they care about and depend upon for their livelihoods. Distant bureaucrats, despite their best efforts, do not share this local perspective. To prevent future complacency, and thereby prevent future disasters, the Commission recommended creation of citizens' advisory councils for the marine and overland segments of Alaska's oil transportation system. We only have citizen oversight of the marine portion of TAPS--the tankers and tanker terminal--and it has proven the wisdom of the Commission's finding. It is time to apply the lessons learned to the overland pipeline.

As a requirement of renewal, the grant and lease should establish a TAPS COG that would operate completely independently of government regulators and industry: incorporating government and industry into "citizen oversight" creates an oxymoron. The TAPS COG should make recommendations directly to the Department of Interior (DOI) and to the Department of Natural Resources (ADNR) or their designees. The COG should be funded through the DOI by the permittees as part of the cost of TAPS operations, and all members of the TAPS COG and their staff should be paid for their services. The COG contract should be negotiable on the same timeframe as the right-of-way permit; i.e., 30 years. 87-15

#3 Charge penalties if more than 10% of employees are afraid to speak out.

Industry employees are the public's front line of defense in reducing oil spills. The workers know what is wrong and how to fix it. They need to be allowed to do their jobs free of harassment and intimidation. All personnel--and particularly the quality control inspectors--need to be independent of pressure from Alyeska and its owners to provide the reliable comprehensive quality assurance program promised to the public. Such a 87-16

program is critical to TAPS integrity as the pipeline ages, because increased maintenance costs will compete with oil company profits: workers need to be able to report maintenance problems without fear of reprisal.

The nuclear regulatory industry closes facilities if more than 10% of plant employees are afraid to speak out because of reprisals, harassment and intimidation. A similar standard should be adopted for TAPS operations, with annual independent surveys of workers to determine work conditions. Instead of closing facilities, stiff penalties should be applied, and public service by company officials and reporting of noncompliance to shareholders required (see Rec. #1, above). 87-16 (Cont.)

#4 Require independent, long-term epidemiology studies, and short- and long-term treatment of physical and mental health effects, for workers and affected residents after major TAPS spills.

Oil spills were--and still are--an anticipated side effect of TAPS construction, operation, maintenance, and termination. That's why there are oil spill contingency plans; that's why the oil companies promised, as a condition of operating, to protect public and worker health and safety. But a promise is worth nothing without follow through: after the *Exxon Valdez* spill this promise was ignored. There was inadequate financial support to meet increased needs of mental health facilities in affected communities and short- and long-term physical health care needs of cleanup workers were unmet. This is simply unacceptable--and in noncompliance with permits.

TAPS owners should be required to pay for increased mental health care in the years during and immediately after a spill in all affected communities. This care should include focused peer listening circles to mitigate community-level emotional trauma. Since oil spill cleanups are considered a hazardous waste cleanup, long-term health care studies should be required as the health symptoms associated with crude oil exposure (long-term respiratory damage; disorders of the central nervous system, liver, kidney, blood, and skin; endocrine disruption; and immune suppression) could take years to manifest as physical health problems. Oil companies should also be required to provide chemical decontamination treatments for individuals with acute health symptoms from high body levels of crude oil and other substances present during the cleanup. Individuals who become disabled from overexposure to chemicals present during the cleanup should be compensated by the oil companies, as should the estate of individuals who die from overexposure to chemicals present during the cleanup. 87-17

#5 Require independent verification of spill volume as a condition of lease renewal.

Spill penalties for damages to natural resources such as fish, wildlife, public lands held in the public trust are based on the volume of oil spilled--as reported by the spiller. One way to reduce the risk of spills and resulting damage to the environment and worker and public health and safety--one of the promises of the original agreement and right-of-way leases--is to penalize TAPS owners, or responsible parties in the case of a TAPS tanker spill, for the correct amount of oil spilled. 87-18

For example, Exxon underreported how much oil it spilled. In an unpublished investigation on file at the Alaska Resources Library and Information Services, the State of Alaska found Exxon spilled about 35 million gallons. Exxon paid the American public one billion dollars for damage to public resources from a supposedly 11 million-gallon spill: by underreporting its spill by one-third, the company only paid for one-third of the damages and essentially saved itself two billion dollars.

Independent verification should be required as a new condition of lease renewal. Further, stipulation should specify that government regulators and citizen oversight councils, either separately or jointly, conduct the assessment and agree upon the volume spilled before spill penalties are assessed. 87-19

#6 Thoroughly review and update the original right-of-way grants and stipulations in light of past experience, current science, new technology, new laws, and public comments.

The federal grant and state lease are three decades old and no longer reflect current science, technological advances, and law changes. For example, global warming and melting permafrost threaten to make at least one-third of the 77,000 vertical support members of the TAPS unstable with potentially catastrophic effects on the pipeline. Studies from the *Exxon Valdez* spill show that oil is 1,000 times more toxic previously thought, and that it can cause long-term environmental damage. Federal laws are still based on outdated research from the 1970s and 1980s and are grossly under-protective of fish and wildlife. This makes the original promises to protect fish, wildlife, and habitat even more important as basically these promises mean the owners and TAPS regulators will take measures *beyond existing laws* in order to protect fish and wildlife, habitat, and other subsistence needs. 87-20

Further, the original grant and lease agreements were signed by some companies that no longer exist because of mergers and buyouts. I assume, but would like proof, that the new companies are signatories to the current right-of-way grants and leases. 87-21

#7 Grant and lease renewals should be made conditional on satisfactory completion--within 12 months of the renewal--of an independent field-based evaluation of the entire TAPS including hardware and management. 87-22

In 1993 a series of independent and industry audits found TAPS was in an imminent state of collapse with several major system wide problems including hardware problems, technical issues, and management issues. 1994 was proclaimed to be the "year of fixes" by the Alyeska president at the time, but fixes proved elusive. For example, the highly touted fiber optics cable, which was supposed to replace the old communication system, didn't work as planned and was quietly shelved.

No one knows how many problems were actually fixed of those disclosed in 1993, or what new problems remain unfixed because there has not been any independent audits of the TAPS since 1993. This is not acceptable for a system that provides a significant portion of the nation's energy demands and the bulk of the state's operating revenues, and can wreak environmental, social, and economic havoc on Alaska's communities, residents, and federally recognized tribes. 87-23

#8 Grant and lease renewals should be made conditional on satisfactory completion of annual independent audits of TAPS operations and management and 5-year in-depth independent field-based evaluations of the entire TAPS, including hardware and management. 87-24

I am concerned that the recommended alternative--to renew the permits for another 30 years--is way to long for this particular pipeline: it is essentially double its design life. If reauthorization is granted, it should be made conditional upon satisfactory completion of independent audits every year with in-depth audits every 5 years as stated above. The Prince William Sound Regional Citizens' Advisory Council has to pass an annual audit and review of operations to be recertified. Nothing less should be expected for the entire TAPS, which has much more at stake than the advisory council!

#9 Immediately escrow TAPS DR&R funds and use interest to finance the TAPS COG and other measures to improve protections for environment, fish and wildlife, and worker and public health and safety. 87-25

Funds intended for future dismantling, restoration, and removal of the TAPS have been collected from TAPS oil companies and passed through to parent companies, resulting in enormous profits--and no pot of money for future DR&R. This is a breach of public trust--and yet another example of corporate irresponsibility and accounting fraud. Government regulators need to take immediate action to remedy this problem.

I want these funds to be escrowed now--before any grant and lease renewals--as a sign of good faith efforts and intention by oil companies and government regulators to the American public. The public was promised this once: we don't need to be promised it twice. Further, earnings from the funds can be pledged towards payment for fulfilling other stipulations under the original agreements--such as protecting the environment, public resources, and worker and public health and safety.

#10 Transfer of TAPS operations to single source with no North Slope production.

The oil company owners consistently cut costs on TAPS operations and maintenance to increase their profits. This dynamic has created an internal conflict of interest, essentially, between the owners and the public interest. While the oil company permittees promised in the right-of-way leases to take all 'reasonable' or 'appropriate and adequate' steps to protect the environment, fish and wildlife, and public and worker health and safety, these adjectives are relative when viewed from different perspectives. What seems reasonable to the oil companies, who measure the cost of prevention against their profits, may not seem reasonable to the public, especially those who measure the cost of spills against their livelihoods and health. The track record shows that the oil companies have profited handsomely at the public's expense.

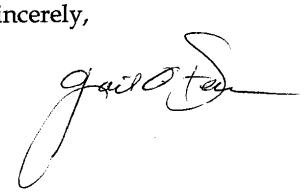
By transferring the operation, maintenance, and termination of TAPS to a single source with no North Slope production, the internal conflict of interest is broken. This operator would take more 'reasonable' steps, from the public perspective, to reduce its liability from spills by attention to TAPS operations and maintenance. Performance bonds could be required for additional protection of the public interest. 87-26

Summary of Concerns

We are going to have to get very creative to prevent a pipeline spill. We can't keep doing the same thing we have done in terms of TAPS operations and maintenance for the past 25 years. To continue past practices is to virtually guarantee a major spill in the TAPS corridor. 87-27

I ask that you give serious consideration to my comments. And I restate my position: I can only support TAPS reauthorization for another 30 years if these recommendations are fully addressed and included in the next federal grant and state lease.

Sincerely,



Responses for Document 00087

00087-001: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" (APSC 2001g) for the pipeline and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" (APSC 2001h) for the VMT. The Plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline or at VMT. They are available to the public through various libraries in several major cities in Alaska. Oil spill prevention and response capabilities and related activities specific to the Copper River Drainage area are discussed more fully in the text box, "Oil Spill Planning for the Copper River Drainage," in Section 4.4.4.3.

00087-002: Based on lessons learned from the Exxon Valdez spill, a number of improvements have been made (e.g., the creation of the Ship Escort Response Vessel System (SERVS) and phase-in of double-hull tankers) that will reduce the likelihood of a catastrophic tanker accident and the expected outflow given an accident.

Shortly after the Exxon Valdez oil spill, A National Transportation Safety Board report stated that had the Exxon Valdez been fitted with a double hull, "the risks of an oil spill owing to collision or grounding would have been significantly reduced."

00087-003: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00087-004: The JPO produced TAPS engineering report No. 00-E-018, Valdez Marine Terminal Ballast Water Treatment Plant: Compliance with Agreement and Grant Section 23 (May 24, 2000). The report satisfies the 5-year review process.

00087-005: Potential health impacts associated with ambient concentrations of benzene, toluene, ethyl benzene, and xylene (BTEX) in Valdez area under the proposed action (at the crude oil throughput levels of 0.3, 1.1 and 2.1 million bbl/day) and other alternatives were estimated on the basis of conservatively high ambient concentration estimates of BTEX and other toxic air pollutants emitted from the BWTF and other sources at the Valdez Marine Terminal (Sections 4.3.13, 4.5.2.13, and 4.6.2.13). These ambient concentration estimates are based on the ambient BTEX concentrations monitored during the 1990-1991 personal and ambient monitoring studies and the tracer studies conducted in the Valdez area when both the vapor emissions from tankers and the BWTF were released. Exposures to these concentrations during the 1977-2003 period were factored into estimating the lifetime residential cancer risks (Table 4.3-4).

00087-006: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent's office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00087-007: The federal action addressed in this EIS is renewal of the right-of-way for the TAPS. While renewal would result in continued operation of oil tankers in Prince William Sound, that activity is beyond the limits of the right-of-way corridor and is not under the jurisdiction of the BLM. Moreover, the BLM has no authority over oil spill cleanup and damage assessment within Prince William Sound. Regulation of activities associated with the transport of oil by tankers in Prince William Sound is under the jurisdiction of the U.S. Coast Guard and the U.S. Department of Transportation. Analysis of impacts to fish and wildlife in Prince William Sound is included in the EIS to provide a perspective within which the direct and indirect impacts of the proposed action and alternatives to it are addressed.

The BLM and member agencies of the JPO enforce a number of stipulations that are protective of fish and wildlife resources within the right-of-way corridor. The EIS analysis did not find any significant impact to fish or wildlife resources associated with TAPS operations and maintenance within the right-of-way corridor.

00087-008: As stated in Section 4.4.4.7 of the EIS, "Human Health and Safety," the assessment of impacts from spills is limited to the general public and does not include occupational exposures to cleanup workers generally or TAPS employees at the Valdez Marine Terminal. Protection of these workers is regulated under the Occupational Health and Safety Act and is beyond the scope of this assessment. Nevertheless, this section of the EIS discusses the concerns expressed in your comment about the allegations of workers who participated in the Exxon Valdez oil spill cleanup operations.

00087-009: Any information regarding potential hazards associated with TAPS should be provided to the JPO.

The Valdez Marine Terminal has a number of fire protection systems and fire protection capability was considered in preparing the EIS. See the text box in Section 4.3.13.1 for a description of fire detection and response features.

Build up of waxy solids in tanks at the Ballast Water Treatment Facility has received considerable attention by JPO and APSC, as well as citizens groups such as PWS RCAC. There is concurrence on an appropriate course of corrective action; see the text box in Section 4.3.13.1.3.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan." The Plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from anywhere along the pipeline, including the river crossings, or at the VMT. The Plans are available to the public through various libraries in several major cities in Alaska during the plan review period. These documents are updated and reviewed by various State and Federal agencies periodically ranging from every year to every 5 years. The substantive elements of the contingency plans are controlled by ADEC rules (18 AAC75), which include provisions for public review and comment as part of the plan update procedures. The lessons learned from occurrences such as EVOS and the MP 400 bullet hole incident are incorporated into the documents when they are updated.

00087-010: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00087-011: It is correct that the effects of aging have the potential to impact the integrity and reliability of any mechanical system. However, age alone does not dictate reliability or performance. Myriad factors can impact system performance. For example, the manner in which mechanical systems are operated and maintained can greatly influence their long-term integrity, reliability, and performance.

Utilizing its oversight authority, the JPO ensures that APSC's operating and maintenance procedures take all potential impacting factors into account and are sufficient and appropriate to maintain TAPS integrity. The JPO also has the authority to direct APSC to undertake changes, repairs, or upgrades when that is not the case. Under the reliability centered maintenance (RCM) program, all TAPS subsystems are being carefully evaluated for the consequences of their failure and will have maintenance regimens or remanufacture, overhaul, or replacement schedules established that preclude such failures from occurring, if they would have an adverse impact on public safety or the environment.

The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

Each of the three spills that occurred on start-up after a maintenance-related shutdown have been carefully evaluated, and causal factors have been identified. The JPO has required APSC to revise its shut-down and start-up procedures to prevent reoccurrence. APSC is also required to conduct drills on its procedures to ensure they are correct and complete. Also, APSC has made modifications to piping at pump stations to enhance cold restart capabilities. Summaries of the three incidents are included in CMP Report #11, issued in April 2002. See also Section 4.1.1.4.

00087-012: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

00087-013: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00087-014: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00087-015: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00087-016: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's employee concerns program (ECP) and that APSC has undertaken considerable efforts to improve and refine their ECP program.

The BLM and JPO expects to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public report issues and concerns about TAPS. Recorded messages are checked daily by BLM-Alaska Special Agent's office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protection and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00087-017: Section 4.4.4.7, Human Health and Safety, provides a detailed analysis of the potential effects of oil spills on human health. The BLM and member agencies of the JPO are committed to the protection of human health and the environment. The Federal Grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of TAPS) within the Federal Grant contain numerous provisions that are protective of human health and the environment. If new data or information emerge that point to the need for further studies on the health effects of TAPS operations, these studies will be initiated by JPO.

00087-018: The BLM and the member agencies of JPO investigate all significant spills to assess lessons learned and potential mitigation. There has been no evidence to date that past spill volumes have been reported inaccurately. If natural resource damage claims occur because of a spill, the U.S. Fish and Wildlife Agency or National Marine Fisheries Service conduct studies to evaluate damage to natural resources.

The BLM does not have the legal or regulatory authority to impose fines on the operator of TAPS; however, the DOI Secretary can impose fines up to $1000/barrel under OPA 90.

00087-019: The BLM and the member agencies of JPO investigate all significant spills to assess lessons learned and potential mitigation. There has been no evidence to date that past spill volumes have been reported inaccurately. If natural resource damage claims occur because of a spill, the U.S. Fish and Wildlife Agency or National Marine Fisheries Service conduct studies to evaluate damage to natural resources.

00087-020: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00087-021: Section 1.1 in the EIS lists the current owners of the TAPS in a discussion about the application for renewal of the right-of-way grant.

00087-022: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00087-023: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00087-024: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00087-025: The reader is directed to the discussion of escrow funds found in Section 2.5.

00087-026: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00087-027: The operational history of TAPS, maintenance activities, spill response capabilities, and the potential for spills associated with TAPS were considered in the analysis. Impacts associated with potential spills are discussed in Sections 4.4 of the FEIS.

The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" (APSC 2001g) for the pipeline and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" (APSC 2001h) for the VMT. The C-Plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline or at the VMT. They are available to the public through various libraries in several major cities in Alaska.

The C-Plans are updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline and at the VMT are incorporated into the Plans. See the text box in Section 4.1.1 for a discussion on how lessons learned in response to the vandalism incident near Livengood in October 2001 have resulted in modifications and improvements to the C-Plans for spills and releases along the pipeline. In addition, the C-Plans are reviewed periodically by the BLM, ADEC, DOT, and EPA. As part of this process, APSC and the federal and state agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment is made available along the TAPS.

00088

BLM TAPS Renewal EIS
Argonne National Lab EAD/900
9700 S. Cass Ave.
Argonne, IL 60439
tapswebmaster@anl.gov

State of Alaska, DNR/JPO
Attn: TAPS Renewal Team
411 West 4th Ave., Suite 2C
Anchorage, AK 99501
ADNR_Administrative_Record@jpo.doi.gov

August 20, 2002

Re: Comments on Application of the Trans-Alaska Pipeline System Owners for Renewal of the Federal Grant and State Lease for the TAPS Right-of-Way

My name is Osa Arnold-Schultz. I have fished, worked and lived in Cordova, Alaska for 22 years. My husband, Richard Schultz has been a Commercial Gill-netter for 26 years in the Copper River/ Prince William Sound Fishery – Area E. Together we have 3 other service/retail businesses here in Cordova, a boat & car towing business, the local pet shop and a B & B rental.

We pursue such diversified business endeavors and work 7 days a week most of the year in an attempt to retain our land / ocean based way of life and livelihood here.
AND WE ARE STILL STRIVING TO OVER COME THE ECONOMIC STAINS AND LOSSES OF THE EXXON VALDEZ OIL SPILL.

I AM **APPALLED** THAT RENEWAL OF THE PIPELINE CONTRACT IS EVEN CONSIDERED WHILE EXXON CONTINUES TO IGNORE THEIR LEGAL OBLIGATIONS!!! 88-1

My husband and I attended the town meeting shortly after the spill where a prominent Exxon CEO promised us that "Exxon will make you whole" again. Whereas, they proceeded to do EXACTLY the OPPOSITE! They continue to refuse to settle their debt that was decided in a court of law – let alone keep the promise they made to Cordova. Is it not reasonable to expect Exxon to complete compensation debts prior to any renewal? They must prove they will follow through on their commitments; how else can we trust them to deal effectively with any future spill?

It is imperative that the State of Alaska and The Federal Government COMPEL Alyeska to 'TOW THE LINE' instead of allowing them to continue to reap profits from America's resources irresponsibly and wantonly. PLEASE DO NOT PERMIT THEM TO JEOPORDIZE OUR FUTURES AND THE ALASKAN ENVIRONMENT WITHOUT TAKING EVERY PRECAUTION recommended by the experts. 88-2

The age of the pipeline, the recent and past accidents all support the urgent need for close controls. Please address and implement the following recommendations as requirements of renewal.

#1 Stiff meaningful penalties for failure to comply. 88-3

#2 Establish a TAPS Citizens' Oversight Group. 88-4

#3 Charge penalties if more than 10% of employees are afraid to speak out. 88-5

#4 Require independent, long-term epidemiology studies, and short- and long-term treatment of physical and mental health effects, for workers and affected residents after major TAPS spills. 88-6

#5 Require independent verification of spill volume as a condition of lease renewal. 88-7

#6 Thoroughly review and update the original right-of-way grants and stipulations in light of past experience, current science, new technology, new laws and public comments. 88-8

#7 Grant and lease renewals should be made conditional on satisfactory completion—within 12 months of the renewal—of an independent field-based evaluation of the entire TAPS including hardware and management. 88-9

#8 Grant and lease renewals should be made conditional on satisfactory completion of annual independent audits of TAPS operations and management and 5-year in depth independent field-based evaluations of the entire TAPS, including hardware and management. 88-10

#9 Immediately escrow TAPS DR&R funds and use interest to finance the TAPS COG and other measures to improve protections for environment, fish and wildlife, and worker and public health safety. 88-11

#10 Transfer of TAPS operations to single source with no North Slope production. 88-12

Again, I ask that you give SERIOUS CONSIDERATION to my comments.
I will loose faith entirely in my state and federal governments if you do not
MAKE THE OIL INDUSTRIES ACCOUNTABLE.

Osa Schultz
Box 1291
109 Council Ave.
Cordova, Alaska 99574
AdoreAlaska@ctcak.net



Responses for Document 00088

00088-001: The reader is directed to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00088-002: Thank you for your comment.

00088-003: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00088-004: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00088-005: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent’s office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00088-006: Section 4.4.4.7, “Human Health and Safety,” provides a detailed analysis of the potential impacts of oil spills on human health. The BLM and other member agencies of the JPO are committed to the protection of human health and the environment. The federal grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of TAPS) within the federal grant contain numerous provisions that are protective of human health and the environment.

00088-007: The BLM and the member agencies of JPO investigate all significant spills to verify the spill volume. There has been no evidence to date that past spill volumes have been reported inaccurately. If natural resource damage claims occur because of a spill, the U.S. Fish and Wildlife Agency or National Marine Fisheries Service conduct studies to evaluate damage to natural resources.

00088-008: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00088-009: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00088-010: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00088-011: The reader is referred to the discussion on escrow accounts in Section 2.5, Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00088-012: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00089

Maggie Pinson
18716 95th Avenue NE
Bothell WA 98011
(425) 486-9959

BLM TAPS Renewal EIS
Argonne National Lab EAD/900
9700 South Cass Ave
Argonne IL 60439

August 20, 2002

To whom it may concern,

I have great concern for the natural environment and for the public health of persons impacted by the oil industry, and specifically of the Trans Alaska Pipeline System (TAPS). 89-1

I urge you to impose the seven recommendations proposed by Dr. Richard Fineberg in the Emperor's New Hose and forwarded by the Alaska Forum for Environmental Responsibility when the Grant and Lease for the right of way of TAPS is imposed. 89-2

Sincerely,
Maggie Pinson

Responses for Document 00089

00089-001: Thank you for your comment.

00089-002: Thank you for your comment.

RON KOVALIK 00090
P.O. BOX72563
FAIRBANKS, ALASKA 99707

Gentlemen:

AS YOU CAN SEE FROM THE ENCLOSED COVER LETTER BY RAY METCALFE, THE GROSS REFINING MARGINS AT THE U.S. WEST COAST ARE THREE AND FOUR TIMES THE GLOBAL AVERAGE, AND THE ELOQUENT TESTIMONY OF OTHERS.

THE STATE OF ALASKA EXERCISES NO SOVEREIGNTY OVER HER OIL RESOURCES. 90-1

I WORKED FOR ARCO ALASKA AT PRUDHOE BAY FROM 1977 UNTILL 1986, NEVER IN MY WORK LIFE HAD I SEEN SUCH WASTE, NOT JUST TOOLS AND MATERIALS, BUT ALSO THE SKILLS AND ABILITIES OF THE WORKFORCE. THE ONLY EXPLANATION I COULD FIND FOR THE LACK OF CONCERN FOR EFFICIENCY WAS GRANTED THE POWER TO STEAL OR -THE COMPANY HAD BEEN- WAS GETTING THE OIL FOR A FRACTION OF ITS TRUE VALUE 90-2

1

THE OIL COMPANIES AND THEIR INSTRUMENT, ALYESKA HAVE TOTALLY SUBVERTED OUR "REPRESENTATIVE" FORM OF GOVERNMENT. 90-3

THE RENEWAL OF THE PIPELINE LEASES SHOULD NOT BE GRANTED WITHOUT SOME IRON CLAD, INDEPENDENT OVERSIGHT AT ALL LEVELS AND FIRST HAND AUDITING POWERS. PERHAPS REVENUE SHARING — LIKE OTHER THIRD WORLD COUNTRIES. 90-4 90-5

Thank you.

Ron Kovalik

3

Responses for Document 00090

00090-001: Thank you for your comment.

00090-002: Thank you for your comment.

00090-003: Thank you for your comment.

00090-004: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00090-005: Thank you for your comment.

1551 Farmers Loop
Fairbanks, Alaska 99709
14 August 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

And,

State of Alaska, DNR/JPO
Attn: TAPS Renewal Team
411 West 4th Ave., Suite 2C
Anchorage, AK 99501

Dear BLM and DNR people,

This material summarizes my testimony given at a public hearing in Fairbanks, Alaska during the evening of Tuesday 6 August, 2002.

The purpose of the hearing was to obtain public comment on a proposed 30-year extension of Permits originally given to cross Alaska with an oil pipeline granted in 1974. The original right-of-way agreements, by both the State of Alaska and the United States government, were for 30 years. State and federal officials have indicated their intention to issue a new authorization for another 30 years in December of this year.

The Bureau of Land Management released a Draft Environmental Impact Statement for public review on July 5 with a comment period of 45 days ending on August 20, 2002. The Alaska Department of Natural Resources concurrently released its Statement of Reasons and Proposed Written Determination (Proposed Determination) for public review during the same period.

TESTIMONY

A. Historical comments:

The rate of change in technology, and in basic concepts during the past century has been without precedent. Changes in transportation and communication have been astonishing! Our view of priorities changes more rapidly than at any time in history. For example, when the Japanese Navy bombed Pearl Harbor on 7 December 1941, it did not include the vast oil tank farms as a target. Their idea was that the US had so much oil that to target the tanks would have been a wasted effort (the US was a major exporter of oil at that time). But if they had bombed the tank farm, the US Fleet would probably have been unable to win the decisive battle at Midway six months later.

Changes in our intellectual approaches to life have been especially marked in just the past 50 years. This includes the introduction and vigorous application of the concepts of Plate Tectonics in the geological sciences, and molecular biology, including DNA and RNA, in the biological sciences. These concepts which were not in the sciences only 50 years ago are now commonly referred to even in newspapers, especially in the application of DNA to solving crimes.

The past 50 years also saw the rapid development of computers. Only 30 years ago, in 1976, Apple Computer introduced the keyboard and video monitor to make a desktop computer that was user friendly. (Before that, one had to key punch cards and run them overnight on a mainframe computer.) In the past thirty years, desktop computers have appeared in all of society, except for the FBI.

B. Future comments:

Currently, in addition to the changes in technology, and in ideas we are also experiencing a major change in the climate of our planet. In view of the unprecedented rapid and accelerating changes in everything during the past thirty years is anyone prepared to say there will be no more change from here on? Should we think about these changes when we propose to add thirty years to the permits of a pipeline which was designed thirty years ago to be used for twenty to thirty years? 91-1

C. Oil Industry Profitability:

There is no question about the contributions made by the oil industry to the economy of Alaska. Many people testified to that effect tonight. But some confused these values with the question of whether or not the pipeline permits should be extended for another thirty years. Questions about the pipeline and how it is performing were treated as treasonous by some. Yet, people who raised questions were primarily trying to assure the future of the system, not to end it.

In addition to the contribution to the Alaska and US economies, we must also recognize that the industry is here for its own health, and it is healthy indeed. In 1999 concerns were expressed about the impact on Alaska's economy by BP's proposed purchase of ARCO (see the editorial by C. McGraw, Fairbanks Daily News-Miner, 27 July 1999; enclosed here as Enclosure #1). While the merger of BP AMOCO and ARCO was being considered by the Federal Trade Commission in 2000, I wrote the attached letter to Chairman, Robert Pitofsky (Enclosure #2). At that time the annual sales of the $110 billion, multinational oil industry based in Alaska exceeded 80 billion dollars (that is about 40 times the State of Alaska's general fund budget). To ask the State of Alaska to manage the multinational oil industry operating within Alaska, is like asking a rabbit to manage a moose. 91-2

According to the report: Oil Industry Profit in Alaska: 1969 through 1987, by Edward B. Deakin (Prepared for the Department of Revenue, State of Alaska), the industry made a profit of $42.6 billion during that 18 year period. That is too big for most people to grasp. It breaks down to $2.4 billion per year, or 45.5 million per week, or $6.5 million per day, or $270,909.00 per hour. The latter figure is interesting. It is a bit more than a quarter of a million per hour (every hour of every day, including Saturday and Sunday, and even on national holidays like Groundhog's Day). Just think, in less than one weekend the profits exceeded what the US paid Russia for Alaska. 91-3

The purpose of stating the above financial information is to demonstrate that it does not seem worth our while to worry about the health of the industry, or to worry about scaring it away.

D. Problems with the Pipeline.

Problems were discussed about many aspects of the pipeline, including the Vertical Support Members (VSM) and corrosion. I will not go into detail about these problems. Industry engineers recognize that these problems exist and need attention.
But questions about the magnitudes of the problems and how to address them led to the extensive report by Richard Fineberg: The Emperor's New Hose ,June 2002. This report has been submitted to both the BLM and DNR groups. Among other things it requests establishment of a Citizens Oversight Group, and a shorter time period for extension of the right of way. I recommend that the report be carefully considered. It raises many good points, and whether one agrees with all of them, they need to be addressed. 91-4

In the light of the rate of change in everything, as addressed above, it seems that a thirty year extension may be longer than would be prudent. 91-5

E. Seismic Hazards.

During the original planning of the pipeline, a good assessment of seismic hazards was made. But we have learned a lot since then.

A consultant at the time of the original planning recommended that Alyeska people should work together with the Alaska Earthquake Information Center at the Geophysical Institute of the University of Alaska. It would be good for this to happen and I recommend it. 91-6

I also recommend that Alyeska coordinate with the Alaska State Seismologist. 91-7

The needs for increased and improved seismic monitoring along the pipeline right of way can best be met by close coordination with the above entities. 91-8

F. Finally.

I close with an important philosophical thought. As officials in government agencies, you are charged with the unique responsibility of thinking and acting on the long-term interests of all citizens. In our society, only government has the responsibility of the long-term view. Industry is clearly short-term in its focus on profits and moves from one project to the next, often rapidly. University research focuses on specific problems and moves from problem to problem without undertaking long-term monitoring. Government agencies, such as the US Geological Survey undertake basic research projects, but they also do essential geological mapping, and monitoring of stream gages. Only government has the responsibility of long-term monitoring of weather, climate, stream flow, tides, earthquakes, etc. 91-9

In thinking of the right of way extension now under consideration, I urge you to keep in mind your responsibility of representing the people as their government. If government does not serve the long-range point of view, no other part of our society will do it.

Sincerely,

Carl S. Benson

Carl S. Benson, Ph.D.
Professor of Geology
and Geophysics, Emeritus

2 enclosures

Responses for Document 00091

00091-001: The reader is referred to Section 4.1.3.2.1, in which the operation and adjustment procedures are described for the vertical support members under changing soil conditions.

00091-002: Thank you for your comment.

00091-003: Thank you for your comment.

00091-004: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00091-005: Thank you for your comment.

00091-006: Thank you for your comment.

00091-007: Thank you for your comment.

00091-008: Thank you for your comment.

00091-009: Section 4.4.4.7 in the EIS, “Human Health and Safety,” provides a detailed analysis of the potential effects of oil spills on human health.

The BLM and member agencies of the JPO are committed to the protection of human health and the environment. The Federal Grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of TAPS) within the Federal Grant contain numerous provisions that are protective of human health and the environment.

TO: ADNR_Administrative_Record@jpo.doi.gov
And toll free fax: 1-866-542-5904

August 20, 2002

Also mailed to:
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

Sir,

I would like to suggest with respect to Alaska Native utilization that the terms of the renewal of the Right of Way be adjusted. This would ensure that the BUSINESS CASE for Alyeska to maintain 20% Alaska Native hire is firmly in place. Alyeska would not forget, or downplay, this requirement in the future since there would be direct impact on the financials.

Currently, I believe, there are minimal, limited, teeth should Alyeska not meet the commitment.

I believe that for every Alaska Native below the employment goal for a specific year, Alyeska should present $150,000 to an Alaska Native scholarship organization. Also, this scholarship money would have no direct effect on the Alaska Native utilization numbers. The Alaska Native utilization numbers would be reported in pure form with no credits for various activities (scholarships or training).

Currently Alyeska gets credits of one full time Alaska Native for every $30,000 of scholarships they support. This, in my opinion, is way to low. Give an Alaska Native an Alyeska job and that Alaska Native will send their own children to college. As a matter of fact, credit for scholarships does not make sense to me at all. If Alyeska needs to train someone in order for Alyeska to make their hire goal, they should just do that. There should be no credit. 92-1

For example: at the end of a specific year, Alyeska's Alaska Native hire percentage is only 19.5% (not the desired 20%). Based on the employees during that particular year (say 900) this turns out to be 4.5 Alaska Natives that did not have jobs required for Alyeska to be at 20%. Alyeska is required to cut a check for 5 X $150,000 = $750,000 to an Alaska Native scholarship provider. Alyeska still has to carry their Native hire numbers at 19.5%. Alyeska does not get 'credit' for the scholarship money. It is a penalty, not a reward. Any other money that Alyeska might allocate for scholarships is not counted to offset this penalty. For example, should Alyeska spend funds to train someone for a specific Alyeska job, this does not come out of this penalty calculation. In other words Alyeska is expected to do what it takes to maintain 20%. Should the 20% not be maintained, the penalty is invoked.

I believe this would continue driving the internal business case for Alyeska to get to and maintain the 20%. The business case would be in the financials not just the good will that Alyeska might want to maintain with the Native community.

Thank you,
Micheal E. Carter
Doyon Shareholder
Ahtna Shareholder
BBNC Shareholder

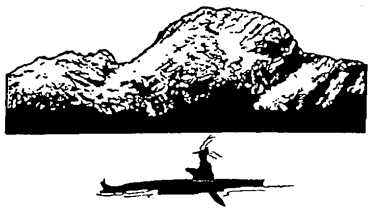
5006 Seton Circle
Anchorage, AK 99508
907-333-6000
alaskanembers@gci.net

Responses for Document 00092

00092-001: Section 29 issues have been a major component of the ongoing government-to-government process under TAPS renewal. BLM welcomes continued dialog with all affected Native Tribes related to Section 29 issues.

A copy of the 2001 Alaska Native Utilization Agreement (ANUA) and its implementing plan have been added to the FEIS as Appendix F. These documents detail the Section 29 requirements, as agreed to by the company and BLM/DOI.

00093



Tatitlek Village IRA Council

"God's Country, USA"

August 20, 2002

BLM TAPS Renewal Scoping
Argonne National Laboratory, EAD/099
9700 South Cass
Argonne, Illinois 60439

To Whom it May Concern:

The following comments are submitted by the Tatitlek Village Council (Tatitlek), the recognized governing body of the Native Village of Tatitlek. Tatitlek is located 29 nautical miles from the city of Valdez in Prince William Sound, five miles west of the grounding side of the Exxon Valdez in 1989. Tatitlek supports the renewal of the federal agreement and grant of the right-of-way (TAPS Right-of-Way) provided that such renewal promotes a secure and safe operation of the TAPS and provide sample protection to the Tribal members of the Native Village of Tatitlek.

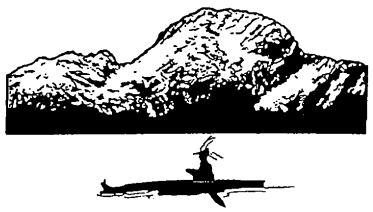
Tatitlek strongly supports the comments and positions of other regional organizations and village Tribal governments in addressing the many deficiencies that the DEIS document contains. We believe that the Bureau of Land Management (BLM) must address these deficiencies in order to properly reflect the impacts of the TAPS. We believe that the 45-day comment period is much too short and should have been extended in order to allow adequate review of the DEIS. Tatitlek, as mentioned earlier, is five miles from the site where over 11 million gallons of North Slope crude was spilled into Prince William Sound. We are very aware of the huge impact that the construction and continued operation the TAPS has had on the people of Prince William Sound. We believe that the DEIS very blatantly minimized the impacts of this catastrophic event. The lives and livelihoods of hundred of people were changed forever by the Exxon Valdez Oil Spill.

93-1

93-2

93-3

P.O. Box 171 • Tatitlek, Alaska 99677 • (907) 325-2311 • FAX (907) 325-2298



Tatitlek Village IRA Council
"God's Country, USA"

Tatitlek was a signatory to Chugach Region Resolution Number 00-01, along with almost off of the other Chugach Region Tribes, ANCSA corporations, and regional organizations. In that resolution, which was basically ignored in the DEIS, three basic issues were put forth, which we still strongly support and want to see addressed in the DEIS. The first is recognition that the transportation corridor extends beyond the pipeline terminus in Valdez, out to the 200 mile limit in the Gulf of Alaska. The BLM cannot responsibly ignore what happens after oil is loaded onto tankers and transported through Prince William Sound. The BLM must redefine the TAPS and include transportation of oil beyond the terminal in Valdez and must analyze the effects of that transportation on the people, land, and resources that it affects. The second issue is that oil industry must be held accountable for promises made in the first right-of-way agreement and demand satisfaction of claims that resulted from the Exxon Valdez Oil Spill. Third, we believe that the establishment of an endowment to provide more meaningful involvement of communities, corporations, and organization in the safe and secure operation of the TAPS is not unreasonable. 93-4 93-5 93-6

To summarize Tatitlek supports renewal of the TAPS right-of-way, but the DEIS, in its present form, is very poorly written and must be redrafted before the final decision of the TAPS right-of-way is made. Tatitlek believes that the BLM must recognize that the subsistence sections have terrible deficiencies that must be addressed, and must provide a more meaningful analysis of the social, cultural, and economic status of the Alaska Natives. 93-7 93-8

We appreciate the opportunity to comment on this issue and wish BLM and the Joint Pipeline Office well in addressing this very complex issue.

Sincerely,

Gary P. Kompkoff, President
Tatitlek Village IRA Council

P.O. Box 171 • Tatitlek, Alaska 99677 • (907) 325-2311 • FAX (907) 325-2298

Responses for Document 00093

00093-001: Thank you for your comment.

00093-002: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00093-003: The settlement claim for punitive damages related to the Exxon Valdez oil spill in Prince William Sound is currently in litigation and is outside the scope of the environmental impact statement process for the renewal of the Federal grant of right-of-way. However, the EIS did incorporate information from the Exxon Valdez oil spill into the analysis.

00093-004: The EIS cumulative analysis examines the environmental issues associated with oil transportation by tankers in Prince William Sound. The U.S. Coast Guard and the U.S. Department of Transportation have regulatory authority over the transport of oil within Prince William Sound. The movement of tankers to West Coast and Asian ports is covered in the cumulative impact analysis in Section 4.7 of the FEIS.

00093-005: The reader is directed to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00093-006: The BLM has no legal or regulatory authority to establish an endowment fund (see Section 2.5).

00093-007: Several sections have been revised and updated for the FEIS.

00093-008: The text in Section 3.24 and Appendix D has been significantly revised to include fuller discussion of many dimensions of subsistence practices, based on re-examination of existing data. Several considerations are addressed, for example, communities in each ecological zone, rates of household participation and production, and rates of sharing. All available data on variation in harvest practices over time are now displayed in figures and discussed. The analysis of impacts on subsistence is now based on a fuller presentation of this source data.

00094

COPPER COUNTRY ALLIANCE
HC60 BOX 306T
COPPER CENTER, AK 99573
(907) 822-3644

August 20, 2002

BLM TAPS Renewal EIS
Argonne National Lab EAD/900
9700 S. Cass Ave.
Argonne, IL 60439

Gentlemen:

Six members of Copper Country Alliance attended the July 31, 2002, TAPS DEIS hearing in Glennallen. Five of us testified, although I was the only one who spoke as a representative of this organization. A copy of my testimony is attached.

It was very clear that all who spoke were most concerned about the very real possibility of an oil spill into one of the many rivers and streams that feed the Copper River, and ultimately, Prince William Sound. We KNOW that such a spill would have catastrophic consequences. Such an event is also the "worst nightmare" of the local Alyeska employees with whom I've talked. However, those employees are not able to give the pipeline the best possible level of protection, because Alyeska's top management and the owners/producers are not giving them the equipment, training, manpower and funding they need. Alaska is home to the local employees, and they care about its future. Alaska is a temporary assignment for most of the decision-makers, and their "worst nightmare" is not an oil spill, but disaffected stockholders. It is critical that this EIS place stipulations on pipeline r.o.w. renewal to force management to give its employees what they need to prevent a catastrophic spill. 94-1 94-2

The DEIS fails to recommend the necessary new stipulations. That doesn't mean that the Final EIS must take the same impotent course. Our organization supports the seven stipulations recommended by the Alaska Forum for Environmental Responsibility (AFER)—not because we are blindly following AFER's lead, but because they make sense to us, based on our local knowledge and experience with pipeline operations. Those recommendations are: 94-3

- A Citizens Oversight Group: The DEIS (Section 2.5) dismisses the idea of an oversight group, reasoning that "the BLM already has an Alaska Resource Advisory Committee...." That committee is responsible for considering a broad range of BLM issues statewide. TAPS will take the full attention of oversight group members. Group members will have to be very focused and dedicated to understand and keep current on matters relevant to oil spill prevention, detection and response. It is simply not possible for Alaska Resource Advisory Committee members to take on that additional burden. Furthermore, the Alaska Resource Advisory Committee draws some of its members from parts of the state that are far removed from the pipeline. How could they have the incentive and interest to dedicate a large amount of their time to TAPS issues? 94-4
- An escrow account for dismantling, removal and restoration of TAPS: Alaska has many unsightly industrial graveyards that hold the rusting, polluting corpses of dead projects. Why should we simply trust the individual TAPS owner companies (which can sell their assets and abandon Alaska) to "meet these and other financial obligations imposed by Federal Grant" (DEIS Section 2.5), when we could be assured, by means of an escrow account, that those funds will be there? 94-5
- Evaluation every five years: This is critical because, as the pipeline ages, there will be more corrosion, there will be more scouring by sand that is entrained in the oil, and valves and other equipment will wear out. 94-6

- An advisory panel to consider changing the way that TAPS is managed and funded: The second paragraph of this letter explains why the current system is more focused on stockholder returns than pipeline integrity. 94-7
- An Employee Concerns Program: I have been impressed with the knowledge, experience and caring attitude of many long-time Alyeska employees. When they see potential hazards to pipeline integrity of employee safety, they need to be able to state their concerns with the assurance that they will be heard without jeopardizing their jobs. There aren't many job opportunities in our area, and even fewer that pay well, so job security is an important factor. 94-8
- Thorough review of stipulations attached to the original Grant and Lease agreements: We all know that technology has improved in the past 25 years. It is only prudent to review stipulations and see if they take advantage of new knowledge. 94-9
- An immediate mile-by-mile "audit" of the pipeline: TAPS owners, Alyeska management, JPO, and the concerned public all need to know the state of the pipeline at this point in order to make prudent recommendations and decisions. For example, when VSMs were placed deeper on the north side of Squirrel Creek, we were told that problems on the south side of Squirrel Creek would be addressed later. That was two years ago. Has anything been done? 94-10

Some of the recommendations listed above were discussed in "Alternatives and Issues Considered but Eliminated from Detailed Analysis" (DEIS, Section 2.5). Reasons given for eliminating them included "no authority", "not part of the application for renewal", and "would involve a separate rule-making process". It is difficult to view these as anything but convenient evasions. They do not belong in the Final EIS. 94-11

The BLM and the authors of the document should understand that failing to prevent a catastrophic oil spill will have environmental and social consequences of enormous magnitude. The Final EIS should be a strong document that reflects an understanding of the seriousness of the issue. BLM should use all the power it has to make strong stipulations. If a separate rule-making process is required, then make renewal contingent upon completion of that process. If BLM lacks authority in some area, then make renewal contingent upon an act of Congress that gives it that authority. 94-12

The EIS should not be treated as a mere writing assignment. It is a document that can give us a safer future.

Sincerely,

Ruth McHenry

Ruth McHenry

Please see document number 00171
for responses to the commentor's
Glennallen hearing testimony.

Testimony of Ruth McHenry
TAPS DEIS Hearing
Glennallen, Alaska
July 31, 2002

Good evening. My name is Ruth McHenry, and I live at mile 17 Edgerton Highway, Kenny Lake and am a 56 year Alaska resident. I have tried, but I haven't read most of the DEIS because it's not compatible with my computer software. I still hope you will grant us more time to read this long document.

I am a member of a local conservation organization, Copper Country Alliance. Our members have put in many volunteer hours learning about Alyeska's operations. Let me assure you that we don't do this out of boredom or peskiness. The mission of our organization is to try to protect the wild and rural character of this region and the habitats upon which those depend. No single event, short of an atomic bomb, would have such a devastating effect on those values as an oil spill that reached the Copper River.

After witnessing two spill drills, one at the Tonsina River and one at the Klutina River, I am unhappy to conclude that an oil spill that reaches a tributary of the Copper River will be unstoppable. It will reach the Copper River. At the Tonsina River, seven hours passed between the time crews assembled at Pump Stations 11 and 12 and the time that the boom was in place. At the Klutina River, the spill scenario called for oil to reach the Klutina River in about an hour and the Copper River shortly after that. (The distance is one to one-and-half miles, and the current at least five knots.) Again, it took hours for boom to be deployed.

Then there is the question of whether boom, once in place, would actually be able to contain oil in a turbulent river. We don't know that.

After witnessing the first drill, I urged that more time and money to be spent on crew training, and for a "hot shot" spill response team to travel up and down the pipeline, training local crews and being ready to assist at a real spill at any location. After witnessing the second drill, and becoming convinced that oil is unstoppable once it reaches moving water, I shifted my focus.

Now I am convinced that pipeline safety demands, and the EIS must require, the following:

1. Better maintenance
2. Better detection
3. Better response-readiness, with an aim to stopping oil before it reaches the water.
4.

Let me take these one at a time.

Better Maintenance: Locally, the leaning VSMs and badly-off-center shoes at Squirrel Creek were an example of what can happen when permafrost thaws. (We don't know whether that happened because of climate changes or because the heat pipes weren't working well enough.) To Alyeska's credit, they did go in and sink the VSMs another 20 feet to make them more stable. But it is disconcerting that they didn't know when the VSM movements had taken place, and that they thought it might have happened in the first 10 years. With good maintenance, Alyeska would have known, and it should have fixed the problem earlier, not 23 years after oil started flowing. Is Alyeska adequately monitoring movements now? How many other locations are at risk? As far as I know, Alyeska has not been able

Please see document number 00171
for responses to the commentor's
Glennallen hearing testimony.

to answer that question. This is just one of many reasons why the pipeline needs to be audited, mile by mile, and why an independent evaluation should be done every five years.

Better Detection: For the first few years of the pipeline's life, the entire line was flown daily. In the past decade, up until September 11, it was flown weekly, and if weather was bad on the flight day, it wasn't flown until the next week. I understand that it is being flown more often now, but as memories of September 11 fade, will frequency slip again? If overflights were adequate, why didn't they find two major pipe shifts in 2000 (Atigun Pass) and 2001 (Pump Station 5)? It should be obvious that detecting a problem early can make the difference between a minor incident and a devastating spill.

Better Response-Readiness: This includes equipment, people and site-preparation. Equipment: clamps that work at higher pressures, and more of them. Equipment and materials for protecting spill workers from fumes so that there's no waiting time before plugging a spill. People: I still think a hot-shot crew is a good idea, but it would focus on keeping oil from reaching the water. Its only jobs would be to be ready to respond to a spill and to train local crews. Site-preparation: this includes plowing pipeline access roads. (During winter, you can find APL's that are plugged with snow berms days or weeks after a snowfall.) It includes making sure there are staging areas at critical points. It includes placing containment berms at creek and river crossings. In short, it means expecting a spill and figuring out in advance what is needed.

To make sure all these things happen, we must have a Citizens Oversight Group. Such a group has greatly improved the situation in terminal and marine operations, but that was after the Exxon Valdez spill had already occurred? Are you going to make us wait until there's oil in the Copper River before you mandate a similar group for the pipeline?

Now, perhaps you will blow these suggestions off as being "being the scope of the EIS". I've got to tell you that I'm disappointed in you folks, the way you blew off scoping suggestions in the DEIS. Some were blown off by way of your section of "Alternatives and Issues Considered but Eliminated from Detailed Analysis". Many others you disdained to even list in the DEIS; they were in a separate eight-page report. Would an eight-page addendum to this huge DEIS done any harm? Are you only going to listen to TAPS owners? They were the only reference you sited for Chapter 2, the chapter in which you dismissed good ideas like a citizens oversight group, fines for TAPS owners when they don't perform, and requiring a pipeline audit as part of the renewal process.

I know how I'm going to feel if I see oil on the Copper River. I'm going to be heartsick, because this is where I live and where I intend to live out my life. I'll also be furious if you folks haven't used the power you have to make this a safer pipeline. You have the power. Use it.

Responses for Document 00094

00094-001: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" (APSC 2001g) for the pipeline and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" (APSC 2001h) for the VMT. The Plans are available to the public through various libraries in several major cities in Alaska. Oil spill prevention and response capabilities and related activities specific to the Copper River Drainage area are discussed in the text box, "Oil Spill Planning for the Copper River Drainage," in Section 4.4.4.3.

00094-002: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00094-003: Thank you for your comment.

00094-004: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00094-005: The reader is directed to the discussion of escrow funds found in Section 2.5.

00094-006: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00094-007: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00094-008: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent's office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00094-009: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00094-010: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00094-011: Please see additional information provided in Section 2.5 of the FEIS.

The EIS provides an in-depth analysis of a set of spill scenarios, including several worst-case spill events and the associated potential impacts of these scenarios.

00094-012: The Trans-Alaska Pipeline Authorization Act and the Federal Grant of Right-of-Way provide the BLM with all of the authority it needs to oversee operation of the TAPS and to impose strict and enforceable requirements upon APSC to comply with necessary operational procedures.

ALASKA FEDERATION OF NATIVES, INC.
1577 C Street, Suite 300, Anchorage, Alaska 99501
907-274-3611 Fax 907-276-7989

August 20, 2002

BLM TAPS Renewal EIS
Argonne National Laboratory EAD/900
9700 S. Cass Avenue
Argonne, IL 60439

To Whom It May Concern:

Attached, herewith, please find the following:

1. Copy of Julie Kitka's August 20, 2002 cover letter to Jerry Brossia on the Draft EIS for the renewal of the grant right-of-way for the Trans-Alaska Pipeline System.
2. Copy of Alaska Federation of Natives' (AFN) comments on Draft EIS for the renewal of the grant right-of-way for the Trans-Alaska Pipeline System in form of attachment to item 1.

It is our hope that AFN's comments and recommendations will be incorporated into the final EIS.

If you have any questions concerning the attachments, please call me at the Alaska Federation of Natives.

Sincerely,

Nelson N. Angapak, Sr.
Executive Vice President

ALASKA FEDERATION OF NATIVES, INC.
1577 C Street, Suite 300, Anchorage, Alaska 99501
907-274-3611 Fax 907-276-7989

August 20, 2002

Bureau of Land Management/JPO
Attn: Jerry Brossia, Authorized Officer
411 West 4th Ave., Suite 2
Anchorage, Alaska 99501

Dear Mr. Brossia:

The Alaska Federation of Natives has reviewed the Draft Environmental Impact Statement (DEIS) for the renewal of the grant of right-of-way for the Trans-Alaska Pipeline System. Our comments follow as General Comments, Page-Specific Comments and Attachments. Our General Comments present our overall concerns with the DEIS, recommendations on the content of the Final Environmental Impact Statement, and recommended additional mitigation measures which we believe should be included in the grant renewing the right-of-way. Our page-specific comments contain references to those sections of the DEIS which we believe need to be corrected or improved and are supplemented by information in three Attachments.

We appreciate the opportunity to comment on the DEIS.

Sincerely yours,

Julie Kitka
President

General Comments
Page-Specific Comments w/Attachments 1-3

cc:

BLM TAPS Renewal Team
AFN Right-of-Way Renewal Committee
Steve Jones, Alyeska Pipeline, TAPS Right-of-Way Renewal Team
John Shively, Jade North, LLC

General Comments
of the
Alaska Federation of Natives
on the
Draft Environmental Impact Statement
for the
Renewal of the Federal Grant of Right-of-Way
for the
Trans Alaska Pipeline

August 20, 2002

Introduction

The Alaska Federation of Natives (AFN) offers the following comments on the Draft Environmental Impact Statement (DEIS) for the renewal of the grant of right-of-way for the Trans-Alaska Pipeline System (TAPS). The AFN represents the interests of Alaska Natives throughout our state and has as members Native Corporations, Native non-profit organizations, and village organizations.

Our comments are presented in two parts. This first document presents our overall concerns with the DEIS, recommendations on the content of the Final Environmental Impact Statement (FEIS), and recommended additional mitigation measures which we believe should be included in the grant renewing the right-of-way. The second section contains page-specific references to those sections of the DEIS which we believe need to be corrected or improved.

First, we want to express our concern with the short 45-day period which the Bureau of Land Management (BLM) allowed for public comment on the DEIS. The DEIS is a long and complex document and the review period comes at a time when most Alaska Natives are either pursuing vital subsistence activities or are involved in seasonal employment which presents the only opportunity many Alaska Natives have to generate any cash income. AFN is disappointed that BLM did not grant our requested extension of time. 95-1

In reviewing our comments BLM and Argonne Laboratories (Argonne) need to keep in mind that Alaska Natives have a special relationship with TAPS. Indeed, most of the pipeline right-of-way was set aside from potential Native Corporation ownership under the provisions of the Alaska Native Claims Settlement Act and some of the right-

of-way currently crosses land owned by Alaska Native Corporations. In giving up land ownership rights, Alaska Natives expected that they would receive special consideration for recruiting, employment and training of Natives, contracting with Native-owned companies, and protection of subsistence resources. We believe that a TAPS renewal EIS should address these issues, but our review of the DEIS leads us to believe that more work needs to be done, particularly on the subject of subsistence.

Preferred Alternative

Before we present further discussion of the DEIS, we would like to comment on the preferred alternative. We support the alternative of renewing the grant of right-of-way for 30 years under certain conditions that are presented in these comments. We recommend some additional mitigation measures be added to the grant or that our concerns supporting the necessity of these mitigation measures be addressed in some other manner.

The original Federal grant of right-of-way contained two stipulations which recognize the special relationship of Alaska Natives to the Trans-Alaska Pipeline. Those are:

1) Section 29 – relating to Native employment, and
2) Section 30 – relating to subsistence.

95-2

AFN is pleased that both of these stipulations are to be retained under the preferred alternative in the DEIS.

Federal Grant Section 29 – Native Hire

Section 29 worked reasonably well during construction of the pipeline, but ceased being honored after the pipeline went into operation. It was "rediscovered" in 1995 and Alyeska and their contractors have made remarkable progress in recruiting, hiring, and training Alaska Natives. AFN's concern is what happens if Alyeska, for whatever reason, loses its commitment to Section 29. Should this occur, currently the only penalty available to the Federal government to enforce compliance is to shut down the pipeline. We believe this is an unrealistic penalty and do not believe that the government would take such a drastic step to enforce Section 29. Therefore, we would like to see some alternative form of enforcement mechanism.

95-3

In this case, compliance can be measured using the Alaska Native Utilization Agreement (ANUA). While reviewing compliance, BLM should consider strengthening the language of Section 29. The lesson learned from the original Native Utilization Agreement is that there must be, at the outset, clear and effective ways of monitoring and enforcing compliance. We suggest that BLM consider an additional provision the in ANUA to provide for an enforcement mechanism for non-compliance with that agreement. 95-3 (cont.)

Recommendation: That Alyeska Pipeline Service Company (Alyeska) and its owners negotiate with BLM an amendment to the Alaska Native Utilization Agreement which provides financial penalties or some other appropriate enforcement mechanism if Alyeska does not meet the goals in the Agreement. If financial penalties are agreed to, such penalties should be based on some multiple of income lost to Natives as a result of Alyeska not meeting its targets.

Federal Grant Section 30 - Subsistence

Section 30 is more problematic. There is no question there have been impacts on subsistence resources as a result of the development of oil on the North Slope and the operation of the pipeline. From the macro issue of the increase in Alaska's population due to the wealth that North Slope oil has brought to Alaska to the micro issues of the effect on individual species important to subsistence and individual villages, there have been many negative changes. The growth of the state's population has brought in more hunters. The construction of the haul road and airstrips along the right-of-way has increased the accessibility for hunters from urban areas and from outside of Alaska. 95-4

The result has been predictable. The moose population around our villages is disappearing. Caribou migration patterns along the upper Koyukuk River and in other areas have been changed. Stevens Village has seen an important pike fishery virtually wiped out. Subsistence resources in Prince William Sound were severely impacted by the Exxon Valdez Oil Spill.

Unfortunately, the DEIS seems to take great pains to minimize or ignore these impacts. There is no question the document suffers from the severe handicap of being written by people who had no understanding of this very complex and politically

sensitive issue when they began the project. In addition, the authors were further handicapped by the inability of the state and Federal governments to provide the data that is necessary to analyze the impacts the pipeline has had on subsistence.

What the DEIS lacks in quality, it tries to make up for in quantity by devoting more pages to this subject than any other. The volume of material indicates some acknowledgement by the authors of the importance of this subject. Unfortunately, the product fails to adequately capture either the role subsistence plays in the lives of Alaska Natives or the adverse impacts of the changes which have occurred over the past 30 years.

On the other hand, the view of the DEIS that renewal will not significantly affect the current situation (a situation that we find unacceptable) is probably correct, absent a major spill into any of the major river systems or a repeat of the Exxon Valdez spill in Prince William Sound. However, the fact that the future impact may be limited does not excuse the past. In fact, if the FEIS would view the subsistence issue through the eyes of the Alaska Natives who are most affected by the changes which have taken place, AFN holds some hope that the government agencies involved in the management of fish and game will effectively manage fish and game to protect subsistence.

95-4 (cont.)

It is important to note here that it is not necessarily the management practices of Alyeska that have created this problem. AFN believes that the fault lies primarily with a fish and game management regime which has not sought local peoples' knowledge of the habits and population of game and fish and which has not been willing to adjust seasons and harvest regulations to accommodate the needs and the wisdom of the people who live closest to the resources. The State of Alaska must take the lion's share of the blame for this situation, as it has been unwilling to change its constitutional structure to accommodate the needs of the people who most rely on these resources for their cultural and dietary sustenance. In addition, decisions by the state, such as the opening of the Dalton Highway to the public, have exacerbated an already difficult situation.

It is more than ironic that the very organization given the responsibility for protecting subsistence, the Alaska Department of Fish and Game, was apparently unable to provide meaningful data to Argonne that might have allowed them to make a more realistic assessment of the impacts of the pipeline on subsistence over the last 30 years. In our attachments to our page-specific comments, we provide additional information

sources which, we believe, support the conclusion that there have been major impacts on subsistence resources since the construction of TAPS. We believe Alyeska also may be submitting supplemental information that supports our conclusions. However, even this additional material will not overcome the problem presented by a lack of a systematic approach to collecting data on subsistence despite, or perhaps because of, the high profile of this issue in the state. Therefore, we make the following recommendation.

95-4 (cont.)

Recommendation: That the grant of right-of-way contain a new stipulation requiring the collection of data which can clearly show the trends in subsistence taking of fish and game and the impact of non-subsistence hunting and fishing on those subsistence trends. Tribal governments and other Native organizations should be directly involved in the gathering of this data. (Note: Our attachments to our page-specific comments contain AFN recommendations for a subsistence data collection program.)

ANILCA 810 Subsistence Analysis

As required by Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA), the DEIS includes an evaluation of impacts of the various alternative actions and whether they "may significantly restrict" subsistence uses. We find the DEIS severely flawed in terms of the analysis completed, the conclusions reached, and the inaccurate omissions of findings, including mitigation measures required by, and subject to public review and comment under, ANILCA.

The DEIS evaluation concludes that none of the alternative actions "may significantly restrict" subsistence uses. The evaluation of impacts was limited by the authors' conclusion that there is a lack of reliable, quantitative evidence necessary to make conclusive final evaluations. As noted above, we agree that there is a need for additional baseline data collected in a systematic fashion and have recommended a grant mitigation measure to address the problem of gaps in quantitative data necessary for impact evaluations. However, there has been ample testimony by local people that over the life of the pipeline there have been adverse impacts on their ability to harvest subsistence resources from increased competition for subsistence resources and the resulting decline in resource availability. That testimony constitutes traditional

95-5

knowledge and should have been given considerable weight, especially in the absence of reliable baseline date to the contrary.

There is also ample evidence that the state has accommodated the increased demand for those resources from non-local hunters and fishermen by placing increasingly restrictive bag limits and seasons on local subsistence users.

We believe there is clear evidence that competition for potential subsistence resources has led to restrictions on some subsistence hunting and fishing. Had the appropriate analysis been applied, the DEIS would have been compelled to conclude that a significant restriction to subsistence activities might occur as a result of competition for potential subsistence resources and the attendant decline in the amount of harvestable resources available to local residents. Such a conclusion would have triggered requirements for findings under ANILCA § 810(a)(3)(A)-(C) as is the case in the Cumulative Impacts Evaluation section of the DEIS.

The Cumulative Impacts section concludes that there may be significant restrictions to subsistence uses. However, the DEIS does not contain the above referenced findings, including the requirement to mitigate. Simply documenting the potential harm to subsistence resources and uses is not enough. The BLM must actually alter their plans to *avoid*, to the maximum extent possible, the harm that may inevitably result from implementation of the preferred alternative set forth in the DEIS or take reasonable steps to minimize the adverse impacts on subsistence uses. 95-5 (cont.)

ANILCA's requirement that mitigation measures be implemented is not discretionary. The federal agency must develop and implement adequate measures to minimize the admittedly harmful cumulative effects of the renewal of the pipeline ROW upon Native subsistence uses. These measures should have been developed and published for review within the DEIS.

Although Section 30 of the federal grant is aimed at mitigating the potential damage to the subsistence way of life, as noted above, that Section would be difficult to implement because of the lack of baseline data. We believe our recommendation for additional data collection program is supported by the requirements of ANILCA for mitigation. Future collection of data that can clearly show the trends in subsistence taking of fish and game and the impact of non-subsistence hunting and fishing on those trends is critical. Otherwise, Section 30 will be virtually meaningless since there will be

no baseline data against which one can measure alleged negative impacts to subsistence. Collection of adequate baseline date should be added to the grant as a "reasonable step" needed to minimize potential adverse impacts on subsistence uses and resources and to give meaning to Section 30.

AFN would like to raise one additional comment relating to Section 30. Section 30 is also limited by the lack of a clear process for making a claim under § 204(a) of the Trans-Alaska Pipeline Authorization Act. To our knowledge there has never been a successful claim using this process. We believe that Section 30 would be more understandable if there were regulations in place describing how the process would work. 95-5 (cont.)

Recommendation: That the Bureau of Land Management promulgate regulations that clearly set out the process Alaska Natives would follow in filing a claim under the Act, as contemplated by Section 30 of the Right-of-Way grant and agreement.

Socio-Economics

The DEIS takes great pains to gloss over the problems Alaska Natives face in harvesting subsistence resources, while stretching beyond any reasonable bounds positive impacts relating to TAPS. For instance, the DEIS uses what is a statistically insignificant difference in family size between Native and non-Native families to indicate that any loss of subsistence resources will be made up by a larger share of the Permanent Fund Dividend. This conclusion is reached without any data discussing the major differences in cost of living between Native villages and the urban areas, the places where most of the people competing with villagers for fish and game resources live. That difference is significant (30% to 100%) according to surveys referenced in our attachments. Although the DEIS does discuss unemployment rates in communities along the pipeline corridor and notes that in some places the "real" unemployment rates may be much higher, no attempt is made to connect the higher unemployment rates to villages and the need for subsistence. 95-6

Recent figures from the Alaska Department of Labor show the following unemployment rates for March 2002:

Alaska Statewide	7.4%
Anchorage	5.7%
Fairbanks	6.4%
Yukon-Koyukuk	19.2%
North Slope Borough	9.5%

In addition, Table 3.29.1 in the DEIS presents a stark picture of the economics of Native villages. With one exception, every community listed which has a higher than average minority population (which in small villages means Native population) has a higher than average low-income population. The DEIS also discusses the high suicide rates, problems with substance abuse, and some of the other social and health problems found in Native villages. It is our belief that many of these problems can be attributed to the economic problems associated with living in Native villages and to the increasing pressure on subsistence resources by urban sportsmen.

The economic problems of a high cost of living combined with high unemployment and low per-capita incomes can not be remedied by getting a few 10's of dollars more from the Permanent Fund dividend. Not only is this finding inaccurate, it is insulting. As we point out in more detail in our page-specific comments, it is likely that some of the earnings from the Permanent Fund will have to be used to help solve the State's impending fiscal crisis. Therefore, it is also quite likely that the Permanent Fund Dividend will be reduced or eliminated in the future. As if the above is not enough, we have already seen the urban-dominated Alaska Legislature look first to state programs in rural Alaska when searching for ways to reduce the state's budget.

95-6 (cont.)

A person unfamiliar with Native villages in Alaska could easily draw the conclusion from the DEIS, that living in places such as Stevens Village, Copper Center, Chenega, Nuiqsut, or any of the other Native villages designated as impacted by the TAPS renewal is not much different from living in a small community in New Jersey or Nebraska. One might draw the incorrect conclusion that whatever economic problems the residents in these communities might face are taken care of by having larger families and thus claiming a greater share of the Permanent Fund Dividend. The reality is quite different and the FEIS should reflect that reality.

Recommendation: The FEIS should contain information relating to village economies and a discussion of how they differ from urban economies. This discussion should include the following findings: that subsistence is a way of life in rural Alaska that is vital to the preservation of community, Tribal cultures, and economies; and that subsistence hunting and fishing exist as part of a mixed economy in rural Alaska, where harvest of wild foods and cash incomes are both essential. The finding that larger Native families receiving a larger share of the Permanent Fund Dividend will make up for any decrease in subsistence take should be removed from the FEIS.

95-6 (cont.)

Tribal Governments

We would like to commend the Joint Pipeline Office (JPO) for recognizing the role Tribal governments have to play in the EIS process. Both federal and state officials are obviously making an extra effort to get out of the urban areas and meet with Tribal governments on their home ground. The Tribal governments of affected villages have already raised, and will continue in the future to raise, a number of issues that directly affect the lives of their members. These issues include but are not limited to:

a) environmental protection,
b) the negative effects of the opening of the Dalton Highway,
c) spill response along river systems,
d) social and economic impacts on villages, particularly alcohol abuse and suicides,
e) access to opportunities for small local contractors,
f) the value of having a JPO person stationed in the offices of the Native corporations located along the pipeline,
g) the age of the pipeline,
h) water quality, and
i) whether the affected villages are getting a fair share of the revenues the State of Alaska receives as a result of the pipeline.

95-7

Although there have been many positive impacts of the pipeline and oil development, almost all of the negative impacts have been borne by the Native

villages along the pipeline and the marine transportation corridor. Therefore, AFN urges you to pay close attention to these Tribal governments.

In addition, AFN believes that Tribal governments can play a more active role in the oversight of TAPS. In the past the federal side of the JPO has not met the obligations that we believe they have for consulting With Tribal governments. There are several ways to accomplish this goal. Tribal governments could be represented on the JPO Executive Committee. Tribal governments could be represented in the JPO office or there could be regularly scheduled meetings between the JPO and Tribal governments. 95-7 (cont.)

Recommendation: That the JPO find a more effective means of involving Tribal governments in the oversight of TAPS.

Spill Response

Throughout the scoping process, at the various government-to-government meetings held during the EIS process, and at public hearings on the DEIS, representatives of Native villages have pointed out the need for more aggressive spill response along the many rivers transected by TAPS. A great deal of attention has been paid to Prince William Sound and the Yukon River, but TAPS crosses dozens of other rivers and streams which are vital habitat for subsistence fish. The DEIS points out that damage from an oil spill to fish in slow moving rivers and steams would most likely be greater than the damage done in faster, large-volume rivers.

Suggestions for addressing this problem have repeatedly concentrated on two activities. The first suggestion is to place more spill response equipment in communities and along some of these rivers. The second suggestion is to train and certify more Alaska Natives for oil spill response. There is a model, which has been in place for decades, for using Alaska Natives in emergency situations. That model is the village fire-fighting teams which have been used by BLM and the Alaska Division of Forestry to combat forest fires. These teams are led by a village person and the members are recruited locally. They are deployed on fire assignments as a team, a concept that is more in keeping with the value Native cultures place on the "group" as opposed to the traditional western approach of hiring one individual at a time. 95-8

We know that TAPS has had some experience with training and employing village crews for spill response. We are suggesting that this experience be expanded to other villages.

95-8 (cont.)

Recommendation: That the FEIS recognize the need for additional spill response equipment along some of the waterways crossed by TAPS. In addition, the FEIS should recommend the training and certification of additional village crews for oil spill response.

Native Lands

The state and federal governments own most of the land over which the pipeline right-of-way is granted, but some of the right-of-way crosses Native-owned land. The DEIS completely ignores the dual role that the Department of Interior must play in extending the grant over lands owned by Natives. The BLM has its traditional land management role, but the Secretary of Interior maintains a trust relationship to Alaska Natives. The DEIS incorrectly implies that the Alaska Native Claims Settlement Act extinguished Native rights in Alaska. Native land claims over virtually the entire state of Alaska were extinguished by that act, but other rights, particularly the Department's trust responsibilities to Natives, were not.

As BLM renews the right-of-way grant, it must be guided by the principle that Native owned lands may need to be treated differently in order for the Secretary of the Interior to meet these trust obligations. AFN is not prepared to state what those differences might be, as we believe that the Native Corporation landowners are in a better position to do that than we are. However, we are quite disappointed that the DEIS does not include a discussion of this important point.

95-9

In addition there are a number of Native allotments within close proximity to TAPS. Some of these allotments are crossed for access to the pipeline. Although AFN is not familiar with the specifics of each allotment, we do know that the FEIS should contain a discussion of the issues, including TAPS access, affecting these allotments. Tanana Chiefs Conference has done the most work on this issue, and we refer you to their comments on this subject.

Exxon Valdez

No discussion of TAPS would be complete without a discussion of the Exxon Valdez Oil Spill. Although the effects of the spill are discussed in some detail in the DEIS, AFN does not believe that the DEIS captures the psychological damage which was done to the Native people living in communities affected by the spill. Many people have lingering doubts about whether certain foods are edible. More importantly, many people have not recovered from seeing the places where they live covered with crude oil. This situation is exacerbated by the continuing and growing frustration over the inability of the judicial system to bring closure to the issue of the damage claims against Exxon. We realize that the DEIS will not fix a judicial system that seems to be imploding. However, neither should it ignore the psychological damage done by the spill, nor the continuing damage being done by not having closure on the Exxon Valdez judgment for damages. 95-10

The DEIS captures little of these effects. The minimizing of the impacts of the Exxon Valdez oil spill by Argonne does a tremendous disservice to those people who have suffered most from one of the most tragic events in Alaska's history. In addition, the DEIS insults most Alaskans by indicating that the positive economic impacts resulting from the clean-up of the Exxon Valdez oil spill equaled or outweighed the negative economic impacts. People reading the DEIS could easily get the impression that Alaskans should be hoping for numerous spills if we want a healthy economy. The Alaskans we know would give back every penny contributed to our economy by the Exxon Valdez spill, if we could turn back the clock and have Joe Hazelwood steer his ship around Bligh Reef.

Conclusion

In closing, we think it is important to reiterate that Natives have a different relationship to the pipeline than other groups who will comment on the DEIS. The renewed federal grant of right-of-way should protect and enhance that relationship. It should in no way be used to dismantle the relationship. The FEIS should also reflect accurately the economic situation in Native villages and provide a more realistic assessment of subsistence. 95-11

The comments in this document identified our major concerns with the DEIS and presented recommendations regarding these major concerns as well as specific

recommended mitigation measures for the federal grant. Our page-specific comments follow and identify specific sections in the DEIS which we believe require changes or clarification in the FEIS. Attachments to the page-specific comments include data and information which we believe support changing some of the conclusions drawn in the DEIS. 95-11 (cont.)

We also draw your attention to comments submitted by other Native organizations. At one time AFN had hoped to lead a coordinated effort to respond to the DEIS, but the short comment period imposed upon us has made that goal an impossibility. Unfortunately, Argonne will need to make substantial revisions in the DEIS, to achieve a goal of an accurate FEIS. Although the job is imposing, we hope the information AFN and other Native organizations have provided will give Argonne the impetus to make these changes. We assume that BLM and Argonne will dedicate the resources necessary to complete this task. 95-12

In conclusion, we would like to reiterate that we are supporting the preferred alterative, but the we do that with the reservation that our concerns about subsistence, Native hire, Tribal involvement, and oil spill response are addressed in the FEIS or by the appropriate government agency or agencies. In addition, we would expect that the FEIS would reflect the changes we are suggesting in our page specific analysis of the DEIS.

Alaska Federation of Natives
Page-Specific Comments on the Draft EIS
For The Trans Alaska Pipeline System Renewal

The majority of our page-specific comments relate to presentations throughout the DEIS on socio-economic and subsistence issues, including the required ANILCA 810 analyses. Examples of the topics we address in our comments are population trends, cost of living in villages, historical context and use patterns of subsistence, impacts to subsistence over the past 30 years, and the approach reflected in state fish and game management regimes. Many of our comments identify errors in the information presented in the DEIS which appear to be the result of incomplete use and/or review of existing source material. To assist the authors in making corrections to the FEIS, we have produced a Source List of additional reference materials, which are included as Attachment 1. This list is categorized by topical area. The sources listed contain information which supports our comments and recommended corrections.

AFN recognizes that the DEIS publication schedule constrained the time available to the authors to locate and thoroughly review available sources relevant to Alaska Native socio-economics and subsistence. However, we strongly encourage the authors' thorough review of the materials listed and believe that such a review will result in a more accurate presentation of these issues in the FEIS. As noted in Attachment 1, where possible, AFN has compiled the referenced source materials at AFN, where they are available for the authors' review.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.23 Economics	3.23.1	2

The paragraph indicates that the DEIS considers the economic effects of TAPS on the state as a whole. This approach allows the DEIS to ignore the substantial economic differences between the relatively wealthy urban areas such as Anchorage and Fairbanks and the economically disadvantaged areas, which are primarily Native villages. The FEIS needs to give some consideration to the economics of the villages determined to be impacted by the pipeline. 95-13

As information provided in Attachment 2 shows, the cost of living is significantly higher in Native villages than it is in urban Alaska. The information in Attachment 2 comes from a Cost of Food Survey conducted quarterly by the Alaska Cooperative Extension of the University of Alaska. Although only 20 communities in the state are surveyed we believe the information is useful for looking at village economics. We would call your attention to the information on Galena and McGrath because we believe it is reflective of the situation found in other off road villages such as Stevens Village, Rampart, Alakaket, Nuiqsut, and others. The survey shows that the cost of food can be 80% to 100% higher in these communities than in Anchorage and Fairbanks. The cost of energy shows a similar disparity.

The decision to look at the economic impacts to the state as a whole leads one to the false assumption that all of Alaska's citizens have been impacted similarly by the development of oil in Alaska. This assumption is false. 95-13 (cont.)

It is essential that the FEIS contain some discussion of the disparity of wealth between urban and rural Alaska, which persists despite the vast amount of wealth brought to Alaska by oil.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.23.4.2.2 Unemployment	3.23-14	2, line 9

95-14

We recommend that the following sentence be added to this paragraph.

"The underreporting of unemployment is likely most severe in isolated Native communities along the pipeline corridor."

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.23.4.3 Personal Income	3.23-16	1, line 4

We recommend that a new paragraph be added stating as follows: 95-15

"The Yukon Koyukuk Census Area is probably most reflective of village Alaska. It is noteworthy that the lowest per capita income of any of the districts listed along the pipeline is in this region. The per capita income in this census area is 56% of the per capita income in Anchorage.

"In addition, the southeast Fairbanks census area also contains a number of small Native communities and this has the second lowest per capita income along the pipeline corridor."

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.23.4 Alaska Regional Economic Issues	3.23-14	None indicated

95-16

We were disappointed that there is no discussion of the cost of living in this section. Regional differences in the cost of living are a substantial factor in Alaska. Because of high transportation costs and small population, the cost of living in village Alaska can be anywhere from 30% to

100% more than the cost of living in urban areas. Attachment 2 provides information documenting these differences.

95-16 (cont.)

It is important to include this discussion because it relates directly to the issue of subsistence. Combining high cost of living and high unemployment as key economic factors in villages makes subsistence even more important as an economic issue. The FEIS needs to be expanded to include a discussion of this very important issue.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.23.5 Subsistence	3.23-17	1, line 6

95-17

We assume that the 2 percent of fish and game harvested noted here is based on weight of resources harvested and not on number of units of fish and animals harvested. It is important to note that this figure is somewhat deceptive because commercial fishing makes up such a substantial amount of the commercial harvest in Alaska. The subsistence harvest of moose and caribou is a far, far higher percentage of the harvest than the 2 percent mentioned here. It is worth noting that moose and caribou are probably the two species on which the most pressure has been placed by urban and sport hunters.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.23.5 Subsistence	3.23-20	6, line 4

95-18

The values placed on these resources are undoubtedly low. For instance in Anchorage, which has the lowest cost of living in Alaska fish purchased at a grocery store ranges from slightly less than $5 per pound up to as much as $10 per pound. There are similar ranges of prices for red meat. Therefore, the value of subsistence resources is most likely understated here. In addition, mention should be made again of the higher cost of living in villages compared with the urban areas which means store-bought food would cost even more..

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.24 Subsistence	3.24-1	2

95-19

This paragraph should contain a discussion of village economics. Reference should be made to the high unemployment rates, low per capita income and the high cost of living which we suggested be reworked in the Economics section.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.24	3.24-2	1

95-20

We are pleased to see that the DEIS uses the current federal definition of subsistence and its requirement that subsistence be linked to rural residency. Given that this is a federal document we believe that it is appropriate to use the federal definition.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.24	3.24-2	3

95-21

We would suggest that this paragraph also contain a brief discussion of the cost of living, low per capita income, and the high unemployment rate in Native villages. This is part of the economic picture which should be painted when talking about subsistence.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.24	3.24-2 – 3.24-30	

First of all, we would like to state that attempting to analyze subsistence on a community by community basis is a very positive part of the DEIS. As the DEIS indicates, subsistence resources, subsistence harvest patterns, and subsistence seasons vary from place to place and it is important to try to capture these differences. Looking at individual villages is certainly a way to identify these differences.

95-22

Unfortunately, as the DEIS states, the data that is used is not particularly useful, both because it is dated and because it provides only a single year snapshot of activities in the various villages. There clearly has been no systematic approach to data collection on subsistence. This is one of the reasons that the Alaska Federation of Natives (AFN) is recommending a mitigation measure to provide systematic data collection in the future. A recommended protocol for such a system is included in Attachment 3.

AFN does not have the capacity to comment on the village-by-village analysis contained in the DEIS. However, we know that tribal governments, other village organizations and regional organizations will be commenting on this material. We believe these comments are very important and will reflect a good deal of local and traditional knowledge.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	Figure 3.24.3	3.24-29	

This figure is interesting. Unfortunately the information included in it does not go back to pre-pipeline days. However, even looking at the information from 1984 forward for sport fishing north of Atigun Pass, we see a general increase in the number of angler days over that period and a general decrease in total harvest. This chart would seem to indicate that fishing pressure from people living outside the area and who are non-subsistence users has had an impact on the resource. The testimony received during the scoping process in a number of the villages certainly would support this conclusion. 95-23

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.25	3.25-1 - 3.25-15	

The DEIS contains discussions of the various Native cultural groups found along the Trans Alaska Pipeline route. AFN is not going to comment on the analysis of each of these cultures in the DEIS. However, we do recognize that some of the Native groups disagree with the analysis as presented, and we would recommend that you adopt their explanations of the current status of their various cultures. 95-24

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.25.1.2 Alaska Native Claims Settlement Act	3.25-15	2

The discussion of the Alaska Native Claims Settlement Act should include a discussion of the impact of the discovery of oil in Prudhoe Bay and the proposal to build TAPS. We believe that authors you have cited in your bibliography would concur that the discovery of oil in Prudhoe Bay was a major factor in the desire of the State of Alaska and the United States Congress to settle Alaska Native land claims. This would also be an appropriate place to discuss the fact that the corridor for the pipeline was set aside and was not allowed to be selected by Alaska Native corporations. This also might be the place to discuss the fact that certain Native groups gave up potential claims on areas such as the marine terminal for the Trans Alaska Pipeline. 95-25

It was because of the relationship of the Alaska Native Claims Settlement Act to the Trans Alaska Pipeline that there are special provisions, such as Section 29 and Section 30 in the Grant of Right of Way. These two issues should be linked either in the discussion in this section or some other section.

In addition, the pipeline currently crosses some land owned by Native corporations and crosses or is close to a number of Native allotments. There is no discussion of those issues in this

section or what the implications of that Native land ownership might be, but there should be such a discussion. 95-25 (cont.)

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.25.1.2 Alaska Native Claims Settlement Act	3.25-16	2

95-26

There is no requirement in the Alaska Native Claims Settlement Act that a regional corporation operate at least one business on a for-profit basis. However, since the Act required that regional corporations be for-profit organizations we suppose it could be interpreted that they had to invest in at least one for-profit business. Of course regional corporations have all invested in dozens, if not hundreds of ventures that were intended to make profits.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.25.1.2 Alaska Native Claims Settlement Act	3.25-16	3

The phrase "disbursing cash" could be a little bit misleading. The only way that village corporations can make cash payouts is by paying dividends or to may payments from their capital base, which was intended to be used for investment purposes. The regional corporations had direct cash distribution responsibilities initially to all shareholders and continually to At-large Shareholders. 95-27

It also might be noted here that all villages chose to incorporate as for-profit corporations. The main reason for this decision was that under Alaska State law non-profit corporations cannot make distributions to their members, whereas profit corporations can make payouts as dividends.

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.25.1.2	3.25-16	4

We believe that the phrase "maintain vestiges of their traditional social cultural system" understates the cultural values and norms still found in Native communities today. Despite the overwhelming pressures placed on Native cultures by western cultures, the basic concept of group being more important than the individual remains today. Other traditional cultural values and activities and norms are practiced, although often they are missed by Westerners who do not understand these cultures. In addition, Natives have often had to hide their language and cultural practices from Westerners whose main goal was to either eliminate all vestiges of Native culture or to ridicule it. 95-28

Section Title	Section Number	Page Number	Paragraph Number
Affected Environment	3.29 Environmental Justice	3.29-7, 8	

Table 3.29-1 is particularly striking when one looks at the relationship between communities that have a substantial number of Natives and communities that have a high percentage of low-income people. In every case except Port Graham, communities which have a greater percentage of Natives than the average in the state also have a higher percentage of low-income people. This kind of economic analysis should be referenced back to the Subsistence section, because, as with high unemployment and high cost of living, low income also increases the reliance on subsistence. 95-29

We recognize that these figures will be updated in the FEIS. However, we would be very surprised if there was any substantial change in the relationship between communities that have a large number of Natives, and communities that also have a high percentage of low-income people.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.17.4 Obstruction to Movement	4.3-58	1

We believe there should be some mention in this section that roads give access to people for hunting. A number of people commented during the scoping process that hunting practices from roads which allow sport hunters to shoot at the lead animals in a migrating herd can, and usually do, change the migration pattern of that herd. 95-30

The traditional Native method of hunting caribou is to allow the lead animals to pass and to hunt the herd from behind. Non-Native hunting practices tend to be the opposite of this approach.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.19.1.2 Assumptions Relating to Other Activities in the Alaska Economy	4.3.66	2

Although the DEIS states that the economic impacts of the various policy options available to solve the state's fiscal situation is beyond the scope of the analysis, we believe that a couple 95-31

comments should be contained in the FEIS. The first is that the state faces about a billion-dollar deficit. No matter what the source of funds to make up this billion-dollar deficit (e.g. personal income tax, sales tax, Permanent Fund earnings, or some combination of these) it will have a definite negative impact on the state economy because it will reduce the spending power of residents of Alaska. In addition, recent history has shown that the urban-dominated legislature views reductions in spending programs in rural Alaska as part of the solution to budget shortfalls. Further reduction of spending in rural Alaska will have a disproportionate affect on Native communities which are also disproportionately low income according to Table 3.29-1 of the DEIS. 95-31 (cont.)

We believe that the FEIS can provide a discussion of the above issues without coming to any final determination about what the solution to the state's fiscal situation might be.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.19.3.4 Personal Income	4.3-73	2

95-32

This paragraph should include a sentence that indicates that the Permanent Fund Dividend could decline and, perhaps even decline substantially, if earnings from the Permanent Fund are used as a partial or main means for solving the state's fiscal situation.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.19.3.5 State and Local Tax Revenues	4.3-73-74	3

95-33

The assumption that state transfers to local government will not be affected by declining state oil revenues has already been proven false. State programs, particularly those with a rural emphasis, have already been reduced by the legislature. AFN anticipates that the state legislature, which will almost surely remain dominated by urban legislators throughout the period of renewal, will continue to look for ways to reduce expenditures in rural Alaska while minimizing any reductions in urban Alaska.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.19.5 Regional Economic Impacts	4.3-79	1

95-34

We are not sure how the DEIS comes to the conclusion that a "steady growth in population and income in the Alaska Native community" will provide additional spending power independent of

TAPS. As most Natives live in the most economically depressed communities in the state, this conclusion would seem to be wrong. In fact, increases in population might well exacerbate the problems of the Alaska Native community if rural economies continue to be as disadvantaged as they are today. 95-34 (cont.)

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.19.5 Regional Economic Impacts	4.3-79	2

95-35

Assuming that state transfers to local government would not be affected by reductions in state oil revenues, as we stated in an earlier comment, has already proven to be incorrect. In fact, as reflected in AFN's Briefing (to the Alaska Advisory Committee of the U.S. Commission on Civil Rights) on Hate Crimes against Alaska Natives and Other Acts of Discrimination (April 2001), state aid to local governments has been cut by almost 60% in the past 7 years – a situation that has harmed all communities but has rendered many rural villages incapable of providing even the most basic of government operations.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.19.6 Alaska Native Corporations	4.3-82	1

95-36

We would note again that the size of the Permanent Fund Dividend could be reduced substantially if income from the Permanent Fund is used to resolve the state's financial situation.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.19.7 Subsistence	4.3-82	1

95-37

Since the DEIS assumes an increase in the Alaska population, it should also assume that that population increase will have potential adverse impacts on subsistence. The more people compete for fish and wildlife resources, the more potential problems there are for people who rely on those resources for subsistence. A greater number of eligible users potentially equates to a larger harvest and to a reduction in harvestable resources, which means there necessarily will be restrictions on subsistence uses in affected areas by virtue of ANILCA's §804 requirements.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.20 Subsistence Impacts	4.3-82 – 4.3-86	

The section attempts to look at some of the difficulties that the residents of Native villages along the pipeline have experienced as a result of the Trans Alaska Pipeline System opening up a fair amount of country which was closed or at least difficult to access before construction of the pipeline. Some recognition is given to "traditional ecological knowledge," which during the scoping process overwhelmingly supported the concept that there has been substantial impact on subsistence resources in the past.

As stated previously, AFN does not believe that the problems with subsistence resources are due to the management of the Trans Alaska Pipeline System. Rather, they result from a doubling of the state's population, a significant contributing factor to which was the development of oil and the shipping it along the Trans Alaska Pipeline. The state and federal governments' fish and wildlife management practices, for one reason or another, have not kept up with that impact and the result has been a reduction of available resources for subsistence needs for Alaska Natives. 95-38

AFN also agrees with the concept that assuming only a small growth in the state's population may result in the future impact on subsistence resources being relatively limited. Unfortunately, however, the status quo presents a problem for most Alaska Natives. We believe that the FEIS should be stronger in its finding that there have been previous impacts on subsistence resources. Absent the data that should be available from the state Department of Fish and Game, we believe that the EIS must default to traditional knowledge on this subject.

In addition we believe that the recognition in the DEIS that appropriate data has not been kept supports AFN's position that development of baseline subsistence data should be required as a condition for renewal of the TAPS Right-of-Way grant. This data collection is vital both for management and subsistence, and for the implementation of Section 30, should it be necessary to invoke the process of determining the value of lost subsistence resources.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.20 Subsistence Impacts	4.3-86	2

95-39

Mention should be made in this paragraph of the use of airstrips developed along the Trans Alaska Pipeline during construction and their continuing use by sport and commercial hunters. This is an issue that was raised by a number of tribal representatives during the scoping process.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.20 Subsistence Impacts	4.3-86	6

95-40

The word "possibly" in the second bullet point should be removed from the last sentence in this paragraph as there is little dispute that continued use of the Dalton Highway to maintain TAPS operations and continued human activity will disrupt the movement of some terrestrial animals.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.21.1 Alaska Native Social Cultural Systems	4.3-87	2

95-41

This paragraph should recognize that some of the programs described as being currently funded through revenues from the oil industry have already been reduced or eliminated in rural Alaska.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.21.1 Alaska Native Social Cultural Systems	4.3-88	4

95-42

The indication that some Alaska Natives cannot compete in the job market because of cultural differences should be supplemented by the comment that some are also hampered by educational deficiencies. The education system in rural Alaska has been the source of numerous studies and, for the most part, rural education outcomes are much lower than those of urban areas.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.3.25 Environmental Justice	4.3-97, 99	

95-43

The discussion of the Permanent Fund Dividend and its "disproportionate benefit" for Native people is at best misleading. First of all, the difference in the Dividend, even if it stays at its current rate, will be a matter of $300 or $400 per family. That amount of money does not make up for the high cost of living in villages which we have referenced earlier in these comments, nor the low incomes and high unemployment rates that the DEIS itself documents.

Renewal of TAPS does not guarantee in any way the continuation of the Dividend. As has also been referenced earlier in our comments, the Permanent Fund's earnings are one of the primary

potential sources for resolving the state's fiscal situation. Using Permanent Fund earnings for this purpose would clearly reduce the Dividend, and, in the worst case, might eliminate it. Therefore it is our belief that the entire discussion of the disproportionate benefit of the Permanent Fund Dividend to minority people should be dropped from the FEIS. 95-43 (cont.)

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.4.4.14 Subsistence	4.4-120 – 4.4-123	

The discussion of potential spill scenarios and its relationship to subsistence is of particular importance to AFN. As the DEIS points out, one of the biggest risks to subsistence is a large spill on a smaller river. Repeatedly during scoping comments, people from Native villages suggested that additional spill response equipment should be placed near or on these rivers and that Alaska Natives should be trained to respond to an oil spill should one occur. AFN believes that using the system that the State of Alaska and the Bureau of Land Management use for recruiting and training firefighters from villages also could be used for spill response. 95-44

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.6.2.0 Subsistence	4.6-71	3

We believe that the assumption in the DEIS that the Dalton Highway would remain open under the No Action Alternative is incorrect. Because of the state's fiscal situation, the state is already actively eliminating road maintenance and snow plowing on highways which serve greater populations and are shorter in length than the Dalton Highway. It is our assumption that with the closing of the Prudhoe Bay oil fields, the main economic driver for the highway would be gone and that the state's declining fiscal situation would force closure of the highway. 95-45

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.6.2.20 Subsistence		4

We have several comments on the conclusions drawn in this paragraph. First of all, the statement that Natives would account for a disproportionately large percentage of the anticipated population growth and this growth would therefore increase subsistence harvest doesn't make sense. The shutting down of the pipeline should not significantly affect Alaska Native birthrates. Therefore, the increases in Native populations should be the same regardless of the renewal alternative selected by BLM. The hunting and fishing pressure from population growth should remain the same relative to the subsistence use by the Native population. 95-46

The DEIS goes on to state that a reduction in income to subsistence users would reduce their access to modern technology needed for subsistence and thus reduce subsistence pressure. Although this statement is probably correct in terms of purchasing power, we believe the larger driving force would be that the reduction in income would increase the need for subsistence resources. Therefore, we would anticipate increased subsistence activity because of the decrease in financial resources available to buy alternative foods. 95-46 (cont.)

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.6.2.25 Environmental Justice	4.6-86	2

Some mention of the North Slope Borough should be made in this section. The North Slope Borough has funded its development through the taxation of the oil industry. The shutting down of the pipeline would clearly mean the shutting down of Prudhoe Bay and the dismantling of the facilities on which the North Slope Borough bases the bulk of its taxation. The impact in lost revenue to the borough would be substantial. 95-47

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.7.8.1 Subsistence	4.7-108	1

We believe that there should be a sentence in this paragraph which states that, based on what little data is available and on the information received from traditional knowledge, significant major adverse impacts to subsistence have already taken place. 95-48

Also, in the second sentence of this paragraph, the term "extremely small" should be replaced with "relatively limited". There should also be a sentence stating, "these assumptions are made based on the likelihood that there will be no major oil spills affecting subsistence resources."

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.7.8.1	4.7-109	3

There should be some statement in this paragraph that traditional ecological knowledge has attributed changing migration patterns to the hunting practices of non-local hunters of killing the lead caribou during migration. This is an issue that was discussed a number of times during the scoping meetings. Traditional Native hunting practices allow the lead caribou to pass by and the herd is then hunted from the back, thus allowing the animals to pursue their migration patterns. 95-49

Non-Native hunting practices generally are based on shooting the first animal one sees. Although this Western hunting practice is not directly related to the management of TAPS, it has become a major problem because the Dalton Highway and new airstrips along the TAPS corridor served to open a vast amount of subsistence hunting areas to non-local hunters.

Further down in this paragraph there is a statement that suggests that the Alaska Department of Fish and Game has successfully regulated harvests to protect subsistence. AFN believes that there is ample evidence on the record from traditional ecological knowledge that would dispute this assumption (See Attachment 1). The AFN believes that the ADF&G has been biased toward sport hunting and fishing at the expense of subsistence. For example, after the state enacted the 1992 Subsistence law, which made all Alaskans subsistence users, the Board of Game refused to limit moose hunting in GMU 13 to local subsistence users. Instead it imposed antler restrictions, a short 7-day season, and individual bag limits, in order to ensure an opportunity for hunters from Anchorage and Fairbanks.

95-49 (cont.)

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.8.1 Unavoidable Adverse Impacts	4.8-1	2

We would replace the second and third sentences of this paragraph with the following.

95-50

"As previously indicated, major adverse impacts to subsistence resources have occurred in the past because of increased competition from non-subsistence users and from some disruption of migration patterns due to activities associated with TAPS and the Dalton Highway. On the other hand, increased access to financial resources has assisted some subsistence users in improving their ability to engage in subsistence activities. It is not anticipated that the current situation will change significantly in the future. However, an improvement in government management practices relating to subsistence could have a positive impact on the situation."

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.8.3 Irreversible and Irretrievable Commitment of Resources	4.8-2	3

95-51

The last sentence in this paragraph does not seem to make sense. We suggest it might be replaced by something to the effect that state and federal governments have the authority, but not always the desire, to allocate adequate subsistence resources to subsistence users.

Section Title	Section Number	Page Number	Paragraph Number
Environmental Consequences	4.8.4 Mitigation of Adverse Affects		

AFN recommends a mitigation measure that requires collection of adequate and accurate subsistence data (See Attachment 3). The DEIS repeatedly points out the problem of the lack of adequate data to make an assessment of subsistence impacts. We believe this situation should be remedied in the future. It would also seem to be essential that these baseline data be available in case there was ever a claim made using the process spelled out in Section 30 of the grant. 95-52

We believe the responsibility for collecting these data rests more with government than with the TAPS owners. However, the FEIS should recognize that these data need to be collected.

AFN also recommends a mitigation measure requiring some enforcement mechanism if Alyeska Pipeline Service Company does not meet its responsibilities under both Section 29 and the Alaska Native Utilization Agreement. We recognize that the BLM may not have the authority to require this recommendation at this point. However, we believe that there is an opportunity to address this situation in the Alaska Native Utilization Agreement and suggest a mitigation measure proposing such a mechanism be placed in that document.

Section Title	Section Number	Page Number	Paragraph Number
Appendix D	D.1	D-3	1

95-53

We believe that the last sentence in this paragraph should be expanded upon. As we have commented previously for other DEIS sections, mention should be made of the high cost of living in villages combined with high unemployment rates and low income.

Section Title	Section Number	Page Number	Paragraph Number
Appendix D	D.1 Introduction	D-3	3

95-54

Mention should be made in this paragraph of the fact that increases in the state's population, particularly the non-Native population, also play a major role in increasing competition for the resources upon which subsistence users rely.

Section Title	Section Number	Page Number	Paragraph Number
Appendix D	D.3.1 Challenges in the Study of Subsistence Patterns	D-5	4

95-55

The FEIS should state in this paragraph that subsistence areas may have been forced to expand both because of competition from outside of the community for subsistence resources and also because of growth in populations in some subsistence communities.

Section Title	Section Number	Page Number	Paragraph Number
Appendix D	D.3.3 Descriptions of Community Subsistence Pattern	D-8	1

95-56

We are pleased that the DEIS attempts to identify subsistence patterns by community. We think this is the appropriate approach. AFN does not have the capacity to analyze whether the data presented for each community and the explanatory information at the beginning of the section on each community is correct. We know that individual communities and some regional organizations will be commenting on these sections. We urge you to pay close attention to these comments as we believe they may more accurately reflect the situation in those communities than information that is currently in the DEIS.

Section Title	Section Number	Page Number	Paragraph Number
Appendix E	All	E-3 through E-14	

These comments apply to the entire Appendix E.

95-57

While Appendix E describes the Section 810 requirements for evaluating impacts of proposed management decisions on subsistence uses and resources, this section should be strengthened by adding a description of the legal requirements of ANILCA Title VIII as follows:

"Legal Requirements. Title VIII of ANILCA expresses an overriding Congressional policy of protecting Native and rural subsistence rights. This policy is expressed in a number of ways. The Act declares that "the utilization of the public lands in Alaska is to cause the *least adverse impact possible* on rural residents who depend upon subsistence uses . . . ." 16 U.S.C. §3112(1). It also states that all land management decisions affecting public lands must allow, to the maximum extent possible, "the opportunity for rural residents engaged in a subsistence way of life to do so." Id. It further ensures that subsistence hunting and fishing is accorded maximum

protection by providing that the nonwasteful subsistence harvest of fish and game is the priority consumptive use on public lands in Alaska. 16 U.S.C. §3114. Finally, in order to ensure that Alaska Natives play a meaningful role in the regulation of fish and game resources, the Act creates local and regional fish and game advisory councils which are authorized to participate in land management decisions that might result in significant restrictions of subsistence uses of resources. 16 U.S.C. §3115; 16 U.S.C. §§3120(a)(1)-(2)."

We suggest the evaluation description on page E-3 be revised to reflect the actual language used by Congress in Section 810 of ANILCA. Our suggested language is as follows:

"Section 810 requires that federal land managers carefully evaluate the impact of the proposed management decisions on subsistence uses and resources. It prohibits any use of federal lands which "may significantly restrict" subsistence uses of those lands unless the responsible federal agency first determines that:

(A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands;
(B) the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition; and
(C) reasonable steps *will be taken* to minimize adverse impacts upon subsistence uses and resources resulting from such actions.

95-57 (cont.)

16 U.S.C. §3120(a)(3)(A)-(C)" (emphasis added).

There are several problems with the Evaluation of Impacts Section (Sections E.2.1-E.2.3) and the Cumulative Impacts Section (E.2.4)

E.2. Evaluation of Impacts

Each "Evaluation of Impacts" of the various alternative actions discussed in the DEIS concludes that "the impacts of the proposed action on subsistence will not reach the threshold of "may significantly restrict" subsistence uses."

The analysis of the potential impacts on subsistence is severely undermined by the authors' conclusion that there is a lack of reliable, quantitative evidence necessary to make conclusive final evaluations. As we point out in numerous locations in our comments, the DEIS evaluation conclusion in E.2.1.1 that "there is no evidence to support the assertion that there has been a decline in the populations or amounts of harvestable resources" is incorrect. There has been ample testimony by local people that over the life of the pipeline there have been adverse impacts on their ability to harvest subsistence resources from increased competition for subsistence resources and the resulting decline in resource availability. That testimony constitutes traditional knowledge and should have been given considerable weight, especially in

the absence of reliable baseline date to the contrary. There is also ample evidence that the state has accommodated the increased demand for those resources from non-local hunters and fishermen by placing increasingly restrictive bag limits and seasons on local subsistence users.

In fact, in analyzing the various alternatives for subsistence management for the public lands in Alaska following the *McDowell* decision (holding that the State could not provide a priority for subsistence uses to rural Alaska residents), the responsible federal agencies rejected several alternative definitions of "rural" precisely *because* they would have enlarged the pool of individuals eligible for rural status thereby increasing the competition for the resources. The FEIS developed for the Federal Subsistence Management Program concluded that those alternatives would likely result in some local restrictions on subsistence uses. Those restrictions, required by ANILCA § 804, would in turn limit subsistence opportunities to only those who could meet the criteria specified in Section 804. As a result, the EIS concluded that such a result "may significantly restrict subsistence uses." *Subsistence Management for Federal Public Lands in Alaska, Final EIS, Vol. 1, Chapter IV-J-3. (Alternative III Finding).* The same standard and analysis should have been applied in this case where there is clear evidence that competition for potential subsistence resources, caused by increased access to remote areas, primarily as a consequence of opening the Haul Road/Dalton Highway to the public and the construction of numerous airstrips in remote areas along the pipeline, has led to restrictions on some subsistence hunting and fishing. Had the same standard and analysis been applied in this case, the DEIS would have been compelled to conclude that a significant restriction to subsistence activities might occur as a result of competition for potential subsistence resources and the attendant decline in the amount of harvestable resources available to local residents.

95-57 (cont.)

Such a conclusion would have triggered requirements for findings under ANILCA § 810(a)(3)(A)-(C) as is the case in the Cumulative Impacts Evaluation section. Our comments below on the Cumulative Impacts Evaluation findings (Section E.2.4) therefore also apply to the general Evaluation of Impacts Section (E.2.1-E.2.3).

As we have stated before in our comments, we do not attribute these declines to the management of TAPS, but rather to the management of fish and game resources and the allocation of those resources by the appropriate government entities, combined with a large increase in the state's population and the competition for subsistence resources. However, even though the declines in resources could not and should not be directly attributable to the management of TAPS, that decline should not be ignored in this analysis.

E.2.4 Cumulative Impacts

The DEIS finds that additional oil exploration, development and production and the construction and operation of a natural gas pipeline "would add to the disruption of game mobility, particularly on the North Slope, where many of these activities would be concentrated." DEIS E.2.4.1 at E-9. The DEIS further concludes that the "changing movement of large numbers of animals with respect to traditional harvest areas would have important implications for subsistence." *Id.* The analysis of the cumulative impacts further acknowledges that access to remote areas would likely increase because of reasonably foreseeable actions, *id.*, and that limits

on access to subsistence areas or restrictions on hunting and fishing in certain areas are the likely consequences – especially with respect to the harvest areas of Anaktuvuk Pass and Nuiqsut. DEIS E 2.4.1 at E-10. The DEIS concludes that the cumulative impacts associated with the proposed action on subsistence "may significantly restrict" subsistence uses. DEIS Appendix E., 2.4. at E-10. This finding clearly triggers Section 810's requirement that the responsible agency make the determinations required by 16 U.S.C. §3120(a)(3)(A)-(C).

The DEIS does not contain the three critical findings required by ANILCA § 810(a)(3)(A)-(C) once there has been a conclusion that there may be significant restrictions to subsistence uses as a result of a proposed federal action.

95-57 (cont.)

We believe the DEIS authors erred in assuming that the above required findings are not required to be published in the DEIS for public review and comment. In fact, these findings *must* be included in the DEIS for public review and comment. *See* 16 U.S.C. §3120(e). Unlike NEPA, ANILCA imposes substantive obligations on federal agencies. *See Sierra Club v. Marsh,* 872 F.2d 497, 502 (1st Cir. 1989). In other words, simply documenting the potential harm to subsistence resources and uses is not enough. The responsible agencies must actually alter their plans to *avoid*, to the maximum extent possible, the harm that may inevitably result from implementation of the preferred alternative set forth in the DEIS or take reasonable steps to minimize the adverse impacts on subsistence uses.

Mitigation Measures

Even though The DEIS acknowledges that a significant restriction to subsistence uses could result from the *cumulative* impacts associated with the proposed action due to an increase in potential disruption of subsistence resource movement and an increase in the area closed to subsistence, DEIS E.2.4.2, there are no additional mitigation measures proposed that might be taken to minimize those potential adverse impacts or to remedy the perceived need for quantitative evidence which is cited throughout the DEIS as a problem. The analysis of the potential impacts on subsistence in this DEIS is severely undermined by the lack of reliable, quantitative evidence necessary to make conclusive final evaluations. That will continue under the renewal agreement unless it is cured with additional mitigation measures.

95-58

ANILCA's requirement that mitigation measures be implemented is not discretionary. The federal agency must develop and implement adequate measures to minimize the admittedly harmful cumulative effects of the renewal of the pipeline ROW upon Native subsistence uses. Although the original agreement and grant of Right of Way for the Trans-Alaska pipeline between the U.S. and the oil companies contains Section 30 which is aimed at mitigating the potential damage to the subsistence way of life of those villages located along the pipeline, that Section may have been ineffective due to lack of baseline data and the lack of a clear process for making a claim under § 204(a) of the Trans-Alaska Pipeline Authorization Act. We believe regulations should be promulgated that clearly set out the process Alaska Natives would follow in filing a claim under the Act, as contemplated by Section 30 of the Agreement.

In addition, future collection of data that can clearly show the trends in subsistence taking of fish and game and the impact of non-subsistence hunting and fishing on those trends is critical. Otherwise, Section 30 would be virtually meaningless if there is no baseline data against which one can measure alleged negative impacts to subsistence. Collection of adequate baseline date should be added as a "reasonable step" needed to minimize potential adverse impacts on subsistence uses and resources and to give meaning to Section 30.

With these concerns in mind, AFN has recommended inclusion of two additional mitigation measures to the Federal Grant of Right-of-Way. The recommendations in our general comments referencing these measures are: 95-58 (cont.)

1. **That the grant of right-of-way contain a new stipulation requiring the collection of data which can clearly show the trends in subsistence taking of fish and game and the impact of non-subsistence hunting and fishing on those subsistence trends. Tribal governments and other Native organizations should be directly involved in the gathering of this data.**

2. **That the Bureau of Land Management promulgate regulations that clearly set out the process Alaska Natives would follow in filing a claim under the Act, as contemplated by Section 30 of the Right-of-Way grant and agreement.**

Section Title	Section Number	Page Number	Paragraph Number
Appendix E	E.1 Subsistence Evaluation Factors	E-3	

Section 810 does not restrict its required analysis to the five impact categories used to assess whether any of the proposed alternatives may result in a significant restriction to subsistence uses. The DEIS should clearly set forth an explanation of the methodology it used in selecting the five impact categories used for deciding whether the proposed action would significantly restrict subsistence uses. Although Appendix A purports to explain the methodology used for the subsistence evaluation, it does not fully explain how the five potential negative impact categories were selected. The only explanation we have found is contained at 4.3.20 (page 4.3-85), where it is suggested that the impact categories relate to the issues identified by individuals who pursue a subsistence way of life and were based in part on traditional ecological knowledge. While we do not necessarily disagree with the five factors, we believe a better explanation of their selection should have been provided. 95-59

Section Title	Section Number	Page Number	Paragraph Number
Appendix E	E.2.1.1 Evaluation	E-4	1

95-60

In this paragraph we believe the term "extremely small" should read "relatively limited (assuming no affects from a major oil spill)".

Section Title	Section Number	Page Number	Paragraph Number
Appendix E	E.2.1.1 Evaluation		2

In sub-paragraph of "2." we would suggest that mention be made of the comments by many local people that Western hunting practices have changed migration patterns of caribou. This again is not a management issue for TAPS, but clearly has had an impact on the resource.

95-61

As we explained earlier, Natives traditionally hunt caribou by letting the lead animals go by and hunting from behind the leaders of the herd. Western practices tend to be to shoot the first animal that one sees. If this animal happens to be one of the leaders of the herd, migration patterns are easily changed.

Section Title	Section Number	Page Number	Paragraph Number
Appendix E	E.2.1.1 Evaluation	E-5	1

The word "possibly" in line 9 should either be deleted or replaced by the word "clearly".

Further on the statement is made that, "Thus, access-related competition with non-locals for subsistence resources is either not related to TAPS ROW renewal or appears to have great limitations." We believe the second part of this sentence is incorrect. Public access allowed along the Dalton Highway has had a clear and substantial impact on both moose and caribou, and in some cases fish. Although there may not be statistics from the Department of Fish and Game that clearly show this situation, there are certainly enough data available to infer this conclusion and combining these data with traditional local knowledge gives a clear picture of the problems that have resulted from the non-local access to these lands for hunting and fishing.

95-62

Section Title	Section Number	Page Number	Paragraph Number
Appendix E	E.2.1.1 Evaluation	E-5	2

In the second paragraph on this page numbered "4." there is a statement that the Dalton Highway would remain open even if TAPS was not renewed. As we have previously stated in these comments, we do not believe that is a correct conclusion. The State of Alaska is currently reducing maintenance and snow plowing on a variety of roads even with the revenues that result from the operation of TAPS. If North Slope production were shut down, it is our assumption that one of the first things that the state would stop doing is maintaining the Dalton Highway. 95-63

This comment also applies to the paragraph numbered "4." on page E-7.

Section Title	Section Number	Page Number	Paragraph Number
Appendix E	E.2.4 Cumulative Impacts	E-8	1

The word "small" in line 11 should be changed to "limited". 95-64

Section Title	Section Number	Page Number	Paragraph Number
Appendix E	E.2.4.1.1 Evaluation	E-8	

In sub-paragraph number "1." of this paragraph, we believe it is important to point out that there is a difference between population decline of subsistence resources and the ability of subsistence users to harvest those resources. Although populations in some cases have increased and in others have decreased, there is clear evidence that there has been a problem with competition for subsistence resources and that should be noted in this paragraph, even though it is more completely discussed in sub-paragraph "3." of this paragraph on page E-9. 95-65

Responses for Document 00095

00095-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00095-002: Thank you for your comment.

00095-003: The concerns of the commentor have been noted. Section 2.5 of the FEIS discusses alternatives and issues considered but not analyzed in the document, including financial penalties. In general, changes to the Federal Grant and future policy decisions are beyond the scope of the EIS.

00095-004: These extensive comment on Section 30 and recommendation for new subsistence monitoring research are acknowledged. The DEIS sections on subsistence received many critical public comments, and as a result, have undergone substantial revision. A small number of additional sources were identified, including the map of Cordova subsistence use areas and North Slope studies of impacts on subsistence economies from oil development. Previous sources were considered more closely, as when time-series data were derived from the ADFG Division of Subsistence studies; and harvest permit data were broken down further to distinguish patterns of rural and non-rural residents. With additional analysis of this data, the EIS draws reasonable conclusions concerning the renewal of the TAPS right-of-way, on the basis of existing information. As a result, the proposal for a stipulation in the grant right-of-way requiring a new studies program is not incorporated.

00095-005: The DEIS sections on subsistence, including the Section 810 analysis found in Appendix E, received many critical public comments, and as a result, have undergone substantial revision. A small number of additional sources were identified, including the map of Cordova subsistence use areas and North Slope studies of impacts on subsistence economies from oil development. Previous sources were considered more closely, as when time-series data were derived from the ADFG Division of Subsistence studies; and harvest permit data were broken down further to distinguish patterns of rural and non-rural residents. With additional analysis of this data, the EIS draws reasonable conclusions, on the basis of existing information

The comment requesting development of clear procedures for filing a claim under Section 30 of the right of way grant is noted. However, existing procedures provide for claims to be filed through a letter to the Secretary, and such claims have been filed. No additional procedures are proposed as part of this EIS.

00095-006: The discussion of the permanent fund dividend refers to disproportionately greater benefits when the per capita dividend is in effect, but also notes the disproportionately greater negative impacts were the dividend to be discontinued. Studies that have appeared in refereed academic literature characterize rural Alaska economies as mixed, which means that cash plays a role as well as subsistence. To ignore the role of cash, or a key source of cash such as current payment levels received from the permanent fund dividend, would be to characterize the mixed economies of rural communities in Alaska incompletely.

Additional discussion has been added to Section 3.23 to discuss different economic and employment conditions in rural Alaska, including Native villages, and Section 3.24 to address differences in cost of living. The discussion of subsistence impacts under the proposed action (Section 4.3.20) also has been expanded to examine subsistence impacts in greater detail, and how these impacts extend into the sociocultural fabric of Alaska Native (especially) society. However, the discussion of positive impacts to subsistence under the proposed action is preserved, to provide a balanced discussion of all consequences of the proposed action.

The EIS discusses social problems faced by Alaska Natives. It also cites possible explanations about these problems that have appeared in refereed journal articles and elsewhere in the academic literature. Preparers of the EIS found no research to support the comment assertions as to the cause of social problems among Alaska Natives.

Statistical significance of the difference between family sizes of Alaska Natives and non-Natives was not calculated. The issue is, of course, not appropriate, as the comparison is not one between samples.

00095-007: The BLM and member agencies of the JPO are committed to ongoing government-to-government consultations and welcome invitations to participate in meetings and dialogues with Native Tribes (see Section 5.3).

In accordance with Executive Order 13175, “Consultation and Coordination with Indian Tribal Governments,” the BLM has involved Tribal governments during the preparation of the EIS. As the lead federal agency associated with this EIS, the BLM established government-to-government exchanges with all Tribal governments in Alaska and more focused exchanges with 21 Tribes directly affected by the TAPS. These 21 communities received more detailed mailings explaining the proposed ROW renewal, the EIS process, and the various sources of additional information. Meetings were held with all Tribal organizations and Native groups that requested them, to discuss the EIS process and related issues in greater detail. At the meetings, specific emphasis was placed on how Tribal organizations and Native groups can participate effectively in the EIS and ROW renewal processes. Section 5.3 was rewritten to clarify the extensive government-to-government consultation process BLM used. While comments on the DEIS had to be received by the end of a 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native groups. The process of government-to-government consultation allows these organizations to continue dialogues with the Bureau of Land Management and for their comments to be considered in the Record of Decision.

00095-008: Recommendation to increase the training and certification of additional village crews for oil spill response is noted. However, recommending specific methods for mitigating future oil spill should de done as part of the C-plan review.

00095-009: Access, land use, and trespass issues related to Native lands are addressed in the EIS in Section 4.3.23.1, "Land Use." The BLM recognizes the concerns of Tribal governments and Native allottees related to land use issues adjacent to TAPS. Although these concerns do not directly affect renewal of the Federal Grant of Right-of-Way, the BLM will continue to work with these groups on these issues, as it has in the past.

The Bureau of Land Management is the lead federal agency for the preparation of this EIS and for considering requests for participation by others. The BLM has consulted with affected Tribal and Native organizations throughout the TAPS ROW renewal and EIS process. Regardless of the assistance provided in preparation and review of the EIS, the BLM is responsible for its content.

00095-010: It is clear that there were significant economic benefits following the Exxon Valdez spill, with spending by the large number of cleanup workers involved producing additional employment and income impacts in the local area and in the state as a whole. While the long-term effects of the spill on the environment in Prince William Sound have yet to be fully established, the costs of the spill measured in terms of losses to the recreation, tourism and fishing industries have been outweighed by the economic benefits associated with clean-up activities.

The spill response capability in Prince William Sound developed after the Exxon Valdez accident means that it is unlikely that a spill of the same magnitude would occur again, and that the local and state economic benefits of spill response and clean-up activities for any spill would be as significant. The possibility of compensatory claims following any long-term damage to the environment resulting from a spill, however, may still increase the monetary cost of even a relatively small spill, although there may be economic benefits if cash from compensation payments is spent inside the state.

All this stated, the issues raised in the comment concerning persisting psychological impacts, and impacts concerning the safety of subsistence harvests from the area affected by the Exxon Valdez Oil spill, are worth noting. Sections 4.7.8.1 and 4.7.8.2, focusing on cumulative impacts of the three alternatives considered in the EIS, have been expanded to discuss effects of the Exxon Valdez Oil Spill on subsistence activities and sociocultural systems in the Prince William Sound area in greater detail. This does not discount any economic benefits that the spill may have brought to the area, but it does help serve to place those benefits in perspective for this unfortunate event.

00095-011: Sections 3.23 and 3.24 have been revised to provide more complete summaries of economic conditions in rural Alaska and a fuller discussion of subsistence harvest patterns. Sections 4.3.20, 4.4.4.14, 4.5.2.20, and 4.7.8.1 all have been expanded to discuss subsistence impacts of the proposed action (or the less-than-30-year renewal alternative) in greater detail.

The conclusions of the EIS with regard to subsistence remain substantively unchanged. There have been many changes in the Alaskan economy and society over the past 30 years, including impacts on subsistence in Alaska Native villages. However, most of these are not due to TAPS itself but rather to other factors such as general population growth or the opening of the Dalton Highway to general public access in 1994.

00095-012: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

While comments on the DEIS had to be received by the end of the 45-day comment period in order to be addressed in the Final EIS, additional provisions for involvement in the decision-making process apply to Tribal governments and Native organizations. The process of government-to-government consultation allows these groups to continue dialogue with the Bureau of Land Management.

00095-013: Text has been added to Section 3.23.5 of the EIS to clarify the scope of the analysis.

00095-014: Text has been added to Section 3.23.5 of the EIS to clarify the scope of the analysis.

00095-015: The text in Section 3.23.4.3 of the EIS has been changed to reflect information provided in the comment.

00095-016: Text has been added to Section 3.23.5 of the EIS to clarify the scope of the analysis.

00095-017: The text in the FEIS (Sections 3.23.5 and 3.24.1) has been changed to reflect information provided in the comment.

00095-018: Differences in the impact of renewal and termination for different parts of the state, presented in terms of population (including migration), employment, and personal income, are included in the EIS. This includes impacts that would occur in three boroughs (Fairbanks-North Star and North Slope), three census areas (Southeast Fairbanks, Valdez-Cordova and Yukon-Koyukuk) and in Anchorage. At this level, it is clear that that the decision to renew or terminate TAPS would have differential impacts in each of these areas, with impacts across the six areas varying according to various factors, in particular, the extent of local employment directly related to pipeline operations and local government reliance on property tax revenues on oil property.

In general, personal incomes in Alaskan Native villages are lower than in the state as a whole and unemployment, especially in smaller villages, is high, particularly during the winter when there is little alternate market-based activity. Because of the key role of subsistence in many village economies, economic data that is collected for these communities may not fully represent their economic well-being. For example, many transactions between individuals involving the exchange of subsistence products that would otherwise provide income if they took place in the marketplace are not reflected in personal income statistics. Similarly, unemployment data may not reflect the extent to which additional economic activity may be required if subsistence activities provide a sufficient alternative to participation in the marketplace. In addition, the large differences in prices between urban and rural Alaska may exaggerate the corresponding differences in economic well-being depending on the extent to which local community members in rural areas have to participate in the local market economy for key consumer items, such as food, clothing, and energy, and the extent to which these items can be obtained through participation in subsistence activities. Because of these problems, the analysis undertaken for the EIS did not estimate the impacts of renewal and non-renewal for areas and villages below the level of the Census Area/Borough.

Additional text has been added to Section 3.23 of the EIS to clarify the scope of the economic analysis. The passage referenced in the comment was only meant to provide a general sense of the monetary value of subsistence harvests in comparison to other sectors of the state economy.

00095-019: Differences in the impact of renewal and termination for different parts of the state, presented in terms of population (including migration), employment, and personal income, are included in the EIS. This includes impacts that would occur in three boroughs (Fairbanks-North Star and North Slope), three census areas (Southeast Fairbanks, Valdez-Cordova and Yukon-Koyukuk) and in Anchorage. At this level, it is clear that that the decision to renew or terminate TAPS would have differential impacts in each of these areas, with impacts across the six areas varying according to various factors, in particular, the extent of local employment directly related to pipeline operations and local government reliance on property tax revenues on oil property.

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Additional text has been added to Sections 3.23 and 3.24.1 to expand the treatment of village economics, including high costs of living and unemployment.

00095-020: Thank you for your comment.

00095-021: Differences in the impact of renewal and termination for different parts of the state, presented in terms of population (including migration), employment, and personal income, are included in the EIS. This includes impacts that would occur in three boroughs (Fairbanks-North Star and North Slope), three census areas (Southeast Fairbanks, Valdez-Cordova and Yukon-Koyukuk) and in Anchorage. At this level, it is clear that that the decision to renew or terminate TAPS would have differential impacts in each of these areas, with impacts across the six areas varying according to various factors, in particular, the extent of local employment directly related to pipeline operations and local government reliance on property tax revenues on oil property.

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Additional text has been added to Sections 3.23 of the EIS to clarify the scope of the economic analysis. Section 3.24.1 has been revised as well to note the mixed subsistence-based economies that dominate rural Alaska, the importance of cash in these economies, and the challenge in acquiring such funds.

00095-022: The original community harvest practice descriptions have been augmented and reorganized into ecological zones to better show regional patterns. Time series data have been added to examine changes in harvest patterns. As a result, the EIS is able to draw reasonable conclusions on subsistence impacts on the basis of existing information.

Comments regarding the community-specific analysis, and forthcoming comments from individual villages, are duly noted.

00095-023: We are not comfortable making the recommended change. Although the trends suggested in the comment seem to be the case, the variation in both angler days and (especially) total harvest makes the strength of trends weak. Moreover, even if the harvest data are an indication of declining populations for the fishes listed, sport harvest is not the only means of affecting fish populations—heavier subsistence harvests, predation, and environmental variables also play a potentially important role.

00095-024: Thank you for your comment.

00095-025: Section 3.25.1.2 has been revised in accordance with the comment.

00095-026: Section 3.25.1.2 has been reworded to clarify this point made in the comment.

00095-027: The phrase “disbursing cash” refers to the initial phase of ANCSA when Village corporations did disperse settlement payments. This section has been clarified to state that Villages currently disburse any dividends.

00095-028: The text in Section 3.25.1.2 (as well as that in Section 3.25.1) has been changed to describe more accurately the nature of Alaska Native sociocultural systems that persist into the 21st century.

00095-029: Text in Section 3.23 (especially) and 3.24 has been revised to describe more clearly the economic situation facing rural Alaskans.

00095-030: Potential disturbance to caribou migration due to traffic on the Dalton Highway, and from hunters shooting at lead animals in a migration, appear in Sections 3.24 and 4.3.20.

00095-031: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00095-032: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00095-033: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00095-034: The text in Section 4.3.19.5 of the EIS has been changed to reflect information provided in the comment.

00095-035: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00095-036: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00095-037: The discussion in Section 4.3.20 (impacts on subsistence under the proposed action) is in agreement with the comment, and has been revised to make the connection between growing population and the TAPS clearer. However, Alaska population growth is not exclusively a result of the TAPS.

In the absence of a clear specific relationship between population growth and overall harvests of subsistence resources in particular areas, it is impossible to project what these impacts might be. In a worst case, as discussed in the comment, harvests could be restricted to subsistence and then further restricted in accordance with ANILCA Section 804 guidelines. However, depending on the relationship of harvests to resource populations in a particular management unit, increased harvests need not invoke restrictions of all uses except subsistence, much less the subsistence uses themselves.

00095-038: The comment is noted, including the position of the Alaska Federation of Natives regarding subsistence impacts and the problems associated with the status quo for Alaska Natives. The problem associated with placing a heavier reliance on traditional ecological knowledge are two: the difficulty in assigning causality of subsistence impacts with traditional ecological knowledge; and the apparent lack of population-level impacts on most subsistence resources during nearly three decades of TAPS operation, as discussed in Sections 3.19, 3.20, 3.21, and 3.22.

The DEIS sections on subsistence received many critical public comments, and as a result, have undergone substantial revision. A small number of additional sources were identified, including the map of Cordova subsistence use areas and North Slope studies of impacts on subsistence economies from oil development. Previous sources were considered more closely, as when time-series data were derived from the ADFG Division of Subsistence studies; and harvest permit data were broken down further to distinguish patterns of rural and non-rural residents. With additional analysis of this data, the EIS has reached reasonable conclusions, on the basis of existing information.

00095-039: The text in Section 4.3.20 has been changed to mention airstrips.

00095-040: The recommended change has been made to Section 4.3.20.

00095-041: The text in Section 4.3.21 has been changed, and now reflects the point made in the comment.

00095-042: The referenced text in Section 4.3.21.1 has been changed in response to the comment.

00095-043: The comment makes some interesting points, but the fact remains that larger families that Alaska Natives tend to have would yield a disproportionate positive impact. There are several possible futures for the permanent fund dividend, and due to uncertainties the EIS avoids speculating on these.

00095-044: The EIS evaluates impacts based on existing spill response plans. When an EIS predicts significant impacts under normal operating conditions, it offers possible mitigation measures. However, in the case of accidents, mitigation measures are not normally offered—due to the uncertainty of occurrence and particular aspects of occurrence (e.g., location).

00095-045: The hypothesis stated by the comment (and the reasoning underlying it) is entirely possible. By the same token, the Dalton Highway provides the only land access to North Central Alaska, and it is reasonable to assume that every possible measure would be taken to keep it open. At this point, we have no way of knowing the future of the Dalton Highway, should the TAPS be discontinued. In the absence of such knowledge, we have assumed its continued operation.

00095-046: The text in Section 4.6.2.20 has been revised to clarify the identification of likely impacts to subsistence under the no-action alternative.

00095-047: Section 4.6.2.25 has been revised to note likely impacts to North Slope Borough public services and programs under the no-action alternative.

00095-048: The text has been changed, both in Section 4.7.8.1 and in Section 4.3.20 (the portion of the EIS to which the cited passage points), though it does not use the recommended wording. As Section 4.3.20 deals with impacts under normal operations, no caveat is necessary with regard to a major oil spill, as such an event is not part of normal operations.

00095-049: The referenced paragraph discusses impacts on subsistence, including caribou hunting, on the North Slope. We have seen no mention of the problem with hunters shooting the lead animal, from two sets of notes taken at the public scoping meeting in Nuiqsut on 24 September 2001; we held no such meeting in Anaktuvuk Pass, and we have no record of this specific concern being otherwise submitted from these two communities. Such comments certainly were made by members of other villages further south, as noted in Section 3.24.1. The existing paragraph already acknowledges that traditional ecological knowledge associate the pipeline with changes in herd movement, which is stated in more general terms that are consistent with concerns we have from both villages. Data presented in Section 3.24.4 approximating sport vs. subsistence harvests show growing sport harvests, in both absolute and relative terms, though resource populations are reported as maintaining sustainable levels.

00095-050: The text in Section 4.8.1 has been changed to clarify the overall message of the paragraph, though this is not in line with the entire change recommended in the comment. The absence of consistent evidence on the current existence of significant impacts precludes making the recommended change.

00095-051: The text in Section 4.8.3 has been revised.

00095-052: The issue of subsistence impacts under the proposed action and alternatives has been revisited carefully in response to public comments. The revised version of Section 3.24 of the FEIS discusses a variety of subsistence data, including community harvest data, approximated subsistence harvests of selected game by geographic area, information on resource populations (see also Sections 3.19, 3.20, 3.21, and 3.22), and traditional ecological knowledge. Sections 4.3.20 and 4.7.8.1 refer to studies that have focused on impacts related to the oil industry on subsistence, thus providing an interpretation of key situational data on subsistence. The available data are adequate for purposes of evaluating impacts of the proposed action and all alternatives considered in this EIS.

A variety of impacts on subsistence appear to persist in much of Alaska, but as discussed in the EIS these impacts tend to be consequences of a range of causes (usually not the TAPS). The acquisition of additional subsistence data likely would help to manage subsistence, sport, and commercial harvests more adequately. However, if and how these data would be collected are beyond the scope of this EIS.

This EIS evaluates the Agreement and Grant of Right-of-Way for Trans-Alaska Pipeline (see Appendix B) as it currently exists. Approaches to enforcement of Section 29 of the agreement are beyond the scope of this EIS (see Section 2.5).

00095-053: The primary purpose of Appendix D is to present additional data to support the analyses contained in the main body of the EIS. As result, we have not added information on village economies to the appendix (which generally has been revised), but we have added such information to Sections 3.23 and 3.24 in the main body of the EIS.

00095-054: A text change has been made in Section D.1 of Appendix D and in Section 4.3.20 of the FEIS.

00095-055: Available data do not indicate that subsistence areas necessarily have expanded, though the possibility certainly exists. If areas had expanded, reasons could also include changing distributions of resources (due to reasons other than changes directly or indirectly associated with the TAPS) and an increased ability to move greater distances with little commensurate kilocaloric cost to the subsistence practitioners.

00095-056: The comment is noted. All comments received on the DEIS receive the same close attention.

00095-057: This comment provides several detailed suggestions for revising Appendix E, the ANILCA Section 810 analysis. The suggestion to add additional language from 16 U.S.C. Section 3112(1) is acknowledged, but is not adopted. The general language concerning the standards for management cited in the comment does not materially change the analysis. The comments regarding the Evaluation of Impacts have been considered, but not incorporated. Additional information has been considered in Section 3.24 on subsistence, and in the subsistence sections of Chapter 4 on Environmental Consequences. However, this additional analysis resulted in the same conclusions in Appendix E. Renewal of the TAPS right-of-way itself is determined not to significantly restriction subsistence activities. However, when cumulative effects are considered, Appendix E concludes that the Proposed Action to renew the lease for 30 years, and the Alternative of renewing the Lease for < 30 years, may significantly restrict subsistence activities.

Finally, the appropriate findings outlined in 16 U.S.C. Section 120(a)(3)(A) – (C) have now been added to the FEIS. The BLM has an established procedure that such findings are not offered at the DEIS stage, prior to public comments, and can only be finalized in the FEIS.

00095-058: The BLM recognizes that there may be interactions between the TAPS and subsistence resources. The BLM also notes that current information does not show a relationship between TAPS and subsistence impacts. The BLM and State of Alaska within JPO are currently working with industry and others to develop a science-based approach to determine how TAPS and subsistence resources interact.

00095-059: A text change has been made to Section E.1 of Appendix E in the FEIS to explain how these categories were identified.

00095-060: The text has been changed, both in Appendix E (Section E.2.1.1) and in Section 4.3.20 (the portion of the EIS to which the cited passage points), though it does not use the recommended wording. As Section 4.3.20 deals with impacts under normal operations, no caveat is necessary with regard to a major oil spill, as such an event is not part of normal operations.

00095-061: A text change has been made in Section E.2.1.1 of Appendix E.

00095-062: The first recommended (text) change has been made to Section E.2.1.1 of Appendix E. The second issue noted—regarding the limited impacts of TAPS-related access—concerns TAPS service roads. The conclusion that they provide limited increased access is based in part on the extent of the network and in part on limitations on their use, particularly following the attacks of September 11, 2001 (as noted in the same paragraph).

00095-063: The hypothesis stated by the comment (and the reasoning underlying it) is entirely possible. By the same token, the Dalton Highway provides the only land access to North Central Alaska, and it is reasonable to assume that every possible measure would be taken to keep it open. At this point, we have no way of knowing the future of the Dalton Highway, should the TAPS be discontinued. In the absence of such knowledge, we have assumed its continued operation.

00095-064: The current wording in Section E.2.4 is consistent with the conclusions reached in the sections of the document referenced in the passage cited by the comment.

00095-065: A text change has been made in Section E.2.4.1.1 of Appendix E to better incorporate the concept of "harvestable" along with population-related issues.

00096

August 18, 2002

BLM TAPS Renewal EIS
Argonne National Lab EAD/900
9700 S. Cass Ave.
Argonne, IL 60439
tapswebmaster@anl.gov

State of Alaska, DNR/JPO
Attn: TAPS Renewal Team
411 West 4th Ave., Suite 2C
Anchorage, AK 99501
ADNR_Administrative_Record@jpo.doi.gov

Comments on Application of the Trans-Alaska Pipeline System Owners for Renewal of the Federal Grant and State Leases for the TAPS Right-of-Way

My name is Dr. Riki Ott and I have lived in Cordova, Alaska, since 1985. I have served on the board of the Alaska Forum for Environmental Responsibility since its inception, however, these comments are my own. My community is still reeling from the aftershocks of the *Exxon Valdez* oil spill 13 years ago.

I am very concerned that the next major spill will be along the overland—or "overstream"—portion of TAPS. The risk is high for my community—20% of the 800-mile pipeline is within the Copper River watershed and the main pipeline crosses 76 tributaries of the Copper. While spill prevention and response measures have improved significantly since the 1989 spill—almost all due to citizen oversight and pressure, most of those changes are at the Valdez terminal and in Prince William Sound. On the pipeline, reliable spill prevention and response measures still do not exist. The problem is particularly acute at river crossings. TAPS crosses 800 streams and sections of pipeline over rivers have reached design capacity for sag—there is nothing left to give. This seems like an accident waiting to happen. 96-1

My comments are based on my experience living in a community that oil company and government representatives visited in the early 1970s and stated there wouldn't be an oil spill in Prince William Sound. The oil companies made many promises such as tankers would have double hulls and we would have a state-of-the-art traffic control system in the Sound. Had these promises been kept, we might not have had the *Exxon Valdez* oil spill. 96-2

Some, but not all, of the oil companies' promises were stated as a set of conditions and stipulations in the original agreements and right-of-way grants. The Interior Department and its designees were assigned the job of ensuring those promises to the American people were kept. Even a brief review of history shows that many of these promises were broken and that the companies were allowed to operate for literally years in noncompliance with their federal grant and state lease. 96-3

For example, the ballast water treatment (BWT) facility at the tanker terminal has not been reviewed at least once every 5 years to ensure state-of-the-art equipment and technology as promised the federal grant and state lease. Some improvements at the 96-4

BWT facility occurred only recently and through citizen involvement and oversight. The vapor recovery system at the tanker terminal didn't work for decades—since startup until 1998 when vapor controls were built into two of the four berthing docks. When it didn't work it dumped literally tons of benzene into the air and jeopardized public and worker health and safety in violation of the federal grant, state lease, and operating permits. In 1993, concerned industry employees testified in Congress that the quality control program was nonexistent—since startup—and, as a result, the entire TAPS had been so poorly maintained that it posed an imminent threat to the public, workers, and the environment. Subsequent audits validated the whistleblowers' concerns. Operating without an independent quality control program is in direct violation of the federal grant and state lease. 96-4 (cont.)

More recent examples occurred after the *Exxon Valdez* oil spill. Still now over 13 years later, most of the species studied by the Trustee Council have not recovered from the spill. Yet the federal grant and state lease promise that damages to public lands will be promptly repaired or replaced and that damages to public fish and wildlife resources, and their habitat, will be rehabilitated. This has not happened. 96-5

The oil companies also promised in stipulations attached to the federal grant and state lease to "take all measures necessary to protect the health and safety of all persons affected by their activities..." (Stipulation 1.20.1). I believe this promise includes taking care of residents and cleanup workers after a spill. Yet, after the *Exxon Valdez* spill, Tatitlek villagers observed that Exxon was willing to spend $800,000 on each sea otter for rehabilitation, but nothing or very little on mental health care for people traumatized by the spill. Further, thousands of cleanup workers got sick during 1989, despite Exxon's worker safety program. I am just learning that hundreds of people may still be sick from overexposure to oil vapors, fumes, and aerosols during the cleanup. All the oil companies promised to "immediately abate any health or safety hazards" (Stipulation 1.20.1): it seems <u>all the companies,</u> not just the spiller, are responsible to ensure that people don't get sick during the cleanup—and to take care of the ones who do as per the original promise. 96-6

I think that the oil companies are now currently in noncompliance with the federal grant and state lease. For example, the fire-fighting ability at the tanker terminal is virtually nonexistent. Oily sludge (hazardous waste) has collected several feet deep in tanks at the BWT facility—and the sludge incinerator was <u>never built</u> as per the original facility design. There is still no independent quality assurance program. The contingency plans for river spills are grossly inadequate—drills show the plans won't work to contain and cleanup oil spilled into rivers. I'm sure this list is incomplete and pipeline regulators could add to it if they were to seriously look for problems and not just respond to ones brought to their attention by citizens or concerned employees. 96-7

In light of these past and still ongoing problems, I strongly disagree with statements made by both the state and federal regulators in the draft EIS documents. The Alaska Department of Natural Resources found the oil companies to be in compliance with the state lease. This determination is obviously a requirement for reauthorization as it has nothing to do with reality. 96-8

Federal and state regulatory agencies also stated that the aging 800-mile pipeline and its support systems that were originally built to last 30 years *"can be sustained for an unlimited duration"* with minimal costs and change in the operating and maintenance procedures. This statement demonstrates a lack of credibility—and no grasp of reality. The recent spate of accidents including the failed response to the Livengood bullet hole spill, and the 21-inch shift in a section of pipeline that went undetected for several months show that both industry and the regulators are ill-prepared for serious problems along the overland section of TAPS. The 3 spills at pump stations on pipeline startup after routine maintenance last fall clearly demonstrate this pipeline is aging and not aging well as frequent spills on startup are one sign of increasing problems that should be anticipated—not ignored—in an aging pipeline. 96-9

I was further shocked and offended by the following statement in the draft EIS. "While the *Exxon Valdez* oil spill was a significant event in the operation of TAPS, creating significant benefits to the state and local economy that more than offset the economic damage to the fishing and tourism industries in Prince William Sound, it is unlikely that a spill of such magnitude, even if it occurred again would create the same level of economic activity" (DEIS, page 4-7-116). 96-10

This offensive statement clearly shows that the government regulators have a completely different perspective of their job of pipeline oversight than we were all led to believe by the federal grant and state lease. The original right-of-way documents do not mention that economics of spill cleanup would be weighed against economic damages to the few communities at risk—I don't think the right-of-way would have been granted with such a discriminatory approach. Instead the oil companies promised to protect, repair, replace, rehabilitate, etc. fish and wildlife resources, and their habitat (Sections 13, 14, 15, 19, 20, and 21)—and the regulators are supposed to hold the companies to this promise. Specifically, the companies also promised to protect subsistence resources, lands, and users, which have a zero dollar economy and can't be compared to economics of spill cleanups at all. 96-11

Oil spills are expensive to clean up—I'm sorry that I can't see this as good for the economy, but that's really irrelevant. Even if there was zero economy as measured by exchange of dollars, the oil companies are authorized to operate only if they take steps to minimize risk of oil spills and damage from spills. It's the government regulators' job to see the oil companies are held to this standard—the statement in the draft EIS seems to indicate that the regulators are not doing their job and are out of compliance themselves with the federal grant and state lease. 96-12

Finally, I must state that I feel this 45-day public comment period for a project of such national and state significance is counterproductive at best and a sham at worst. I did not have time to thoughtfully review the 1,700 page draft EIS because I have been busy trying to earn a living and put up winter food during Alaska's short summer. It appears from statements in the draft EIS that the government regulators did not have time to thoughtfully review nearly 30-years of TAPS history and compare performance with promises, conditions, and stipulations in the federal grant and state lease. Why the rush on a project of such significance? Over a year ago, the Joint Pipeline Office stated that the comment period would run from July to September, but in keeping with 25 96-13

years of broken promises by TAPS operators and government regulators, the regulators have broken that promise too. 96-13 (cont.)

State and federal regulators have further shown their disregard for public comments by trying to dismiss the Alaska Forum's key recommendations without any consideration on their part, which seems to be in violation of the spirit of the NEPA process. Despite all the obstacles for public testimony, I offer the following recommendations for improving TAPS operations for the next 30 years—and I believe all my comments are well within the scope of this National Environmental Policy Act hearing process. 96-14

I support reauthorization for another 30 years **only** if these recommendations are fully addressed through the NEPA process and included in the next federal grant and state lease.

Recommendation #1: Stiff meaningful penalties for failure to comply.

Background of Concern. It is often said that TAPS is the most regulated pipeline system in the world, but while the regulators and industry speak to the quantity of oversight, I am more concerned with the quality of oversight. There are three parts to meaningful oversight: setting standards and stipulations; monitoring compliance; and enforcing compliance. We have out-of-date standards, questionable monitoring, and virtually nonexistent enforcement. I don't care if TAPS is the most regulated pipeline system in the world. I care whether the regulation works: it doesn't—and it hasn't for 25 years.

The regulatory system is broken largely because of questionable monitoring, no meaningful enforcement, and hobbled regulators. By questionable monitoring, I mean that I question the validity of industrial self-monitoring. And I also question whether the regulators are monitoring enough, whether they are monitoring the right things, whether they are doing so in a timely manner, and whether they enforce compliance with original promises and stipulations.

The problem with enforcement is lack of meaningful penalties for failure to comply with the leases and stipulations. Monetary fines are dwarfed by enormous profits, and the regulators are certainly not going to shut down the oil flow as a penalty for noncompliance—the nation has become too dependent upon this energy source. 96-15

And finally, regulators are hobbled because they discouraged from doing their jobs. For example, the State of Alaska has a long history of firing or reclassifying employees who take their regulatory and oversight role seriously. ADEC employee Dan Lawn's decade-long battle with the state to regain his oversight position of TAPS terminal operations received international attention. This year, ADEC employee Susan Harvey made statewide news when the state fired her, basically, for reviewing North Slope operating permits too closely.

Federal regulators frequently fail to follow through with enforcement. The criminal investigation by the US Justice Department (DOJ) into the 1993 file-stuffing incident by Alyeska during the Owen Thero audit was quietly dropped after months of work. In 1996, another criminal investigation occurred when it was disclosed that BP had reinjected hazardous waste down one of its wellheads. The DOJ levied $25 million in fines and civil penalties against BP and its contractors and put BP on probation. The penalties were trivial in terms of North Slope profits. More importantly: now BP is in apparent violation of its probation because of safety issues, yet the federal government has not yet enforced the probation terms.

All the laws, regulations, stipulations, and oversight in the world are forever inadequate without meaningful penalties and enforcement. These examples send a clear message to the oil company permittees that the laws and regulations don't matter and are secondary to economic considerations. This was not what the American public was originally promised or led to believe would happen.

Recommended Solution. Some possibilities for meaningful penalties for noncompliance by the oil companies are as follows.

√ Oil companies in noncompliance could be required to report the circumstances of their noncompliance to their shareholders in quarterly newsletters as the events unfold (not after the fact). This is similar to the requirement for reporting violations under the federal Racketeering and Conspiracy Act—and it would help the public understand that a contract has been broken and public trust breached.

√ CEOs and other responsible officers of oil companies in noncompliance could be required to conduct public service in the TAPS corridor communities most at risk from the consequences of the noncompliance. This is similar to the public service required of Joe Hazelwood as part of his penalty for grounding the *Exxon Valdez* and spilling oil, but this requirement should not be predicated on a trial. Every instance of monetary fines for noncompliance should also include a public service component. 96-16

√ Penalties should be accrued with interest on a daily basis as long as the infraction occurs.

√ Penalties should be set higher and tied in with the cost of the fixing the problem: penalties should be 10 times the money saved by failure to do the maintenance work in a timely manner. This will force owners to change perspective and view maintenance as a *cost savings* compared to prospective penalties.

Such requirements might help improve oil companies' compliance with the TAPS operating permits, but another approach is needed to deal with government noncompliance or breach of the public trust.

Recommendation #2: Establish a TAPS Citizens' Oversight Group.

Background of Concern. Following the *Exxon Valdez* tragedy in 1989, the State of Alaska created the Alaska Oil Spill Commission to investigate the root causes of the spill and recommend changes to the oversight system. One of the Commission's central findings was that institutional complacency, both in industry and government, was a root cause of the spill. The Commission found that citizens were essential to an effective oversight system because they bring urgency to protecting the resources they care about and depend upon for their livelihoods. Distant bureaucrats, despite their best efforts, do not share this local perspective. To prevent future complacency, and thereby prevent future disasters, the Commission recommended creation of citizens' advisory councils for the marine and overland segments of Alaska's oil transportation system.

The federal Oil Pollution Act of 1990 created Regional Citizen Advisory Councils (RCAC) to oversee marine transportation in Prince William Sound and Cook Inlet. However, citizen oversight of the 800-mile pipeline was ignored. A decade of experience with the RCACs , combined with other citizen efforts, has proven the wisdom of the Commission's finding. Citizen involvement does indeed strengthen oil spill prevention and environmental protection efforts. Some of the accomplishments driven by citizen oversight at Valdez include: state-of-art tractor tugs as escort vessels in Prince William Sound; installation of vapor recovery system at the loading docks and terminal; reduction of hydrocarbons in terminal discharge; and elimination of hazardous wastes discharge through ballast water treatment facility. It is time to apply the lessons learned to the overland pipeline. 96-17

Recommended Solution. The Grant and Lease should establish a TAPS COG that would operate completely independently of government regulators and industry: incorporating government and industry into "citizen oversight" creates an oxymoron. Establishment of a TAPS COG should be required as a condition of TAPS and permits. The TAPS COG should make recommendations directly to the Department of Interior (DOI) and to the Department of Natural Resources (ADNR) or their designees. The COG should be funded through the DOI by the permittees as part of the cost of TAPS operations, and all members of the TAPS COG and their staff should be paid for their services. The COG contract should be negotiable on the same timeframe as the right-of-way permit; i.e., 30 years, with audits required as frequently as they are required for the overall TAPS (annually, 5 years, etc.).

Recommendation #3: Charge penalties if more than 10% of employees are afraid to speak out.

Background of Concern. These first two solutions—meaningful penalties and citizen oversight—are insufficient to address the increased risk of environmental damage and to public and worker health and safety from accidents due to industry and bureaucratic noncompliance and/or complacency.

The original Grant and Lease promise the American public that the TAPS will have a comprehensive quality assurance program "to assure that the environmental and technical Stipulations in this Agreement will be fully complied with throughout all phases of construction, operation, maintenance, and termination" (Section 9, p. 5).

We've never had that—and I don't believe we do now. During TAPS construction we had falsification of x-ray welds and harassment of industry whistleblowers that made national news at the time and were the subject of congressional oversight hearings. In the mid1980s, whistleblowers reported that the vapor incinerators at the Valdez terminal weren't working correctly (and never had been). Regulators confirmed that the air pollution (benzene) from the terminal had increased the cancer risk to local residents and workers. After the 1989 oil spill, whistleblowers again stepped forward to report massive corrosion, massive electrical deficiencies, and complete breakdown of the Quality Control and Assurance Programs along with other system-wide problems. Their concerns became the subject of more congressional oversight hearings, several audits, and multiple lawsuits from employees who suffered extreme harassment, intimidation, retaliation, discrimination, and wrongful termination. 96-18

Industry employees are the public's front line of defense in reducing oil spills. The workers know what is wrong and how to fix it. They need to be allowed to do their jobs free of harassment and intimidation. All personnel—and particularly the quality control inspectors—need to be independent of pressure from Alyeska and its owners to be the reliable comprehensive program promised to the public. Such a program is critical to TAPS integrity as the pipeline ages, because increased maintenance costs will compete with oil company profits: workers need to be able to report maintenance problems without fear of reprisal.

Recommended Solution. The nuclear regulatory industry closes facilities if more than 10% of plant employees are afraid to speak out because of reprisals, harassment and intimidation. A similar standard should be adopted for TAPS operations, with annual independent surveys of workers to determine work conditions. Instead of closing facilities, stiff penalties should be applied, and public service by company officials and reporting of noncompliance to shareholders required (see Rec. #1, above).

Recommendation #4: Require independent, long-term epidemiology studies, and short- and long-term treatment of physical and mental health effects, for workers and affected residents after major TAPS spills.

Background of Concern. Stipulations attached to the original documents promise the American people "permittees shall take all measures necessary to protect the health and safety of all persons affected by their activities performed in connection with the construction, operation, maintenance, and termination of the Pipeline System, and shall immediately abate any health or safety hazards" (Stipulation 1.20.1). Further, the original documents promise a quality assurance program to try to prevent damage to public and worker health and safety from occurring in the first place by adopting procedures to promptly detect and abate any conditions that could lead to such damages (Section 9, federal right-of-way agreement).

Oil spills were—and still are—an anticipated side effect of TAPS construction, operation, maintenance, and termination. Therefore, these promises apply to TAPS oil spills and TAPS oil spill cleanups. Oil spills are hazardous waste cleanups under the US Occupational Safety and Health Administration (OSHA) *Hazardous Waste Operations and Emergency Response* standard (29 CFR 1910.120; 54 FR 9294, 3/6/89).

96-19

Physical Health Effects. There is evidence from oil spills around the world that nearby residents get sick from exposure to oil aerosols from wind and wave action and from volatilized oil vapors. In 1989, residents of Tatitlek became nauseous and dizzy when the fumes from the *Exxon Valdez* test burn permeated their village (*Anchorage Times*, 3/28/89). Researchers found residents exposed to oil aerosols, mists, and fumes from the *Braer* spill in Shetland in 1992 suffered more incidences of headaches, throat irritation, skin irritation, itchy eyes, and mood changes, and to a lesser extent fatigue, diarrhea, nausea, wheezing, cough, and chest ache, than unexposed individuals.[1] Researchers found residents exposed to oil aerosols, mists, and fumes from the *Sea Empress* oil spill in Milford Haven harbor in southwest Wales in 1996 suffered similar symptoms to a greater extent than unexposed people.[2]

There is also evidence that *Exxon Valdez* cleanup workers got sick from exposure to oil aerosols, mists, and fumes. Court records (now sealed) revealed that cleanup workers filed over 6,700 claims with Exxon in 1989 for respiratory illnesses.[3] Exxon did not report these claims to state or federal OSHA oversight agencies and so dodged the long-term health monitoring requirements of hazardous waste cleanup regulations. Health symptoms of cleanup workers described in media coverage, 1989 congressional oversight hearings, and medical records from toxic tort cases filed by sick workers

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1. Campbell, D. M. and 5 others. 1993. Initial effects of the grounding of the tanker *Braer* on health in Shetland. *BMJ* 307: 1251-1255; and Campbell, D. M. and 4 others. 1994. Later effects of the grounding of tanker *Braer* on health in Shetland. *BMJ* 309: 773-774.
2. Lyons, R. A. and and 4 others. 1999. Acute health effects of the *Sea Empress* oil spill. J. *Epidemiol. Communnity Health* 53: 306-310.
3. Stubblefield, Garry, and Melissa Stubblefield v Exxon, Veco, and Norcon, 3AN-91-6261, Superior Court for the State of Alaska, Third Judicial District of Anchorage (1994).

include respiratory and sinus problems, headaches, cough, nausea, dizziness, sore throats, burning eyes, and mood swings among others. *Exxon Valdez* cleanup workers filed nearly 1,800 claims with the Alaska Workers' Compensation Board in 1989: respiratory claims were by far the leading illness among cleanup workers.[4]

Mental Health Effects. Besides affecting the physical health of workers and residents, researchers have documented acute and prolonged mental health effects on residents of affected communities. I believe that the original promises to protect the health and safety of all persons affected by the owners' activities included mental as well as physical health.

Seminal studies by sociologist Dr. Steve Picou and others on communities impacted by the *Exxon Valdez* spill found that models developed from natural disasters for community response and relief of emotional trauma did not work for man-made disasters. In natural disasters, community impacts were known to be short-term and response was therapeutic–social bonds actually improved when people worked together to rebuild their community. But in technological disasters such as Bhopal, Chernobyl, Three Mile Island, Love Canal—and the *Exxon Valdez* spill, sociologists observed pervasive and debilitating stress, and chronic social and psychosocial impacts. These impacts were prolonged by divisive litigation—still unsettled in the *Exxon Valdez* spill—that further destroyed social bonds and hindered the healing process.[5]

96-19 (Cont.)

In communities struggling with disaster-induced psychological trauma, there is little opportunity to work collectively to rebuild and recover. Speeding recovery by mitigating social damage is addressed through Federal Emergency Management Act, but this law only applies to natural disasters. Picou and his co-workers developed a method of reducing emotional trauma from the *Exxon Valdez* spill: this "peer listening circle" is now being used to relieve mitigate emotional harm in oil spill impacted communities and other communities experiencing trauma from technological disasters.[6]

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4. Alaska Department of Labor. 1990. Prince William Sound oil spill. Chapter 3 in Occupational Injury and Illness Information–Alaska 1989. Pp. 25-34.

5. Freudenberg, William. 1997. "Contamination, Corrosion and the Social Order: An Overview." *Current Sociology* 45(3):19-39, 1997.

Gill, Duane and Steven Picou. 1998. "Technological disaster and Chronic Community Stress," Society & Natural Resources 11:795-815.

Picou, Steven. 2001. Toxins in the Environment, Damage to Community: Sociology and the Toxic Tort. In Steve Kroll-Smith and Pamela Jenkins (eds.), *Witnessing for Sociology: Reflexive Essays of Sociologists in Court* (New York: Greenwood Press).

Picou, Steven and four others. 1998. "Technology, Disaster and Litigation: Evaluating a Model of Chronic Community Impacts," Presented at the American Sociological Assoc., San Francisco, CA, August 1998.

Picou, J. Steven, Duane A. Gill and Maurie J. Cohen, eds. 1997. *The* Exxon Valdez *Disaster: Readings on a Modern Social Problem* (Dubuque, IA: Kendall-Hunt).

6 Picou, Steven. 2000. The "Talking Circle" as Sociological Practice: Cultural Transformation of Chronic Disaster Impacts." *Sociological Practice: A Journal of Clinical and Applied Research*, 2(2): 77-97.

The *Exxon Valdez* oil spill, the 2001 Livengood spill, the spate of spills in fall 2001 at pump stations during restart after maintenance are just examples of the inevitable consequences of TAPS operations. All the TAPS owners are liable for public and worker health and safety from spills along the TAPS corridor, while single owners are assumed to be responsible parties for tanker spills. However, I maintain that worker and public health and safety for all TAPS spills—whether along the overland or marine portion—are addressed through the original TAPS right-of-ways. I further maintain that additional stipulations are necessary in light of law changes (oil spills declared hazardous waste cleanups), and evidence that people and workers exposed to oil aerosols, mists, and fumes, and oil spill emotional trauma, get physically—and mentally—sick.

Recommended Solution. TAPS owners should be required to pay for increased mental health care in the years during and immediately after a spill in all affected communities. This care should include focused peer listening circles to mitigate community-level emotional trauma. Since oil spill cleanups are considered a hazardous waste cleanup, long-term health care studies should be required as the health symptoms associated with crude oil exposure (long-term respiratory damage; disorders of the central nervous system, liver, kidney, blood, and skin; endocrine disruption; and immune suppression) could take years to manifest as physical health problems. Oil companies should also be required to provide chemical decontamination treatments for individuals with acute health symptoms from high body levels of crude oil and other substances present during the cleanup. Individuals who become disabled from overexposure to chemicals present during the cleanup should be compensated by the oil companies, as should the estate of individuals who die from overexposure to chemicals present during the cleanup. 96-19 (Cont.)

Any spill-related epidemiology studies and treatment for mental and/or physical health impacts should be contracted through the citizen oversight groups or independent professional facilities and should be paid for by the TAPS owners (or in the case of a tanker spill, by the responsible party) through the DOI. The TAPS owners or oil shippers should not be allowed to participate in any studies or treatments in any way (i.e., study or treatment design or conduct, review of draft results, sharing of confidential health data, etc.).

Recommendation #5: Require independent verification of spill volume as a condition of lease renewal.

Background of Concern. Spill penalties for damages to natural resources such as fish, wildlife, public lands held in the public trust are based on the volume of oil spilled—as reported by the spiller. This is ludicrous. Obviously the incentive to underreport spills and thereby reduce spill penalties is very high. One way to reduce the risk of spills and resulting damage to the environment and worker and public health and safety—one of the promises of the original agreement and right-of-way leases—is to penalize TAPS owners, or responsible parties in the case of a TAPS tanker spill, for the correct amount of oil spilled.

For example, Exxon underreported how much oil it spilled. In an unpublished investigation on file at the Alaska Resources Library and Information Services, the State of Alaska found Exxon spilled about 35 million gallons.[7]

Records show the three Exxon tankers used to lighter the *Exxon Valdez* went to Exxon refineries to recover what Exxon insisted was pure "oil," but there was so much water in some of this "oil" that the refineries refused to offload all of it. The refineries recovered what oil they could and returned the wastewater to each tanker. The oily water was ballast for the return trip to the Valdez terminal, where the amount of water - —and approximate oil content—was duly recorded on ballast water survey forms. 96-20

These forms show that the *Baton Rouge* carried about 10.14 million gallons of water from the Exxon Valdez; the *San Francisco* about 9.17 million gallons; and the *Baytown* about 5.01 million gallons. This is 24.32 million gallons of water, which Exxon claimed was oil: 24.32 plus 11 million gallons shows Exxon actually spilled closer to 35 million gallons (28 to 42 million gallons with a 20% error margin).

That's more than three times as much oil as Exxon reported. Exxon's figure for oiled coastline, 1,300 miles, is low too. NOAA reported that 3,240 miles were oiled—2 1/2 times as much oiled coastline as reported by Exxon.[8] Exxon paid the American public one billion dollars for damage to public resources from a supposedly 11 million-gallon spill: by underreporting its spill by one-third, the company only paid for one-third of the damages and essentially saved itself two billion dollars.

Recommended Solution. Independent verification should be required as a new condition of lease renewal. Further, stipulation should specify that government regulators and citizen oversight councils, either separately or jointly, conduct the assessment and agree upon the volume spilled before spill penalties are assessed.

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7. State of Alaska. Unpublished "ACE" investigation, 1989-1991. On file at Alaska Resources Library and Information Services, Anchorage, AK.
8. Mearns, A. 1996. *Exxon Valdez* Shoreline Treatment and Operations: Implications for Response, Assessment, Monitoring, and Research. *American Fisheries Society Symposium* 18 (1996): 309-328.

Recommendation #6: Thoroughly review and update the original Grant, Lease, and stipulations in light of past experience, current science, new technology, new laws, and public comments.

Background of Concern. The federal grant and state lease, and the attached stipulations, are seriously out-dated as evidenced by over 30 years of experience with TAPS construction, operation, maintenance, and spills, discussed above. The sections and stipulations designed to protect the environment, fish, wildlife, subsistence resources and habitat, and worker and public health and safety are all inadequate. The Grant and Lease and stipulations need to be strengthened to provide assurances to the American public that the oil companies and government will live up to their original promises.

Further, these original documents are three decades old and no longer reflect current science, technological advances, and law changes. For example, global warming and melting permafrost threaten to make at least one-third of the 77,000 vertical support members of the TAPS unstable with potentially catastrophic effects on the pipeline. Studies from the *Exxon Valdez* spill show that oil is 1,000 times more toxic previously thought, and that it can cause long-term environmental damage. Federal laws are still based on outdated research from the 1970s and 1980s and are grossly under-protective of fish and wildlife. This makes the original promises to protect fish, wildlife, and habitat even more important as basically this agreements mean the owners and TAPS regulators will take measures *beyond existing laws* in order to protect fish and wildlife, habitat, and other subsistence needs. 96-21

Further, the original grant and lease agreements were signed by some companies that no longer exist because of mergers and buyouts. I assume, but would like proof, that the new companies are signatories to the current right-of-way Grant and Lease.

Recommended Solution. As stated above: the original stipulations and right-of-way Grant and Lease need to be thoroughly reviewed.

Recommendation #7: Grant and lease renewals should be made conditional on satisfactory completion—within 12 months of the renewal—of an independent field-based evaluation of the entire TAPS including hardware and management.

Background of Concern. In 1993 a series of independent and industry audits found TAPS was in an imminent state of collapse with several major system wide problems including hardware problems, technical issues, and management issues. 1994 was proclaimed to be the "year of fixes" by the Alyeska president at the time, but fixes proved elusive. For example, the highly touted fiber optics cable, which was supposed to replace the old communication system, didn't work as planned and was quietly shelved. 96-22

No one knows how many problems were actually fixed of those disclosed in 1993, or what new problems remain unfixed because there has not been any independent audits of the TAPS since 1993. This is not acceptable for a system that provides a significant portion of the nation's energy demands and the bulk of the state's operating revenues, and can wreak environmental, social, and economic havoc on Alaska's communities, residents, and federally recognized tribes.

Recommended Solution. As stated above: 30-year renewal should be **conditional** upon satisfactory completion of an independent field-based audit of the entire TAPS.

Recommendation #8: Grant and lease renewals should be made conditional on satisfactory completion of annual independent audits of TAPS operations and management and 5-year in-depth independent field-based evaluations of the entire TAPS, including hardware and management.

Background of Concern. In the lease renewal documents, federal and state regulatory agencies stated that the aging 800-mile pipeline and its support systems that were originally built to last 30 years *"can be sustained for an unlimited duration"* with minimal costs and change in the operating and maintenance procedures. This is not a credible statement given the numerous recent problems with the pipeline—and the anticipated escalation of problems as TAPS approaches its 30-year design life. 96-23

I am concerned that the recommended alternative—to renew the permits for another 30 years—is way to long for this particular pipeline: it is essentially double its design life.

Recommended Solution. Compromise: renew the permit for another 30-years, but make the renewal **conditional** upon satisfactory completion of independent audits every year with in-depth audits every 5 years as stated above. The Prince William Sound Regional Citizens' Advisory Council has to pass an annual audit and review of operations to be recertified. Nothing less should be expected for the entire TAPS, which has much more at stake than the advisory council!

Recommendation #9: Immediately escrow TAPS DR&R funds and use interest to finance the TAPS COG and other measures to improve protections for environment, fish and wildlife, and worker and public health and safety.

Background of Concern. Funds intended for future dismantling, restoration, and removal of the TAPS have been collected from TAPS oil companies and passed through to parent companies, resulting in enormous profits—and no pot of money for future DR&R. This is a breach of public trust—and yet another example of corporate irresponsibility and accounting fraud. Government regulators need to take immediate action to remedy this problem. 96-24

Recommended Solution. As stated above: **this should be done before any grant and lease renewals** as a sign of good faith efforts and intention by oil companies and government regulators to the American public. The public was promised this once: we don't need to be promised it twice. The funds simply need to be escrowed as required under the original grant and lease agreements before they expire. Further, earnings from the funds can be pledged towards payment for fulfilling other stipulations under the original agreements—such as protecting the environment, public resources, and worker and public health and safety.

Recommendation #10: Transfer of TAPS operations to single source with no North Slope production.

Background of Concern. The oil company owners consistently cut costs on TAPS operations and maintenance to increase their profits. This dynamic has created an internal conflict of interest, essentially, between the owners and the public interest.

While the oil company permittees promised in the right-of-way leases to take all 'reasonable' or 'appropriate and adequate' steps to protect the environment, fish and wildlife, and public and worker health and safety, these adjectives are relative when viewed from different perspectives. What seems reasonable to the oil companies, who measure the cost of prevention against their profits, may not seem reasonable to the public, especially those who measure the cost of spills against their livelihoods and health.

Under the present management scenario, the public has no opportunity to weigh in with social, environmental, economic, and health costs except once every 30 years during the permit renewal. Obviously this disadvantages the public and leaves our fate in the hands of the oil companies whose performance over the past 30 years shows that the public traded very real permits for paper promises. The oil companies have not been accountable to the American public and have profited handsomely at the public's expense. 96-25

Recommended Solution. As stated above: by transferring the operation, maintenance, and termination of TAPS to a single source with no North Slope production, the internal conflict of interest is broken. This operator would take more 'reasonable' steps, from the public perspective, to reduce its liability from spills by attention to TAPS operations and maintenance. Performance bonds could be required for additional protection of the public interest.

Summary of Concerns

Over 13 years ago, I gave a talk the evening before the *Exxon Valdez* disaster, in which I summarized concerns of the Cordova fishing community by stating that it was not a question of if, but when, the 'Big One' would occur in Prince William Sound. It didn't feel good to be right then, and it still doesn't now. I've witnessed dozens of fishing families forced to leave Cordova because they could no longer make a living after the spill.

Once again I am echoing the concerns of people in Cordova who are concerned about imminent danger from a pipeline spill along the TAPS corridor. More paper promises like the Reliability Centered Maintenance (RCM) program will not avert disaster without independent management and a stable source of funding. The biggest challenge for the next 30 years is to keep oil in that aging pipeline. I wish I could age as well as the oil companies allege that pipeline is aging! 96-26

We are going to have to get very creative to prevent a pipeline spill. We can't keep doing the same thing we have done in terms of TAPS operations and maintenance for the past 25 years. To continue past practices is to steer our TAPS ship straight towards Bligh Reef. We've got to change course. 96-27

We have simply run out of time for bickering over whether public comments do or do not fall within the scope of the NEPA hearing process. The Alaska Forum is one of your strongest critics—or your staunchest ally, depending on how you chose to take our comments. We have always pointed out genuine problems and realistic solutions. We've even figured out ways to pay for the increased protection from spills without additional costs to the oil industry: the money can come by plugging the leak of profits from TAPS DR&R funds that the oil companies were not entitled to in the first place. 96-28

Listen to us. Believe us. Work with us. We should all be on the same team. We should all be working together to prevent the 'Big One' from happening on the Trans-Alaska Pipeline System. Don't make me right again.

I ask that you give serious consideration to my comments. And I restate my position: <u>I can only support TAPS reauthorization for another 30 years if these recommendations are fully addressed through the NEPA process and included in the next federal grant and state lease.</u>

Sincerely,

Riki Ott

Riki Ott, Ph.D.

POB 1430, Cordova, AK 99574

Responses for Document 00096

00096-001: The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. In the event of a spill, however, JPO has a number of highly-trained individuals who are fully prepared to respond quickly and effectively.

During 1990 and 1992 the JPO agencies worked with APSC to improve the pipeline contingency plan. Personnel response equipment and response training and exercise programs were added to the plan. Access to the pipeline was improved and the Incident Command System was adopted. All this was done without citizen oversight and pressure.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" (APSC 2001g) for the pipeline and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" (APSC 2001h) for the VMT. The Plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline or at VMT. They are available to the public through various libraries in several major cities in Alaska when the plan is undergoing public review. Oil spill prevention and response capabilities and related activities specific to the Copper River Drainage area are discussed more fully in the text box in Section 4.4.4.3, "Oil Spill Planning for the Copper River Drainage."

00096-002: Unfortunately, there is always a remote probability of an extreme event such as a very large oil tanker spill. However, based on lessons learned as a result of the EVOS, new legislation, and new regulations, numerous improvements have been made that will reduce the likelihood of a major marine transportation accident and/or the expected outflow given such an accident. These measures fall into two main classes: (1) Improvements in spill prevention and response capability for Prince William Sound (PWS) made by APSC, including the creation of the Ship Escort Response Vessel System (SERVS) and (2) Phase-in of double-hull tankers.

The recent National Research Council study (NRC 1998) offers estimates of measures of effectiveness of double-hull tankers compared to existing single-hull tankers. This study estimates that the probability of a spill would be reduced by an "improvement factor" ranging from 4 to 6, and the expected spill outflow reduced by an improvement factor of between 3 and 4. Together, improvements in prevention and phase-in of double-hull tankers should reduce spill probabilities and spill outflows at PWS appreciably.

00096-003: The State of Alaska and the BLM have evaluated the compliance issues and have determined that the applicant currently is in compliance with the terms of the Federal Grant and State Lease. The BLM recognizes that there have been past compliance problems, but these have been corrected.

00096-004: The JPO produced TAPS engineering report No. 00-E-018, Valdez Marine Terminal Ballast Water Treatment Plant: Compliance with Agreement and Grant Section 23 (May 24, 2000). The report satisfies the 5-year review process.

00096-005: The federal action addressed in this EIS is renewal of the right-of-way for the TAPS. While renewal would result in continued operation of oil tankers in Prince William Sound, that activity is beyond the limits of the right-of-way corridor and is not under the jurisdiction of the BLM. Moreover, the BLM has no authority over oil spill cleanup and damage assessment within Prince William Sound. Regulation of activities associated with the transport of oil by tankers in Prince William Sound is under the jurisdiction of the U.S. Coast Guard and the U.S. Department of Transportation. Analysis of impacts to fish and wildlife in Prince William Sound is included in the EIS to provide a perspective within which the direct and indirect impacts of the proposed action and alternatives are addressed.

The BLM and member agencies of JPO enforce a number of stipulations that are protective of fish and wildlife resources within the right-of-way corridor. The EIS analysis did not find any significant impact to fish or wildlife resources associated with TAPS operations and maintenance within the right-of-way corridor.

00096-006: Section 4.4.4.7 provides a detailed analysis of the potential effects of oil spills on human health.

The BLM and member agencies of the JPO are committed to the protection of human health and the environment. The Federal Grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of TAPS) within the Federal Grant contain numerous provisions that are protective of human health and the environment.

00096-007: Any information regarding potential hazards associated with TAPS should be provided to the JPO.

The Valdez Marine Terminal (VMT) has a number of fire protection systems, and fire protection capability was considered in preparing the EIS. See the text box in Section 4.3.13.1 for a complete description of VMT fire control features.

Buildup of waxy solids in tanks at the Ballast Water Treatment Facility has received considerable attention by the JPO and APSC, as well as by citizen groups such as PWS RCAC. There is concurrence on an appropriate course of corrective action. See the text box in Section 4.3.13.1.3.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" (APSC 2001g) for the pipeline and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" (APSC 2001h) for the VMT. The plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from anywhere along the pipeline, including the river crossings or at the VMT. The plans are available to the public through various libraries in several major cities in Alaska. These documents are updated and reviewed by various state and federal agencies periodically ranging from every year to every 5 years. The substantive elements of the contingency plans are controlled by ADEC rules (18 AAC75), which include provisions for public review and comment as part of the plan update procedures. The lessons learned from occurrences, such as Exxon Valdez oil spill and the MP 400 bullet hole incident, are incorporated into the documents when they are updated.

APSC substantially revised its quality control procedures after the 1993 testimony. APSC's quality control program undergoes review by the JPO under its comprehensive monitoring Program. See Section 4.1.3.1 of the FEIS.

00096-008: Thank you for your comment.

00096-009: It is correct that the effects of aging have the potential to impact the integrity and reliability of any mechanical system. However, age alone does not dictate reliability or performance. Myriad factors can impact system performance. For example, the manner in which mechanical systems are operated and maintained can greatly influence their long-term integrity, reliability, and performance.

Utilizing its oversight authority, the JPO ensures that APSC's operating and maintenance procedures take all potential impacting factors into account and are sufficient and appropriate to maintain TAPS integrity. The JPO also has the authority to direct APSC to undertake changes, repairs, or upgrades when that is not the case. Under the reliability centered maintenance (RCM) program, all TAPS subsystems are being carefully evaluated for the consequences of their failure and will have maintenance regimens or remanufacture, overhaul, or replacement schedules established that preclude such failures from occurring, if they would have an adverse impact on public safety or the environment.

The text box in Section 4.1.1.8 provides a synopsis of the MP 400 bullet hole incident. Details of the spill and the response are provided. Changes to the pipeline's spill contingency plan that are being made as a result of lessons learned are also discussed.

Each of the three spills that occurred on start-up after a maintenance-related shutdown have been carefully evaluated, and causal factors have been identified. The JPO has required APSC to revise its shut-down and start-up procedures to prevent reoccurrence. APSC is also required to conduct drills on its procedures to ensure they are correct and complete. Also, APSC has made modifications to piping at pump stations to enhance cold restart capabilities. Summaries of the three incidents are included in CMP Report #11, issued in April 2002. See also Section 4.1.1.4.

00096-010: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

00096-011: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

00096-012: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

00096-013: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00096-014: The BLM employed six methods to receive comments from the public: (1) via a public web site, (2) toll-free fax, (3) toll-free voice mail, (4) six public hearings, (5) standard mail, and (6) hand delivery to JPO offices. To imply that it was difficult to submit comments is incorrect.

00096-015: The JPO consists of 13 federal and state agencies who closely cooperate in TAPS oversight activities. The BLM, as lead federal agency, has been audited by the Government Accounting Office and the Department of the Interior Inspector General and has been found to be doing creditable oversight of TAPS.

The BLM has the necessary authority under the Federal Grant and TAPAA to rigorously enforce compliance with all current and future stipulations.

The BLM and member agencies of the JPO work diligently to ensure the safe operation of TAPS. The BLM is not aware of any action taken against BLM employees for conducting rigorous oversight of TAPS operations and maintenance.

The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00096-016: The BLM has no authority to require specific corporate reporting to shareholders. The Security and Exchange Commission has authority to compel the reporting of certain corporate activities to the public and shareholders.

The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00096-017: The reader is referred to Section 2.5 of the FEIS, "Alternatives and Issues Considered but Eliminated from Detailed Analysis."

00096-018: The BLM and the agencies within JPO acknowledge both that there have been legitimate issues related to APSC's Employee Concerns Program (ECP) and that APSC has undertaken considerable efforts to improve and refine its ECP program.

The BLM and JPO expect to continue to evaluate the effectiveness of APSC's ECP through confidential surveys that will seek input from all TAPS employees (see Section 4.8.4 of the FEIS). Like the three prior surveys, these efforts can provide broad measures of the confidence that TAPS workers have in APSC's ECP and can suggest areas needing improvement.

The JPO also notes that a confidential hotline (1-800-764-5070) currently exists for employees or members of the public to report issues and concerns about TAPS. Recorded messages are checked daily by the BLM-Alaska Special Agent's office. The purpose of the hotline is to identify issues relating to pipeline integrity, public safety, environmental protections and regulatory compliance for incorporation into the JPO work program. The BLM also refers employees seeking personal relief (e.g., restoration of employment or lost compensation) to the U.S. Department of Labor or other appropriate authorities for further investigation.

00096-019: Section 4.4.4.7, "Human Health and Safety," provides a detailed analysis of the potential effects of oil spills on human health.

The BLM and member agencies of the JPO are committed to the protection of human health and the environment. The Federal Grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in assuring the protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of the TAPS) within the Federal Grant contain numerous provisions that are protective of human health and the environment.

00096-020: The BLM and the member agencies of JPO investigate all significant spills to verify the spill volume. There has been no evidence to date that past spill volumes have been reported inaccurately. If natural resource damage claims occur because of a spill, the U.S. Fish and Wildlife Agency or National Marine Fisheries Service conduct studies to evaluate damage to natural resources.

00096-021: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

Additional information on VSM monitoring and mitigation can be found under section 4.1.3.2.1 of the FEIS. Human health impacts from oil spills can be found in section 4.4.4.7 of the FEIS, while ecological impacts can be found in sections 4.4.4.10, 4.4.4.11, and 4.4.4.12.

The current Grant is contained in Appendix B. Section 33.B requires prompt notification to the Authorized Officer of all transfer agreements related to Ownership changes. The new owners are required to assume full responsibility for the Federal Grant.

00096-022: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00096-023: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00096-024: The reader is directed to the discussion of escrow funds found in Section 2.5.

00096-025: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

The BLM and member agencies of the JPO are committed to the protection of human health and the environment. The federal grant and authorizing legislation (TAPAA) provide unprecedented authority to BLM in the assuring protection of human health and the environment. Stipulations (the guiding conduct of operations for the operator of TAPS) within the federal grant contain numerous provisions that are protective of human health and the environment.

00096-026: The age and condition of the TAPS were considered in the analysis.

00096-027: The operational history of TAPS, maintenance activities, spill response capabilities, and the potential for spills associated with TAPS were considered in the analysis. Impacts associated with potential spills are discussed in Sections 4.4 of the FEIS.

The oil spill planning and prevention effort in the JPO is a large-scale, multi-agency endeavor. Each participating agency (Alaska Department of Environmental Conservation, Environmental Protection Agency, BLM, and the Alaska Department of Natural Resources) has a particular focus, but these are all considered collectively in the JPO TAPS oil spill response and planning group. This inter-agency group generally meets monthly with APSC and maintains a continuous monitoring program on TAPS oil spill planning and related issues. The group also coordinates with the Office of Pipeline Safety, which reviews the Pipeline Oil Spill Contingency Plan.

The emphasis of all agencies is on the prevention of spills. This is accomplished through a combination of: 1) oversight of spill contingency planning (including 64 exercises on TAPS annually) and, 2) through JPO's comprehensive TAPS operations oversight, monitor issues which could contribute to a spill in the future. The JPO is doing everything possible to prevent and respond to a potential oil spill from TAPS.

APSC's oil spill response capabilities and plans for TAPS are summarized in Section 4.1.4 of the EIS and explained in detail in the "TAPS Oil Discharge Prevention and Contingency Plan" (APSC 2001g) for the pipeline and in the "Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan" (APSC 2001h) for the VMT. The C-Plans provide for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline or at the VMT. They are available to the public through various libraries in several major cities in Alaska.

The C-Plans are updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline and at the VMT are incorporated into the Plans. See the text box in Section 4.1.1 for a discussion on how lessons learned in response to the vandalism incident near Livengood in October 2001 have resulted in modifications and improvements to the C-Plans for spills and releases along the pipeline. In addition, the C-Plans are reviewed periodically by the BLM, ADEC, DOT, and EPA. As part of this process, APSC and the federal and state agencies with oversight responsibilities for TAPS make sure that the appropriate emergency response equipment is made available along the TAPS.

00096-028: The reader is directed to the discussion of escrow funds found in Section 2.5.

00097

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02 AUG 20 PM 1:44

August 19, 2002

BLM TAPS Renewal Team
Joint Pipeline Office 411
W. 4th Avenue, Suite 2

Carl G. Wassilie

I request that Bureau of Land Management (BLM-DOI) withhold my address from the public record.

Comments on the Draft EIS

First of all, I would like to request an extension for the public comment period for at least an additional 45 days. I believe that the Joint Pipeline Office (JPO) was completely dysfunctional at my request of documents for the Draft Environmental Impact Statement (DEIS). I specifically asked the JPO, Rob McWhorter, to send the DEIS to my place of employment. Today is August 19, 2002, one day before final comments are accepted for review and I still have not received the DEIS for review. This total lack of public communication by the JPO reflects that both the State of Alaska and Department of Interior are not properly prepared for allowing the public to adequate time to review and comment on the DEIS.

It is absurd that the decision makers only allow 45 days for such an important and extensive document for public review. An extension for public review does not affect the flow of oil through TAPS. The original EIS was never completed so this DEIS is more important than the DEIS that originated during TAPS construction in the 1970s. At recent public hearings for the Trans-Alaska Pipeline System (TAPS) right-of-way (ROW) renewal I heard many oil industry individuals and spokespersons speak very highly at the owners (Alyeska Pipeline Service Company) of the Trans-Alaska Pipeline System (TAPS) and how very well the owners are doing for the environment, subsistence animals, and maintenance of TAPS. In light of these testimonies, I ask that the Department of Interior allow the entire United States (U.S.) population to review the DEIS and extend the comment period for at least an additional 45 days. 97-1

In reviewing the Draft Environmental Impact Statement (DEIS), I have noticed many flaws and inadequacies of information in various Chapters regarding environmental, social, subsistence and economic impacts. Not only have whole communities been ignored, but also many Alaska Native Tribes have been left out of the consultation process with the U.S. and State Governments regarding the numerous impacts that TAPS imposes. Small rural communities have been left out of the DEIS in the event of a catastrophic or major oil spill from TAPS. 97-2

Arctic climate changes such as warming in the Alaska region have not fully addressed the impacts on the TAPS infrastructure and TAPS ability to adapt to future climate changes, especially permafrost changes. 97-3

Technological advances in information, equipment, monitoring and maintenance have been made in numerous aspects of the oil industry for the safety of the environment and the peoples that depend on a clean environment to live. This environment includes the whole of Alaska. These technological advances need to be address and implemented on the aging pipeline for the safety and future of Alaskans, United States, and Earth. 97-4

I don't understand how the U.S. Government and State of Alaska can support the TAPS ROW renewal for an additional 30 years when the richest multi-national corporations (TAPS owners) in the world are cutting back on maintenance cost on the eroding pipeline. I request that TAPS ROW be renewed every 5 years due to the TAPS age and dramatic climate changes that are occurring at this time and lack of implementing the best available technology. 97-5

In the event of a major oil spill or disaster along TAPS over running waterway systems (stream, river, and creek), the TAPS owners do not have the adequate equipment to respond to a moving water spill. There is no compensation plan for a major spill or disaster for the communities in all of Alaska and U.S. that depend on other natural resources for social, economic and traditional way of life in which a major spill could drastically impact. Native people will have the most adverse impacts to a spill due to the strong ties to the traditional ways of life in the land, air and water. These must be addressed in an oil spill compensation plan and the absolute best measures of technology and prevention must be implemented to protect the Native people of Alaska. 97-6 97-7

The DEIS does not mention that crude oil in the parts per billion affect salmon productivity. This translates to every 1 gallon of oil disrupting salmon productivity in every 1,000,000,000 gallons of water. Salmon spawn in fresh water in areas upstream and downstream from where the pipeline crosses. The salmon is vital to the livelihood of all Native people in Alaska. The productivity of salmon in Alaska is instrumental to the fisheries industry worldwide and feeds many people through out the Earth. 97-8

In the event of a spill on the Yukon River or any of its tributaries, the fisheries of all of Alaska will be severely impacted. This includes the people of the Bering Sea communities that depend on the fish for subsistence and commercial activities. This also includes the fisheries of the people and First Nations of Yukon Territory, Canada. The impacts of oil spills on peoples' livelihoods (socio-economic, cultural, environmental, subsistence) and Native way of life in all regions of Alaska and Canada were not fully addressed in the DEIS. All of these people deserve the opportunity to provide comment and testimony (public hearings) on the DEIS throughout every region of the state. 97-9

It is absurd that the U.S. and State Governments support a 30-year renewal with no review, audit and full public scope of structural changes, maintenance and operation of TAPS from a third and forth-party oversight. The DEIS does not address the full range of communities and the full environmental, subsistence, social and economic impacts that the TAPS imposes in the Arctic and sub Arctic regions of North America and it's water bodies. In order to address these impacts to the full extent that the DEIS misses, I ask for a Citizen's Oversight Group to have regulatory powers and representation similar to the 97-10 97-11

Regional Citizen's Advisory Committees established after the Exxon Valdez Oil Spill in 1989. I also re-emphasize the need for a federal and state permit renewal every 5 years to ensure the safety of transporting oil on TAPS.

97-11 (cont.)

I would like to conclude by supporting each and every recommendation made by Richard Fineberg's latest document, "The Emperor's New Hose", prepared for the Alaska Forum for Environmental Responsibility in June of 2002. I especially support an independent review of TAPS and the need for a Citizens Oversight Group.

97-12

Sincerely,

Carl G. Wassilie

Carl G. Wassilie

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02 AUG 20 AM 1:44

Responses for Document 00097

00097-001: Although 45 days is understandably a short time to review a document of this size, the time period is consistent with the Council on Environmental Quality regulations for implementing the National Environmental Policy Act regarding the review of draft environmental impact statements. Significant effort was made to advise people of the schedule and duration of the review well in advance (one year). The DEIS was published on schedule and many substantive comments on the content of the DEIS, including yours, were received during the 45-day period.

00097-002: The EIS discusses the impacts of the renewal of the TAPS ROW to communities all along (and in many cases, well beyond) the right-of-way. The criteria for the selection of specific communities is given in Sections 3.25.1.1, 3.25.2, and 5.2 (now revised). Communities had the opportunity to petition for inclusion in the EIS analysis.

All federally recognized Alaska Native Tribes and Villages were notified that the EIS was being written and given a chance to provide input. In addition, input was solicited a second time from those communities most directly affected by TAPS ROW renewal. No response was received. Further consultations were held with Alaska Native communities after the DEIS was published.

00097-003: Vertical Support Member (VSM) stability is obviously critical to TAPS integrity. As such, it is the focus of extensive monitoring and surveillance. See Section 4.1.3.2.1 for a discussion on the design, monitoring, and repair of pipeline structural supports (including VSMs). See also the analysis of potential impacts on pipeline structures in Section 4.3.2.

The warming in Alaska in the last several decades is recognized. Evidences of warming in areas surrounding Alaska, including the Arctic Sea, as well as air temperatures, permafrost temperatures, and field observations in thermokarst lakes and glaciers are presented in Section 3.12.7.

00097-004: The BLM and member agencies of the JPO use an adaptive management approach to evaluate the effectiveness of stipulations and regulatory oversight. Ongoing monitoring programs, as identified in the 12 Comprehensive Monitoring Reports published since 1996, provide BLM and JPO with the necessary information to evaluate the effectiveness of stipulations in the Grant and Lease.

The reader is referred to Section 4.1.1 (JPO oversight) and specifically to Sections 4.1.1.2 (Adaptive Nature of the Grant in Compliance Monitoring), 4.1.1.3 (Risk-based Compliance Monitoring), 4.1.1.4 (JPO Comprehensive Monitoring Program), and 4.1.1.8 (Coordinated Planning and Response to Abnormal Incidents) for more information on the role of adaptive management as a JPO business practice.

00097-005: Thank you for your comment.

00097-006: The operational history of TAPS, maintenance activities, spill response capabilities, and the potential for spills associated with TAPS (to include those over major waterways) were considered in the analysis. Impacts associated with potential spills over waterways are discussed in Sections 4.4.3 and 4.4.4 of the EIS. The TAPS Oil Discharge Prevention and Contingency Plan (C-Plan) is updated periodically and lessons learned from actual occurrences as well as from regular exercises conducted along the pipeline are incorporated into the Plan. In addition, the C-Plan is reviewed annually by BLM, every three years by ADEC, and every five years by DOT. EPA also reviews the plan as it applies to pump stations. The C-Plan provides for significant resources, including equipment, trained personnel, and effective organization, to respond if oil does spill from the pipeline. It is expected that this process would continue throughout the ROW renewal period, if granted, and the C-plan would be kept up to date.

00097-007: Section 4.1.4 describes the steps taken to prevent and respond to spills. Although these plans have not been implemented specifically for the sake of protecting the Alaska Native way of life, Alaska Natives would be among those benefiting from them. The EIS evaluates current provisions of the Agreement and Grant of Right-of-Way for Trans-Alaska Pipeline (see Appendix B). This includes Section 30, which relates to impacts to subsistence and compensation for such impacts. Section 3.24 discusses subsistence and its importance to Alaska Natives, and as such supports several assertions made in the comment.

00097-008: Additional information about the fate and potential effects of aqueous phase oil has been added to the discussion of impacts from spilled oil in Section 4.4.4.10.

00097-009: Section 4.4.4.10 of the EIS discusses the impacts of a spill into the Yukon River on fish; Sections 4.4.4.14 and 4.4.4.15, in turn, discuss impacts of such spill on subsistence and Native sociocultural systems. Although impacts certainly would occur were such a spill to occur, the size of the Yukon River and the volume of water it contains would help to limit the severity of impact in terms of numbers of fish affected, as discussed in Section 4.4.4.10. Perceived damage to subsistence resources may also cause an impact, both above and below the spill, as discussed in the revised version of Section 4.4.4.114. There is no indication that fisheries in all of Alaska (e.g., the Copper River Basin) would be adversely affected by an oil spill into the Yukon River.

People throughout the entire United States were given the opportunity to comment on the DEIS. Because of the impracticality of holding public hearings throughout the United States, comments were accepted by a number of different forms—including public testimony, by letter, fax, Web site, and through telephone calls. All comments were accorded the same level of importance, regardless of their means of submittal.

00097-010: The reader is referred to Section 2.5 of the FEIS, in which audits are addressed under Alternatives and Issues Considered but Eliminated from Detailed Analysis.

00097-011: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”

00097-012: Thank you for your comment.

TAPS ROW Renewal
1835 South Bragaw Street, MS-568, Anchorage, Alaska 99512
Telephone (907) 787-8882 FAX (907) 787-8322

August 20, 2002 APSC Letter No. 02-18961

BLM TAPS DEIS Comments
Joint Pipeline Office
411 West 4th Avenue, Suite 2
Anchorage, Alaska 99501

BLM TAPS DEIS Comments
Argonne National Laboratory
EAD/900 9700 South Cass Avenue
Argonne, Illinois 60439

Re: DEIS Review Comments Transmittal

Gentlemen:

This letter transmits the comments of the Trans Alaska Pipeline System (TAPS) owner companies in response to the July 5, 2002 Federal Register notice requesting comment on the Draft Environmental Impact Statement for the Renewal of the Federal Grant for the Trans Alaska Pipeline System Right-of-Way (the DEIS). We are pleased to offer these comments this date via courier to the BLM and to Argonne National Laboratory. Electronic and CD versions of these comments are also being sent to Argonne. Detailed section-by-section comments are attached in a matrix format, but we would like to highlight a few items that we believe are of special significance in the DEIS analysis.

The DEIS evaluates three alternatives for Grant renewal (including non-renewal) and concludes 30-year renewal is the preferred alternative. The TAPS owners concur in this finding and strongly recommend that it be retained as the preferred alternative in the Final EIS. Thirty-year renewal is both appropriate and necessary given the economic importance of TAPS to the country in general and the State of Alaska in particular. TAPS was created as the sole means of bringing North Slope oil to market and all the best information available indicates there is at least another 30 years of commercially producible reserves on Alaska's North Slope. TAPS has safely and reliably served this purpose for 25 years and is prepared to do so for the next 30.

Maintaining the proper focus for the Grant renewal EIS is also an important aspect of this process. While TAPS is an essential piece of infrastructure and Grant renewal is required for its continuation, renewal is only one piece of many processes that affect the continued operation of TAPS. The DEIS appropriately evaluates a wide variety of issues related to TAPS but eliminates others from detailed analysis. These issues are mentioned but not pursued because they generally are the subject of processes that are separate from and independent of the straightforward land use decision that underlies the renewal question. Section 2.5 of the DEIS properly identifies items raised during scoping - such as the Exxon Valdez litigation, Dalton Highway status, and DR&R tariff issues - as out of scope.

Among the items raised and considered but eliminated from detailed analysis in the DEIS is the concept of adding an advisory committee or citizen oversight function for TAPS. During the course of the public hearings on the Draft EIS a number of commentors spoke either in favor of or opposed to this concept and we believe, therefore, that some additional comment on this issue is appropriate.

First, we refer you to that portion of our scoping comments that addresses this point, a copy of which is enclosed and hereby incorporated into our formal DEIS comments. As our scoping comments note, Federal law does not favor the creation of formal citizen advisory functions. The Federal Advisory Committee Act (FACA) and the Congressional intent language creating this act make it clear that a genuine purpose and need for an advisory function must be established and an approval process completed before creation of the function is permitted. This rationale stems basically from the fact that public oversight is the responsibility of the government. The authority does not exist within the context of the right of way renewal process to establish such an advisory group nor to compel the TAPS owners to provide funding. It has, therefore, correctly been addressed as outside the scope of this decision process.

But, even if it were not, the rationale for creating an oversight function does not exist. In the case of TAPS, the Joint Pipeline Office, a consortium of state and federal agencies, has already been established to carry out TAPS oversight. Numerous opportunities for formal and informal public participation exist within the authorities included in the JPO as well as oversight provided by other state and federal agencies exercising jurisdiction over TAPS. In fact, many of the areas of concern commented on during the DEIS hearings, such as oil spill response plans, are the subject of other public processes. Finally, information about TAPS is widely and publicly available.

The TAPS owners appreciate this opportunity to comment on the Draft EIS. It is our hope and expectation that the preferred alternative and scope of the DEIS be retained in the Final EIS. TAPS exceptional environmental performance, aggressive maintenance program coupled with a comprehensive regulatory regime to oversee its operations support such a finding.

Sincerely,

W. Steven Jones
TAPS ROW Renewal Project Manager

Enclosures

cc: R. McWhorter, w/enclosures
J. Brossia, w/enclosures
J. Kerrigan, w/enclosures
G. Reimer, w/o enclosures
TAPS Owner Companies w/enclosures
S. Martin, w/enclosures

TAPS Owner's Comments

00098001

Regarding the sentence that begins "In the northern portion of Alaska, most. . ." the term "nonlocal hunters" should be clarified in order to not confuse readers between use of the terms "nonlocal" and "nonresident".

00098002

Sentence that starts "The number of mountain goats. . ." does not appear to be complete. Suggested edit: "The number of mountain goats that stay in. . .by the ROW, has increased. . .Highway, yet has declined. . ."

00098003

Typo -- citation should be Ballard and "Whitlaw", not "Whitelaw"

00098004

This paragraph would have better organization and flow more coherently if the description of the terrestrial portion of the Beaufort Sea were presented first in a separate paragraph. Suggest change: the portion starting on line 16 (i.e., "For this EIS, the terrestrial. . ." through to ". . .within this area.") and make it the first paragraph. Then the general description of the species in the study area becomes more relevant as the introduction's second paragraph.

00098005

Regarding the sentence "The reason for the dramatic decline of the adult moose population throughout the North Slope in recent years is not known."

1. It is questionable whether this statement belongs here in its current form. A more appropriate statement would include information recently published by Geoff Carol of ADF&G (see below for citation) stating the Colville River moose population is currently (since 1997) increasing in response to the population being below carrying capacity, browse recovery from moose and snowshoe hare overbrowsing, and the resulting improved moose body condition. In 2000, the Colville River moose population was estimated at approximately 650-700 moose (Carol 2002). I suggest this statement be updated to reflect current information or else deleted from the section.
2. If it is retained, the information presented in the existing statement needs one if not more citations. A citation is required for the decline. Use of the term "dramatic" is a red flag and needs to be carefully defined with a citation.
3. It is difficult to imagine that a decline would occur only in the adult segment of a population, but if this were the case, and researchers knew that calves were not declining and recruitment was satisfactory, then it seems they would surely know the cause of the decline.
4. The North Slope is a large area and naturally occurring moose habitat is limited and somewhat fragmented (i.e., that is why numbers are low at this northern edge of moose range). A citation is required to document and support the phrase "throughout the North Slope".
5. The phrase "in recent years" is also vague. Again, a citation is required to document and support this term.
Considering the above comments it is clear this statement is problematic and I suggest either deleting or expanding upon it with appropriate citations, including Carol (2002). It is not scientifically acceptable in its current form.

Carol, G. 2002. The rise, fall, and recovery of the Colville River moose population. Pages 3-5 in V. Crichton and G. Redmond, editors. The Moose Call, Vol. 14, April 2002. (See Argonne Document #3371)

00098006

General comment for this section:

1. The levels of detail for population, range and habitat use data presented in this section are not consistent among species. For example, why is the estimated size (in 2000) of the Porcupine herd presented (line 4 of paragraph 1 on page 3.21-16) in the middle of a paragraph that otherwise appears to discuss seasonal distributions and habitat use of the 4 North Slope caribou herds?
2. Then, in the 3rd paragraph on page 3.21-16, comments regarding portions of the Central Arctic herd ("small numbers" line 6 paragraph 3; "Census data indicate that about half of the Central Arctic herd tends. . ." line 13 paragraph 3) are presented with no mention of Central Arctic herd population estimates (current estimate or population growth since mid-1970s).
3. In contrast, bear (page 3.21-17 paragraph 5 lines 1-8) and fox (page 3.21-17 paragraph 7 lines 7-10) numbers and densities are discussed in greater detail.

Please resolve this discrepancy in levels of detail presented among species in the Beaufort Sea area. We strongly suggest you provide population data for the 4 caribou herds over time (Cronin et al. 1998).

00098007

The 1st sentence states "Other impacting factors include the potential alteration of animal habitats and migration patterns." This is a sound and reasonable statement. However, "potential" is removed from the next sentence, which therefore implies the "altered habitats and migration patterns" are a known fact with "continuing impacts on subsistence and on commercial and sport hunting and fishing." Suggest inserting the word "potential" into the 2nd sentence, allowing for the possibilities of these impacts, without presuming they occur in all areas under all circumstances.

00098008

Box entitled -- Impacts of Proposed Action on Birds and Terrestrial Mammals: This highlight box is very well written, concise and to the point.

00098009

Regarding the sentence that starts "There is no evidence that populations. . ."; the beginning clause is correct and scientifically based, as evidenced by the numerous citations, however, the second clause is misleading and should be edited. It is true that such impacts can be difficult to detect, but this has been presented in a better manner in other sections of the EIS (see page 4.3-54 paragraph 2 lines 15-16 with language ". . .may not be detectable above natural population fluctuations [ADNR 2000; MMS 1998])." I suggest rewording the closing phrase of this sentence with the above language. In addition, the current citation of Chardine and Mendenhall (1998) is a seabird citation and is not the most relevant or appropriate choice. I suggest using the previous citations of ADNR (2000) and MMS (1998).

00098010

Add Shideler and Hechtel (2000) to the citation string regarding anthropogenic food sources.

00098011

Regarding the sentence that begins "Brown bears generally avoid. . .", the citation to Ballard and Whitlaw (2002) is not the most appropriate. I suggest the entire sentence be reworded as follows "Although it has been demonstrated that some brown bears avoid areas within 300 ft of roads (McLellan and Shackleton 1988) this response has not been reported in the TAPS or Prudhoe Bay areas."

00098012

Regarding the sentence that begins "Disturbance is greater from helicopters. . .". Although this statement is generally true, there is great variation among species, environmental variables, etc. as stated in the previous sentence. However, the citation for this statement (Watson 1993) is a study of nesting bald eagles and is probably not appropriate for such a general statement. I suggest rewording the sentence to read "For example, Watson (1993) reported that disturbance to bald eagles was greater in response to helicopters as opposed to fixed-wing aircraft at similar distances."

00098013

"285,600 al " should read "285,600 gal"

00098014

The DEIS states: "However, extended bulk storage of spill debris that has been determined by analysis to be hazardous waste is not addressed." This is unclear and appears to indicate a deficiency in plans that are prepared and approved on a site-by-site basis. The storage of bulk hazardous spill debris has been addressed in the State approved Oil Discharge Prevention and Contingency Plans.

00098015

"Control Valves 10 and 12" should read "Check Valves 10 and 12".

00098016

In addition to the air emissions permit issued by ADEC, there is an operations plan for treating contaminated soil that has been approved by ADEC under 18 AAC 75.365.

00098017

The Executive Summary contains no summary of the cumulative effects analysis. As this is an important component of the Environmental Impact Statement, a summary of findings should be included.

00098018

The discussion of the contribution of North Slope oil and TAPS to reducing the trade deficit is accurate and useful. However, many readers may not be aware of the significance of trade deficits in terms of everyday economics. We recommend that the DEIS provide an explanation of why a reduction of the trade deficit is beneficial.

One example of good general writing about the economic significance of current account deficits is found in the article, "How Returning Deficits Impact Main Street" (Cook, D. T., The Christian Monitor, July 19, 2002). Trade deficits contribute to current account deficits. As Cook notes,

"In the long term, federal budget deficits reach into voters' pocketbooks in a variety of ways, economists say. 'If the government is borrowing money, that means there is less available for private investment,' says Economy.com's Mr. Faucher. Eventually, that is going to mean we will have slower growth down the road."

Ultimately there are limits on the government's ability to borrow and government expenditures need to be reduced and/or the dollar must be devalued. Increased unemployment, slower growth, and higher interest rates (e.g., mortgage rates) for the average person (the equivalent of a tax for people with adjustable-rate mortgages) are some of the consequences of budget deficits.

00098019

After sentence ending in "(Table 3.23-7)," suggest adding the sentences "Nonetheless, petroleum revenues remain very significant to the State. In the year 2000, for example, the total revenues of nearly $2.4 billion were equivalent to more than $3,800 per person."

00098020

(Please note: Graph for this comment could not be included in the database. For full comment, please see Argonne Document #3350)

Please provide some perspective on state expenditures by including the attached graph showing the 15 states with the largest expenditures per capita. Alaska tops this list -- and has for many years -- for several reasons, including relatively low population density, large size, harsh climate, and various unique social programs. The point is not to argue that Alaska's expenditures are inappropriate, but rather that these are -- for many reasons -- high in per capita terms. In order to support these relatively high expenditures it is necessary to find sufficient revenue.

00098021

This section does not address the many causes of social change -- including the effects of oil and gas development -- and also fails to address many of the relevant issues. Only alcohol and suicide are mentioned as problems.

The discussion is unbalanced; it fails to point out many of the positive aspects of social change among Alaska Natives, such as increased graduation rates (and increased GEDs) in schools (see the NSB 1998/1999 Economic Profile and Census Report) and increased percentages who understand or can speak native languages. There is also increased communications access (radio, telephone, cable television, and the Internet) and specific radio and television programs available for Alaska

00098022

This economic analysis of the proposed action and the no-action alternative in the DEIS incorrectly assumes that some unidentified means can be found to finance continuing state deficits without creating adverse impacts on the economy. In the DEIS analysis the Permanent Fund Dividend (PFD) is retained (even in the case of the no-action alternative) and state expenditures are permitted to grow even though revenues decrease gradually or abruptly. This assumption is simply wrong.

The most useful and straightforward approach would be to examine the effects of balancing the state budget by reducing expenditures to match available revenues. The economic consequences of this assumption would include a substantial (and abrupt in the case of the no-action alternative) reduction in state (and local) services, reduced state and local government employment, and other consequences (unemployment, recession) that would directly follow. This case is easy to evaluate and understand. (Other options are noted below.)

In the year 2000 oil and gas revenues contributed approximately $2.4 billion to state revenues (see Table 3.27-7), equivalent to more than $3,800 per person. According to projections made by the Alaska Department of Revenue (Revenue Sources Book, Spring 2002), the state's budget gap is estimated to be $963.4 million in the fiscal year starting on 1 July 2002 -- a number projected to grow to more than $1 billion in fiscal year (FY) even with continued oil and gas revenues and flat state expenditures. If these revenues were to decrease (as would occur under the proposed action alternative) or terminate abruptly (as would occur under the no-action alternative), then this gap would grow. To eliminate this gap the state will have to sharply reduce expenditures, increase taxes, sell off assets, decrease or eliminate the PFD or implement some combination of these measures in order to balance the budget.

The DEIS notes that it is difficult to forecast the specific mix of actions that would be taken by the state to solve the resulting budget crisis (a reasonable statement), but then assumes that the budget can remain unbalanced indefinitely -- an unreasonable assumption.

The TAPS Environmental Report (TAPS Owners, 2001) made the assumption that, among other things, the state would eliminate the PFD in order to reduce the budget gap. Many would agree with this choice: the most recent Revenue Sources Book (Spring, 2002, p. 50) notes that "reducing [the PFD] would have a smaller overall [adverse] economic effect on the Alaska economy than a personal income tax or sales tax." If the DEIS authors believe that this would not occur, then the DEIS must evaluate some other means to bring revenues and expenditures into balance.

As noted above, one straightforward approach is to examine the effects of balancing the state budget by reducing expenditures to match available revenues.

Alternatively, the analysis in the DEIS can be modified to include both expenditure reductions and the imposition of a tax to eliminate the budget deficit. A combination of budget reductions and increased taxes may be more attractive (thus more likely) than eliminating deficits by expenditure reductions alone. However, evaluating a mix of expenditure cuts and increased taxes is more complex because additional assumptions need to be made (e.g., sales or income tax, whether progressive or not, balance between cutbacks and taxes). Candidate taxes (type, amount, and provisions) can be found in the Department of Revenue, Revenue Sources Book.

Whether budget cutbacks, taxes, or other measures are ultimately evaluated, the assumptions made in the DEIS must be modified to provide a realistic estimate of the economic effects of the proposed and no-action alternatives. The economic impacts projected in the DEIS are erroneous even in the case of the proposed action alternative. These errors are even greater for the no-action alternative.

00098023

The fact that using domestic oil from the North Slope, produced at a real economic cost less than the price of purchasing imported crude, makes the US economy richer should be explained and highlighted. The point is that for each NS barrel, the US uses resources equal to the cost. For each imported barrel, the US must expend real economic resources equal to the price.

00098024

Because it is no longer the marginal supplier of West Coast refineries, North Slope oil does not impact the price of crude or product on the West Coast through the quantity supplied. It is not cheaper on the West Coast because it is closer than other sources of supply because the market is a net back market. All crude of the same characteristics has the same price at the refinery. Its price differs from other West Coast crudes because of quality differences.

00098025

Delete "resulting in a swampy area" substitute "possibly due to construction impacts." Delete "Keyes 2002" cite and use original study. (Reference: MP 735 Aboveground Pipeline Assessment, Michael Baker, Jr., Inc., December 2001 (See Argonne Document #3349)).

00098026

The discharge diffuser for the Valdez Marine Terminal sanitary sewer is located offshore of the VMT but is not located "near the bottom of the fjord" as stated.

Suggest the wording be changed to ". . .through a diffuser located offshore northwest of the Marine Contingency Building."

00098027

Effluent limitations for the Valdez Marine Terminal outfalls should include BTEX.

00098028

The top graph incorrectly identifies the dates of the VMT NPDES permit renewals. The correct dates are June 1989 and May 1997.

00098029

The term "segregated ballast" is used in error. Delete "segregated". The BWTF does not treat segregated ballast.

00098030

Refer to the sentence that reads: "Depending on the texture of the soil material, a saturated soil may become liquefied when it is subjected to sudden movements such as a strong earthquake." It is suggested that the sentence be modified as follows to be accurate:
"A thawed, loose granular soil deposit located below the water table may liquefy when it is subjected to sudden movements such as a strong earthquake."

Liquefaction can occur only in a rather narrow range of geologic and soil environments characterized by granular soils that remain loose and uncemented after deposition during recent geologic time (modern or late-Quaternary eras) and that lie beneath a shallow ground water table. Quite often, permafrost has a high silt content, which would preclude liquefaction.

This comment also refers to Table 3.4-3 found on Page 3.4-6.

In this paragraph, it seems that a comparison is being made between the peak ground accelerations (PGA) from the USGS Open File Report 99-36 by R. L. Wesson et al. and the TAPS ground motion criteria. The USGS PGA values from the Wesson report serve as a basis for the USGS seismic hazard contour maps of spectral acceleration used in the International Building Code (IBC) 2000. While it might seem appropriate to compare these numbers with the TAPS seismic criteria, it actually is not, because the two sets of numbers were derived for different event recurrence intervals. The PGAs from Open File Report 99-36 are for a "Maximum Considered Earthquake", which has a probability of non-exceedance of 2% in 50 years, or an approximate recurrence interval of 2,500 years. The TAPS criteria were originally intended to represent a recurrence interval of approximately 300 to 500 years, but recent assessments indicate that the recurrence interval probably varies from 500 to 1,000 years for various areas along the 800-mile route.

It is important to recognize that the two sets of numbers are used differently in the design process. The IBC 2000 starts with spectral coefficients for the 2,500 year earthquake, but multiplies these numbers by 2/3, further modifies them to account for site specific soil conditions, and divides by a reduction factor of approximately 1.5 to 8 depending on the amount of ductility and energy dissipation that can be mobilized by the type of structure being designed. The TAPS ground motions are multiplied by amplification factors to obtain spectra and then factored to account for ductility and energy dissipation. In addition, both the IBC 2000 and TAPS procedures apply different load factors to the various possible load combinations that include seismic load components. Thus, the respective processes used to develop design loads are quite dissimilar, and consequently, it is not possible to compare PGAs this way.

The only meaningful way to compare the PGAs from Open File Report 99-36 to the existing TAPS seismic ground motion criteria would be to run each set of numbers through the respective design processes, i.e., IBC 2000 vs. the TAPS seismic design criteria, and compare the resulting design loadings. This would be formidable task, which we believe is beyond the scope of the EIS.

In conjunction with plans to update seismic design specifications to a form consistent with IBC 2000, APSC has commissioned a probabilistic seismic hazard assessment (PSHA) of the pipeline route. The results of this study will be used to determine input seismic design coefficients for the updated seismic specifications. It is expected that the net seismic design requirements will not differ substantially from the requirements imposed by the existing TAPS seismic criteria, albeit the design procedure itself will be modified to be consistent with IBC-2000. The last such review of Alyeska seismic criteria was conducted in 1994-95. (See Argonne Document #3096: Reassessment of Seismic Design Criteria for the Trans-Alaska Pipeline, December 1995, Rev. 1) It also included a PSHA, and it was concluded that the originally specified TAPS seismic criteria were adequate in the high seismic areas along the route, and conservative in the low to moderate seismic areas.

00098032

Refer to the sentence that reads: "Within 10 minutes of when alarms are sounded, shutdown will begin automatically unless the operator intervenes on the basis of his interpretation that the alarm was falsely initiated." It is suggested that the sentence be replaced as follows:

"If the pipeline controller fails to acknowledge seismic alarms within 10 minutes, automatic shutdown of the pipeline will commence. This automatic shutdown process is intended to guard against the possibility that the operator is unable to respond to the seismic alarm condition."

Note: The pipeline controller will determine the need for shutdown through his/her review of alarm displays, which includes seismic, leak detection, etc. If an emergency condition is determined to exist, shutdown will be initiated by the controller long before the 10-minute time-out period.

00098033

Change " . . . was upgraded to a conventional aerobic secondary treatment that uses a small mechanically activated sludge plant." To: " . . . was upgraded to a conventional aerobic secondary treatment process by addition of a small mechanical activated-sludge plant."

00098034

Discrepancy in volumes. "Maximum annual volume . . . was 3.8 gallons in 1991" in paragraph 6. Total for 1996 and 1997 was 7.8 million gallons of hydrostatic test water. This is more than double the "maximum annual volume".

00098035

Confining unit usually overlies the aquifer. The text should read "The underlying permafrost forms a confining unit for the subpermafrost aquifers."

(Please note: Tables for this comment could not be included in the database. For full comment, please see Argonne Document #3355)

Four of the seven possible impacts noted in the bullet points in these paragraphs address the possibility of competition between subsistence users from sport anglers or hunters. Sport hunters/anglers are alleged to use "improved technologies" and are facilitated by increased access. Cumulative effects are claimed to include competition from "outsiders" and new Alaskan residents attracted by economic opportunities associated with the proposed action and other reasonably foreseeable actions.

This discussion in the DEIS is incomplete. It fails to address the priority accorded subsistence users in both state and federal law and the game and fishery management options available to mitigate any conflicts between sport and subsistence users.

Wolfe (2000) notes that:

"Subsistence uses of fish and land mammals are given a priority over commercial fishing and recreational fishing and hunting in state and federal law. This means that when the harvestable portion of a fish stock or game population is not sufficient for all public uses, that subsistence uses are restricted last by regulation."

In the event that oil and gas development and other projects were to result in competition that lowered or threatened to lower the harvestable portion of the fish stock or game population to levels insufficient to accommodate all users, it is the obligation of state and federal authorities to restrict other users in order to satisfy the needs of subsistence users and to distinguish among subsistence users. Because of this subsistence priority, it is impossible in principle for competition from nonsubsistence users to adversely impact subsistence users. In practice, however, fish and game management decisions have not always favored subsistence users.

The following discussion provides relevant information that should be added.

Suggested Insert:

Subsistence Priority

The history of subsistence management in Alaska is discussed elsewhere in the DEIS (see Section 3.24 for a useful chronology regarding subsistence law and policy in Alaska). The Alaska Department of Fish & Game (ADF&G), under the direction of the Alaska Board of Fisheries (BOF) manages sport, commercial, personal use, and State subsistence harvest on all state lands and waters throughout Alaska. Title VIII of the Alaska National Interest Lands Conservation Act (ANILCA) requires that the Secretary of the Interior and the Secretary of Agriculture implement a joint program to grant a preference for subsistence uses of fish and wildlife resources on public lands and waters in which there exists a federal reserved water right. Detailed subsistence regulations applicable to these lands have been published (see e.g., 67 Federal Register 26, pp 5890 – 5906, see also USEPA, 2001, 2002).

Additionally, certain international agreements empower other bodies (e.g., the International Pacific Halibut Commission) to establish overall harvest limits for certain species (Hamel et al., 2000, Herrmann et al., 2001) in designated waters (e.g., the North Pacific, Gulf of Alaska, and eastern Bering Sea), but authority to allocate catches among commercial, sport fish, and subsistence users is delegated to the individual nations.

Notwithstanding the issue of how subsistence users should be defined (a complex subject), the laws, of the State of Alaska provide a preference for subsistence hunting and fishing uses (Burr, 2001).

Table 1 provides excerpts from the Alaska Statues (AS 16.05.258 Subsistence Use and Allocation of Fish and Game) that clearly spell out the responsibilities of the BOF (and corresponding Board of Game) in managing Alaskan fish and game resources. The decision logic clearly reflects a subsistence priority (text emphasized in italics in Table 1) over other uses of stocks/populations under various supply-demand circumstances including, (1) if the harvestable portion of the stock or population is sufficient to provide for all consumptive uses, (2) if the harvestable portion of the stock or population is sufficient to provide for subsistence uses and some, but not all, other consumptive uses, (3) if the harvestable portion of the stock or population is sufficient to provide for subsistence uses, but no other consumptive uses, and finally (4) to distinguish among various subsistence users if the harvestable portion of the stock or population is not sufficient to provide a reasonable opportunity for subsistence uses. The language in this statute is unambiguous -- there is a clear mandate in state law to favor subsistence users (subsistence users here are defined first as all Alaskans, then in the case of Tier II are defined more restrictively).

Notwithstanding the plain meaning of the state's subsistence law the legal and political history of the management of fish and game resources has left many Alaska Natives believing that rural subsistence users are not accorded priority and that "the system is broken" (Shively, 2002).

State Management Practices

This section provides an overview of the administrative mechanism by which the state regulates fisheries (and game resources) and identifies specific management practices used for this purpose.

Administrative Mechanisms

-Fishery

The BOF consists of seven members appointed by the governor and confirmed by the Legislature. The BOF sets fishery regulations and harvest levels, allocates fishery resources, and approves or mandates fishery conservation plans for the state (Burr, 2001). The BOF receives technical assistance from ADF&G personnel and input from numerous local fish and game advisory committees. For example, the North Slope Borough (NSB) formed a North Slope Borough Fish and Game Advisory Committee that provides citizen input to the BOF relative to fish and game management (Burr, 2001) in that area. (This same committee provides input to a corresponding Board of Game [see below] relative to game management.)

The operating schedule at present entails BOF consideration of area-specific issues on a three-year cycle. Proposals for regulatory action and management plans are received for evaluation/approval by the BOF from ADF&G and members of the public—any Alaskan can submit a proposal to the BOF (Burr, 2001). As part of its deliberations the BOF receives input in the form of oral and written testimony from various groups including ADF&G personnel, members of the general public, members of local advisory committees, and others such as angler clubs. Proposals are accepted by majority board vote, reviewed by ADF&G, confirmed by the Commissioner of ADF&G, approved by the Attorney General, and filed by the Lieutenant Governor before being implemented by ADF&G.

For time critical issues not adequately covered by existing regulations, ADF&G is empowered (Alaska Administrative Code [AAC] 05 AAC 75.003 Emergency Order Authority) to issue an Emergency Order (EO). This portion of the code (055 AAC 75.003) states in part:

"The department [ADF&G] may, by emergency order, change bag and possession limits or alter methods and means in sport fisheries. These changes may not reduce the allocation of harvest among other user groups."

Emergency orders are used to correct a situation until it is resolved or formally addressed by the BOF.

-Game Management

The state Board of Game (BOG) serves the same function for game management as the BOF for fishery management. The seven BOG members are appointed and confirmed in the same way and the administrative mechanism (process, advisory committees, etc.) is also identical. The BOG (by majority vote) may adopt, amend, repeal, or take no action on such matters as trapping/hunting seasons and bag limits, elimination of tag fees, restrictions on methods and means (e.g., snare restrictions, use of snowmachines, bear baiting, muzzleloader seasons, bow seasons, archery equipment, and restrictions in use of aircraft), hunter education requirements, and the establishment of restricted areas and game management units (GMUs). BOG decisions are reported in a Summary of Actions report issued after each meeting. ADF&G may also issue Emergency Orders for game management.

Specific Management Options

State authorities employ a variety of measures to manage fish and game resources.

-Fishery Management

Fishery managers employ a variety of options to ensure that adequate stocks are available (supply management) and/or to allocate available stocks among various users (demand or harvest management). On the supply side, fish hatcheries can be used to augment wild resources. Hatcheries are used to augment stocks of salmon and certain other species (see e.g., Arvey, 1991; McNair, 2002; State of Alaska, Governor’s Office, 2002; ADF&G, 2001) such as Arctic grayling and Arctic char. To date, hatchery augmentation has not figured importantly for many of the waters in the vicinity of the TAPS right-of-way (ROW)—at least at the northern end (Arvey, 1991; Burr, 2001). However, some believe that increased hatchery augmentation of native stocks in interior Alaska is a viable option (Fairbanks Chamber of Commerce, 2002). A resolution passed by the Fairbanks Chamber of Commerce, for example, supports a hatchery for interior Alaska and claims (as one justification) that this would accommodate any increased numbers of residents and anglers associated "with the development of the missile defense program, deployment of the Interim Brigade Combat Team at Ft. Wainwright, and future development of ANWR and a gas line."

There are numerous demand-side or harvest-side options for fishery management in use in Alaska. These include placing direct or indirect limits on either catch or harvest by various users for some or all species. Table 2 identifies many of these demand-side measures and provides illustrations of each taken from applicable Alaska sport fishing regulations for the year 2001. Table 2 presents a broad range of options that provide great flexibility for fishery managers to satisfy the Alaska subsistence priority.

Each of these options has advantages and disadvantages, circumstances under which it might be appropriate, and enjoys a varying amount of support among sport anglers or subsistence users. Catch and release or selective harvesting, for example, enables anglers to enjoy the fishing experience without excessively depleting stocks. Catch and release is one of the techniques employed by the BOF (see footnote 1 below) endorsed by many Alaska outfitters/lodges/guide services that cater to visiting anglers, and regional and national sportfishing organizations. Those opposed to catch and release are concerned over fish injury or mortality (see footnote 2 below) and (particularly among Alaska Natives) those who believe that this practice is disrespectful and violates traditional values (see footnote 3 below). ADF&G (Timmons, 1991) has done a limited amount of survey work on opinions and regulatory preferences of holders of sport fishing licenses regarding various regulatory options.

Several references provide illustrations of how data are collected and analyzed to support the development of regulations and/or to integrate fishery management in the planning process (see e.g., Parker, 2001; Alaska Department of Natural Resources, 2002). Nonetheless, as indicated elsewhere in this DEIS, subsistence data are incomplete.

The BOF has proactively managed fishery issues in the vicinity of the TAPS right-of-way. Sportfishing was closed for five miles on either side of the pipeline beginning in 1978 to prevent rapid fisheries depletion by construction workers and others along TAPS (Arvey, 1991). More recently, the opening of the Dalton Highway to public travel in 1994 prompted additional regulations including a reduction in bag limits for northern pike and Arctic grayling and in a no-harvest regulation for lake trout within the highway corridor (Burr, 2001).

-Game Management

Game managers employ a variety of regulatory tools to ensure that the resource is adequate to support subsistence needs or at least minimize the effects of competition with sport hunters/trappers.

Table 3 identifies many demand-side measures that are used to minimize any adverse effects of sport hunting/trapping. These include closing areas to sport hunting/trapping (see footnote 4 below), setting bag limits, defining controlled use areas (CUAs), placing limits on the hunting technology employed, and establishing registration or drawing permit hunts. Details and examples of each of these measures are provided in Table 3. As with the fishery management options summarized in Table 2, game management options provide great flexibility.
Notwithstanding the state's legal subsistence mandate and available regulatory tools, some believe that the state has not discharged this responsibility efficiently -- at least in connection with wildlife resources. Even when the rural priority was included in the state's subsistence law, the differences between hunting regulations for sport and subsistence users were small according to one analysis by the Division of Subsistence of ADF&G (1990):

"Although subsistence priority existed in law, in practice subsistence hunting regulations were quite similar to resident hunting regulations, at least from 1978 to 1989. Methods and means regulations were virtually identical for nonresident, resident, and subsistence hunts. Seasons and bag limits were similar for most resident and subsistence hunts.

But in some areas where demand for wildlife was high, subsistence hunters did enjoy longer seasons, higher bag limits, or other advantages over resident hunters for selected species. . . Subsistence regulations provided 8,160 potential hunting days for caribou statewide (the total of all the open subsistence hunting seasons in all the game management subunits). Resident regulations provided 7,500 hunting days, or 8 percent fewer. Resident moose hunts had 14 percent fewer hunting days compared with subsistence hunts. Resident sheep hunts had 24 percent fewer hunting days."

This same analysis (ADF&G, 1990) related a cautionary tale of the Nelchina caribou herd:

[Because of highway developments and post-World War II population growth the Copper Basin was opened and exposed to hunting and fishing pressure by urban Alaskans. The Nelchina caribou herd became the most easily accessible caribou for both Fairbanks and Anchorage area hunters.]

"Fortunately, during the 1950s and 1960s the Nelchina caribou herd was growing just as the urban populations (sic) was growing. So although the number of hunters on the Nelchina kept growing, the hunting regulations were quite liberal. By 1971, the caribou season was open from August 10 to March 31, and each hunter could take four caribou.

Then, in 1971-72, the Nelchina herd crashed. Whereas in 1971 hunters killed 10,131 caribou, in 1972 the entire herd was estimated to include only 7,842 animals.

In 1972, the season was reduced from eight months to 40 days; the limit from four to one. Harvested (sic) declined to 555 animals in 1972. But in 1976 when 1,807 hunters took 822 caribou in the first five days of the season, biologists closed it by emergency order.

The Nelchina caribou herd simply could not meet the increasing demand. So in 1977, the Alaska Board of Game directed the Department of Fish and Game to award 750 permits in a random drawing. Anyone could apply; a $5.00 fee was required. The drawing permit system remains in effect today [1990]. The Nelchina caribou herd has grown since 1971 so the number of permits has grown to 2,230."

Although this system allowed the Nelchina herd to recover, it required court action to force the Board of Game to develop a subsistence drawing permit hunt (ADF&G, 1990).

As a second example of how the state management system did not always exercise its authority to protect the interests of certain subsistence users, the Division of Subsistence (ADF&G, 1991) relates a story of confusion in the wake of the State Supreme Court decision to strike down the rural subsistence priority as unconstitutional. Effects noted included postponed decisions and reduced subsistence seasons and bag limits made necessary by the substantial increase in the number of possible subsistence users that followed from elimination of the rural priority.

However, this same source (ADF&G, 1991) also noted that the state Board of Game created 15 Tier II subsistence hunts during the emergency August 1990 season, due to the increased pressure from urban residents hunting under subsistence regulations. As noted:

"Tier II hunts are required by law when there are too many hunters for the resources. For these 15 hunts, non-resident hunting was eliminated. Resident sport hunting was eliminated. Subsistence hunting was allocated to individuals (sic) hunters through a complex point system which measured the hunter's level of dependence and proximity to the game population."

In this case, the management system worked as intended.

Alaska Natives and rural Alaskans are concerned that game regulations have not always been tailored to ensure a real subsistence preference. Among other concerns, they believe that broadening the definition of a "subsistence user" effectively created more competition and that (even though an administrative mechanism--the Tier II permit--exists to address this situation) the BOG has not accorded sufficient priority to rural residents. Moose, for example, are much sought after by rural hunters (and others). Hicks (1995) provides the following information on moose hunting regulations in game management subunit 26B (a portion of the North Slope):

"Beginning in 1990, all Alaska residents qualified as subsistence users under state law. To compensate for the large increase in hunters eligible for the subsistence season, the season was shortened to 5 -- 15 September and 1 November -- 31 December, and the one-bull bag limit was extended to all hunters. Additionally, a 50-inch minimum antler size was established for nonresidents."

Although the BOG had other options that would favor local subsistence hunters (Tier II hunt), this action was taken which effectively lowered their probable harvest.

-Equity Issues

The above discussion makes clear that existing Alaska law provides a mechanism to accommodate the needs of those dependent upon a subsistence lifestyle and that the BOF/BOG have an array of useful means to ensure that this is the case. A controversy exists as to whether or not these administrative tools have been consistently employed to achieve this objective:

-- Rapid population growth in urban areas during the 1970s led to increased competition for fish and game resources between Alaska Natives and other Alaskans (see footnote 5 below).

-- Urban and nonsubsistence interests are alleged to have dominated the State fish and game boards, leading those boards to favor sport and commercial users over those the State designated as subsistence users. For example over fishing of salmon in the Copper River, largely by residents of Anchorage and Fairbanks, led the BOF to allow fishing in the river on only two days, Saturday and Sunday. When Native elders fished during the week, they were arrested (see footnote 6 below).

-- Bias was also charged by Rep. Morris Udall who claimed: "Both the State and the Secretary have been reluctant either to provide rural people with a meaningful opportunity to participate in the management and regulation of subsistence resources in their local area or to take timely steps to protect subsistence resources and uses from overpowering competition from the urban population centers. . . " (see footnote 7 below)

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Footnotes:

1 -- Information on catch and release is prominently displayed on ADF&G's website <http://www.state.ak.us/sportf/geninfo/selhar/selhar/htm>.
2 -- Studies on fish injury and mortality in Alaska resulting from catch-and-release fishing includes those reported by USGS (2002) and Clark (1991).
3 --Twitchell (2001) comments on this cultural conflict as follows:

"Native people are taught to respect all resources and that one never wastes, misuses, plays with, or disrupts subsistence resources, especially fish and wildlife. Their ethics teaches them that when fish and animals are mistreated, the natural order becomes disrupted and people risk future food shortages.

To play with fish by catch-and release sport fishing is disrespectful and violates traditional values. It is believed that disrupting fish in this manner cause the fish to move away and perhaps never return. Native cultures are also very upset by the injury and mortality caused by sport fishermen playing with the fish. Studies have shown, and native people have witnessed, high rates of mortality as a result of poor catch-and-release techniques and handling practices. Improperly sized fishing tackle, barbed hooks, playing fish to exhaustion, mishandling of caught fish, improper hook removal, and poor release practices produce high rates of injury and mortality in fish."

Others that have expressed or reported views on catch-and-release include Burr (2001), Medred (2002), and Timmons (1991). Proposals to eliminate catch-and-release fisheries have been advanced at various times (see e.g., Proposal 289 to the BOF reported in Clark et al., 1992).

4 -- Predator control strategies, such as increasing bag limits on predator species (e.g., wolves that prey on moose), are also used.
5 -- Kancewick, M., and Smith, E. 1991. Subsistence in Alaska: Towards a native priority. 59 UMKC Law Review 645.
6 -- See H.R. No. 1045, 95th Congress, 1st Session, pt. I at 184 (1978) also statement by Senator Abourezk, August 2, 1978, 30 ANILCA Legislative History (ALH) 166-167, 207-208 (mark up sessions).
7 -- Statement by Rep. Udall (1975), 125 Congressional Record 9904.

00098037

Arctic Char and Dolly Varden: Table 3.19-1 does not mention Arctic char as a fish species that occurs along the TAPS ROW. Section 3.19.1.1.1 mentions Arctic char as an important target species for anglers, but does not mention where they occur. Table 3.19-2 lists Arctic char as occurring in the Sag River drainage. In order for these tables to be consistent, perhaps there should be a footnote added to one or both of the tables. Refer to the footnote in the TAPS Environmental Report (TAPS Owners 2001) Table 3.2-4 which states: "Fish of the genus Salvelinus caught in North Slope drainages and along the Beaufort Sea coast before the mid-1980s were identified as the western Arctic Bering Sea form of the Arctic Char (S. alpinus). Morrow (1980, 1984) contended that these fish are northern forms of Dolly Varden (S. malma), and current consensus conforms to this taxonomic designation. Thus, no Arctic char are listed along TAPS."

00098038

"Security program" paragraph at the bottom of column one could be of more value by adding the words in the third line following the word include: "badges, alarms, sensors"

It should also be noted that the same security measures are implemented at Pump Stations. A section on security for Pump Stations was not found.

00098039

The word "Office" should be changed to "Officer."

00098040

NPDES permits do not regulate septic system discharges. Add ". . . and other regulatory requirements." To the end of the last sentence in the paragraph.

00098041

General Comment on Section: Something is amiss in the outline structure. Suggest that nutrients and hydrocarbons be covered under Marine Water Chemistry, or perhaps as a SUBSET of discharges from the VMT.

00098042

General Comment on Section: Something is amiss in the outline structure. Suggest that nutrients and hydrocarbons be covered under Marine Water Chemistry, or perhaps as a SUBSET of discharges from the VMT.

00098043

Check units on oxygen content. mL/L is rare and requires an understanding of temperature and pressure. This is probably meant to be mg/L. The values seem appropriate for the gravimetric units.

00098044

Icons are reversed in the legend. Average annual flow are the long columns. Permit reissuance dates are the red points in time. (Value of 21 mgd is meaningless for the date).

00098045

Permit process is not accurate as described. USEPA issues the NPDES permit. ADEC does not have that authority, but will typically concur through its certification that the permit issuance will uphold State of Alaska Water Quality Standards, per Section 401 of the Clean Water Act. The BWT NPDES permit covers both the sanitary discharge (up to 10,000 gpd) and the treated ballast water discharge (significantly more water, including discharge from VMT Industrial waste sewer system.)

Note in the last line in this paragraph that the 700,000 gallons +/- identified here was domestic sanitary wastewater only (<2,000gpd). BWT discharged considerably more, as discussed elsewhere.

00098046

The permit allows for discharge of UNcovered secondary containment structures, not REcovered ones.

00098047

Insert: ". . . sanitary WASTEwater treatment. . . "

00098048

Please note that although the City of Fairbanks lies generally along the pipeline corridor, the City's wells are located some distance from the pipeline. These wells are not likely to be influenced in any way by the pipeline in terms of quantity or quality of water available. Aquifers serving the pipeline wells are independent hydraulically from the City of Fairbanks wells.

The reference to the City of Fairbanks is intended to be a comparison of water withdrawals with pipeline water use. There is another similar reference in the groundwater section of the Cumulative Impacts analysis.

00098049

The first sentence is incorrect because 1) the Valdez Marine Terminal is not considered a pump station [rather it is a marine terminal] and 2) the Valdez Marine Terminal is regulated by an air quality operating permit (contrary to the statement made in the sentence).

VMT does have an existing air quality operating permit under old air quality rules and did apply for a Title V operating permit.

Suggested Wording: Each of the TAPS pump stations, except Pump Station 5, and the Valdez Marine Terminal are regulated individually with an operating permit from. . .

00098050

Under the Rating/Capacity/Throughput column: All the less than or equal to symbols need to be changed to greater than or equal to -- to be correct. Otherwise, as stated, the table will need to include all the small equipment sources (and tanks) at each facility which does not appear to be the intent of the table.

Under the Number of Units column(s): The following sources need to be include on the table: At PS 2: include one 980 bhp Detroit Diesel electric generator (backup power) At PS 6: include two 619 bhp Detroit Diesel electric generators (1-primary, 1-backup). At PS 10 include two additional 475 bhp Detroit Diesel electric generators (1- primary, 1- backup). Note: These units were listed in the former 18 AAC 50.400 air permits because they were added after 1997. Since the units are permitted based upon engine shaft output you can simply place them in the same line titled "Detroit diesel electric generator". However, the 425 KW value will need to be reduced to 354 KW to be equivalent with the 475 bhp generators at PS 10.

00098051

Footnote "g" does not read correctly. The station has two 210K bbl. tanks. As written the footnote implies there is only a total of 210 K bbls. of tank capacity. Recommend changing the footnote value from 210 K bbls to 420 K bbls.

00098052

Near the last part of the sentence it states PS 7 and PS 8 are "minor sources" in the area. The term "minor source" is an air quality term with regulatory implications that could be construed to mean the facility is not a "major" source of emissions as defined by Title I and Title V of the Clean Air Act. This is not true for PS 7 and PS 8 since they are major sources under Title I and Title V of the CAA.

For clarification -- suggest replacing the word "sources" with "contributors." Therefore the sentence would read "Criteria pollutant and . . . Fairbanks, are minor contributors in the area. . . "

00098053

The statement in the first sentence stating: "facilities are not allowed to exceed the potential maximum emission levels specified in the ADEC operating permits under all operating conditions" is entirely correct. For the most part, the allowable emission values in the permits are not limits but rather emissions estimates ADEC placed in the permits for information purposes. Only in those instances where the specific permit level stated in the permit also includes a statement that the emission level is enforceable or where there were amendments to the permit that tie the emission levels to a technology or ambient limit is the emission level an enforceable potential maximum. However, as a practical matter these emission levels (estimates) are a maximum because they are an estimate of the maximum emissions the equipment can produce at full performance.

00098054

The 50 ppm value given for the fuel gas H2S concentration in 2001 is incorrect. The average H2S content of the fuel gas for 2001 was 22 ppm; this value is based upon the weekly sampling results of the fuel gas provided by the fuel gas supplier.

00098055

There appears to be a global inconsistency in the sections 4.4.4.6, 4.4.4.6.2, and 4.4.4.7 on the use of the term "Hazardous Air Pollutants" (HAPs). The term HAPs refers to the hazardous air pollutants listed by Section 112 of the Clean Air Act (CAA). The initial list identified 189 compounds as being HAPS.

The sections noted above are including compounds (cyclohexane, n-octane, and hydrogen sulfide) that are not listed on the Section 112 HAP list and, therefore, by definition are not HAPs. These compounds are hazardous and maybe listed elsewhere in regulation such as under EPCRA or the RMP Program. As such, either these compounds should be removed or the HAP entries changed to provide clarification that not all the compounds listed are HAPs.

00098056

The statement in the text that there will be significant out-migration of the non-Native population between 2004 and 2019 appears inconsistent with results presented in Table 4.3-7 on the same page that shows a net in-migration over this period. Perhaps some signs are missing on numbers in the tables, but the results are inconsistent as given.

00098057

Tables 4.3-7 and 4.3-8 are the first instances in which a format is presented to display economic projections associated with either the proposed action or no-action alternative. For the most part tables, rather than graphs, are used to convey numerical information and, moreover, the tables include only four selected years (2003/04, 2019, and 2034). This makes it difficult to observe/appreciate trends and the arbitrary years chosen obscure important economic consequences depicted in the Environmental Report prepared by the TAPS Owners. There is no justification for only presenting these particular years and describing all the results in terms of the annual rates of change over two arbitrary intervals. We recommend that year-by-year graphs be used to the greatest extent feasible, supplemented by tables when necessary to display particular numbers.

In this case of the economic effects of the proposed alternative the economy is projected to slowly transition away from its current heavy dependence on oil while at the same time dealing with its state revenue shortfall. This basic fact of life, and challenge for the economy of the state, is totally lost in the arbitrary method of presentation of results in this section. The point is that this process of transition will be long and difficult. If you don't describe it, you give the impression that the state's economy will just continue to grow slowly without any particular challenges.

00098058

Petroleum fuel supplies have not historically been cheaper in Alaska than elsewhere and this has not been the stimulus to growth of the tourist industry in the state. It has grown with overall demand and an increase in infrastructure to be able to serve the industry.

00098059

This comment applies to the Table and Text in Section 4.3.19.3.3.

State employment is projected to increase from 21,845 in 2004 to 27,601 in 2034 (see Table 4.3-9). Yet, from revenue estimates given in Table 4.3-12 and population estimates given in 4.3-7, total State revenues are projected to decrease from $4.995 billion ($7,329 per person) to $4.278 billion ($3,891 per person). Increasing employment with falling revenues appears inconsistent -- probably a consequence of the assumption that the state can continue to run deficits. Table 4.3-14 indicates that, despite this drop in revenues, state expenditures continue to increase, from $5.8 billion in 2004 to $7.3 billion in 2034. This error would be corrected if the analysis assumed that state expenditures were reduced to equal state revenues.

00098060

It is illogical to project that unemployment will trend upward over a 30-year period without suggesting some mechanism, in the form of structural change in the economy, to account for the trend. Under normal circumstances the unemployment rate is cyclical and any long-term trend would be moderated by in- or out-migration of the labor force.

Investment earnings are projected to fall over time, but the analysis assumes (inappropriately) that the Permanent Fund, the main financial asset of the state, will continue to grow.

Total state revenues are projected to fall over time. This is inconsistent with the projected increase in state and local government employment shown in Table 4.3-9. State government employment cannot increase without more revenues to pay salaries. Local government is highly dependent on state transfers to pay local employee salaries. If the state budget is falling, some must come out of local transfers and this will negatively impact local government employment.

The largest state to local transfer, which is not recognized anywhere in the text, is the school foundation program which is state supported for K-12 schools. This provides all the money for schools in many rural areas and half or more of the money in urban Alaska.

This oversight results in an error in assuming that local government will not be negatively impacted if the state budget is cut. Because of its dependence, local government would indeed suffer.

00098062

Total state expenditures (Table 4.3-14) are higher than state revenues, reported in an earlier table (Table 4.3-12, page 4.3-74), in all years presented. The state cannot constitutionally operate without balancing its budget.

This error is repeated in the analysis of the no-action alternative -- compare expenditures estimates in Table 4.6-19 (page 4.6-66) with projected state revenues shown in Table 4.6-17 (page 4.6-64).

00098063

Local government expenditures are consistently reported here to be much greater than revenues reported in Table 4.3-13 (page 4.3-75). It is possible that personnel expenditures are erroneously added to education and noneducation expenditures to get the total. Actually personnel expenditures are included in the other two categories. As written, these tables indicate that annual deficits will accumulate at the local government level.

This same error is repeated for the no-action alternative as indicated in Table 4.6-20 (page 4.6-66) and Table 4.6-18 (page 4.6-65).

00098064

Employment is projected to be less than 150 jobs higher (2019) and only 11 jobs higher (2034) in the case of higher production. But higher production over a 30-year period will certainly provide a legacy of more economic activity in the state both from direct employment and from higher public revenues. This result does not make sense.

00098065

The estimates presented in Table 4.3-17 are surprising. Although revenues from the oil industry are substantially greater in the 5% probability case than the 95% probability case, the state population, personal income per capita, and Permanent Fund Dividends are identical for these two cases. Moreover, the differences in total employment between these two cases are very small.

00098066

The discussion of spill prevention and response makes no mention of the federal Oil Pollution Act of 1990, which legislated new requirements for tankers operating in Prince William Sound.

00098067

It appears that some of the map symbols for "Oil Spill Contingency Plan Sites" did not reproduce correctly in the pdf file. There could be a font or symbol problem.

00098068

The first sentence in the paragraph states: "A 10% increase in the world price of crude oil would increase oil revenues by 6.2% over the baseline proposed action case." The DEIS should define what is meant by "revenue" (e.g., to whom does it accrue and how is it calculated) and explain why crude price increases lead to less than proportional revenue increases.

Because changes in oil price at the market flow directly back to the wellhead, a 10% change in the market price should have a greater percentage impact on the wellhead price.

00098069

This is backwards. A higher oil price, sustained over 30 years, will result in a higher, not a lower, rate of population increase because the higher oil price will be a stimulus to a higher level of economic activity.

00098070

This is backwards. A lower oil price, sustained over 30 years, will result in a lower, not a higher, rate of population increase because the lower oil price will be a drag on the level of economic activity.

00098071

The overall level of economic activity in the region in fact will be closely correlated with TAPS throughput via operations employment, local property taxes on the pipeline, and the sharing of revenues from the state to local government (including transfers in support of K-12 schools). In addition, state government provides services directly at the local level that would be jeopardized by a reduction in oil revenues. Finally, as oil revenues dry up the squeeze on the state budget is likely to hit areas that lack statewide or urban support, such as special services targeting rural parts of the state.

00098072

The estimates presented in Table 4.3-18 are contra-intuitive. Although revenues from the oil industry are greater in the event that prices are 10% higher, the total employment projected for the year 2019 is lower in the event of higher oil prices -- a surprising result. Also, the personal income per capita is slightly lower ($24,281 compared to $24,288) in the event of higher oil prices, another apparent inconsistency.

According to this table the economy is very insensitive to differences in the price of oil sustained over a 30-year period. This does not make sense.

Perhaps it can be traced to two assumptions the authors may have made. First that differences in the price of oil do not result in differences in the level of investment in oil production. Second is that differences in oil revenues do not result in differences in state and local expenditures. Neither of these assumptions is reasonable.

00098073

Native corporations are impacted by oil activity in at least two important ways -- employment contracts in support of the pipeline, employment contracts in support of NS oil exploration, development, and production. Natives also share as owners, either through the corporations, or local government, in oil production from NS fields.

00098074

Pressure on subsistence resources is probably more sensitive to population than to the level of personal income.

00098075

The document does not present consistent views on the availability of cash to support subsistence activities. In the proposed action alternative, Page 4.3-82, paragraph 5 line 15 states that:

"A decline in income growth might affect the productivity of subsistence activities and create other socioeconomic impacts. Less income would be available for investment in subsistence-related equipment, and the demand for subsistence products would increase as the amount of income available for the purchase of consumer market goods would fall."

In the cumulative effects section, the exact opposite is stated on page 4.7-108, paragraph 2 left, line 1:

"Larger amounts of cash would probably be available to individuals pursuing subsistence activities, enabling them to purchase improved subsistence-related technologies (though the precise impact of cash or subsistence activity has not been measured."

The evaluation of the direct and cumulative impacts to subsistence activities needs to be re-examined for consistency.

This paragraph explicitly states that income will be decreasing over the renewal period. Table 4.3-21 on page 4.3-83 shows income in the total pipeline corridor increasing slightly after 2004 for the total pipeline corridor and for all areas except the North Slope Borough. The inconsistencies between these data need to be reconciled.

00098076

This comment applies to the last sentence of the text box on Page 4.3-84.

The text in the sidebar should be rewritten for clarity and the subsistence section of the cumulative effects chapter should be reviewed for consistency.

The summary of impacts on page 4.3-84 (sidebar, line 20) suggests that positive economic conditions that provide cash for modern technology used in subsistence are not necessarily associated with TAPS. This statement is contradictory to what is stated in the proposed action section on subsistence. In the proposed action chapter, page 4.3.82, paragraph 4, line 18 notes that "Less income would be available for investment in subsistence-related equipment, and the demand for subsistence products would increase as the amount of income available for the purchase of consumer goods would fall." This contradiction needs to be reviewed.

Additionally, the proposed action and cumulative effects section do not agree. As stated above, the proposed action indicates that there will be less income available for investment into subsistence-related equipment. In the cumulative effects chapter the exact opposite is noted; more income available to pursue subsistence activities. Bullet point 1 on page 4.7-108 of the cumulative effects chapter notes that "Larger amounts of cash would probably be available to individuals pursuing subsistence activities, enabling them to purchase improved subsistence-related technologies (though the precise impact of cash or subsistence activity has not been measured)."

00098077

DEIS contains statement that Chugach Corporation is concerned that the existence of the TAPS on their land precludes other uses --attributed to Rogers (2002). What are the other uses?

This paragraph also claims that trespassing has occurred on Ahtna Corporation lands presumably facilitated by the presence of TAPS access roads near a heavily used snowmachine and ORV use area. If trespassing does occur, this seems to be a matter for security and/or police forces, rather than an issue relevant to renewal of the ROW.

00098078

This paragraph indicates that recreational opportunities and use levels would be expected to decline . . . as a result of decreased state funding . . . . We agree with this assessment. However, this paragraph refers to Section 4.3.19, which (Table 4.3-14) actually projects state expenditures to increase (not decrease) over this time period -- an inconsistency that needs to be explained.

00098079

Recommend adding the following to the summary on economics:

The relative importance of the oil and gas sector is expected to diminish year-by-year as production levels decline, and an oil-based economy transitions to a more diversified economy. The state will have to find means to deal with growing deficits that will slow the economy for some time to come. These means include some combination of spending reductions, imposition of new taxes or increases in present taxes, sale of assets, and revisions to the Permanent Fund.

Recommend that the summary sentence on sociocultural systems be rewritten as follows:

Anticipated effects on sociocultural systems include a continuation of the changes presently occurring -- a mixture of benefits and liabilities. The presence of TAPS is only one of the many forces causing social change among Alaska natives and non-natives.

The summary on recreation, wilderness, and aesthetics needs to be rewritten. To our knowledge, "acceptable levels" have not been defined.

00098080

There appears to be a global inconsistency in the sections 4.4.4.6, 4.4.4.6.2, and 4.4.4.7 on the use of the term "Hazardous Air Pollutants" (HAPs). The term HAPs refers to the hazardous air pollutants listed by Section 112 of the Clean Air Act (CAA). The initial list identified 189 compounds as being HAPS.

The sections noted above are including compounds (cyclohexane, n-octane, and hydrogen sulfide) that are not listed on the Section 112 HAP list and, therefore, by definition are not HAPs. These compounds are hazardous and maybe listed elsewhere in regulation such as under EPCRA or the RMP Program. As such, either these compounds should be removed or the HAP entries changed to provide clarification that not all the compounds listed are HAPs.

00098081

There appears to be a global inconsistency in the sections 4.4.4.6, 4.4.4.6.2, and 4.4.4.7 on the use of the term "Hazardous Air Pollutants" (HAPs). The term HAPs refers to the hazardous air pollutants listed by Section 112 of the Clean Air Act (CAA). The initial list identified 189 compounds as being HAPS.

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00098082

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00098083

The temperature of the surrounding permafrost will also be a significant factor in permafrost aggradation following dismantlement. Permafrost aggradation will be much greater on the northern part of the pipeline. On portions of the southern end of the pipeline the permafrost may not aggrade at all following pipeline removal.

00098084

Insert ", if necessary," before "reseeding" because natural revegetation (without reseeding) is generally preferred.

00098085

All these activities would take place on the workpad or pads for related facilities and the impacts would be localized to the pad.

Soil compaction is unlikely or negligible. Therefore, delete "soil compaction."

Permafrost would degrade where heat pipes or mechanical refrigeration systems are removed, but the DRR activities would otherwise have little to no effect on the permafrost.

00098086

Regarding the last sentence, there would not likely be much if any impact to slope stability or permafrost as these excavations would be on previously disturbed ground under the workpad and would already be thawed.

00098087

Delete "and expand"

There is little reason for mass wasting to expand because the areas disturbed by construction have generally stabilized and thawing of permafrost has slowed with the lowering of the permafrost table.

00098088

First Mile post should be 735, not 35.

This is a poor example of evidence of the impact due to recent climate warming. The area was swampy to begin with and then was disturbed by pipeline construction. It is not reasonable to associate the problems at MP 735 with climate change.

00098089

It is not accurate to say "where it is on the outwash fan of the Delta River". Needs to be changed to "where it is on glacial till".

00098090

It is expected that future surface disturbances leading to thawing of permafrost will be significantly less than the past disturbances because most of the future disturbances will be within the workpad area that has been cleared for over 25 years and the development of thaw bulbs slows with increasing depth.

00098091

This is a poor example of the thawing of permafrost since construction because the thawing at this location is due to the disturbance from the buried pipeline and the spill cleanup (1979) and not to climate change.

00098092

Change "would" to "may" because there is no certainty that climate warming would be at a rate that would increase mass wasting.

00098093

Replace "would" with "may" and after "TAPS" insert "if trends continue for the next 30 years".

00098094

Add " 1998 " to read "1997, 1998, and 2001".

00098095

Line 6: Insert "primarily" after "caused" and remove "the degradation of permafrost due to warming climate change and" and insert "made by fires and mining prior to the construction of TAPS" after "disturbance".

Line 10: Add period after "2000b)" and insert "The"

Line 12: After "2000b)" insert "have had some ground warming and permafrost degradation primarily as a result of the ground disturbance caused by construction and maintenance activities along this section of TAPS that is underlain by very warm and discontinuous permafrost."

00098096

Line 10: Remove "has" and replace with "may have contributed to". Delete "accelerated". After "2000b)" insert "although the changes in creep rates are more likely to be related to vegetation removal and grading during construction and the ongoing maintenance activities on the slopes"

Line 14: Remove "Degradation of permafrost has also been evidenced by accelerated soil creep movement" and replace with "Some minor warming of permafrost may have caused some creep rate changes"

Line 17: Remove "and" and begin new sentence.

Line 19: After "MP 438)" insert "may be evidence of near-surface permafrost degradation."

This paragraph uses examples of soil creep on slopes along TAPS as evidence of recent regional warming. This is an incorrect characterization since soil creep on slopes is not usually the result of permafrost degradation. The process of soil creep, called soliflucation, chiefly occurs from active layer thawing of near-surface soils that occurs on a seasonal (and sometimes daily) basis.

00098097

Riprap may be obtained from more than four sites and new rip rap sites may be permitted. Therefore, suggest deleting the words "four" and "currently" from the sentence.

00098098

To say that the slope has deteriorated is misleading and suggests that the slope is progressing toward failure, which is not the case.

Suggest saying: "In those instances where vertical support members on slopes have moved significantly, replacement or other types of repair may be necessary."

00098099

The siltation and erosion mentioned here was temporary. The sites are stabilized after mining episodes to prevent siltation and erosion.

00098100

A thaw bulb does not generally cause subsidence of the buried pipeline since it is only buried in thaw-stable permafrost. The photos referenced were taken of above ground pipe, not buried pipe.

00098101

Spelling: Tiekel , not Tickel

00098102

The pipeline crosses the Gulkana River, not the West Fork of the Gulkana River.

00098103

"Spruce-fir" forests in the interior are mentioned. There are no fir in interior Alaska. Recommend they be identified as "spruce-birch" or "spruce forests."

00098104

The statement about temporary avoidance to 0.6 mi. applies only to caribou during the calving period, and is not appropriate for this block dealing with all birds and mammals. In addition, the avoidance of oil field infrastructure by caribou is equivocal, with some animals occurring very close to roads and pipes during the calving period.

00098105

It is stated that Prince William Sound was "pristine" prior to the Exxon Valdez oil spill. A recent paper (cited below) shows this was not the case, because there was extensive hunting, trapping, fishing, logging, and fox farming and oil spillage after the 1964 earthquake. In addition, natural oil seeps are a major source of crude oil pollution to Prince William Sound. This misperception should be removed from the DEIS.

Wooley, C. 2002. The myth of the "Pristine Environment": Past human impacts in Prince William Sound and the Northern Gulf of Alaska. Spill Science and Technology Bulletin. In Press. (See Argonne Document #3374).

00098106

The color coding for Coastal Forest and Boreal Forest appear the same and the forest types can't be differentiated.

00098107

The figure legend says wetlands in the vicinity of TAPS, but the map only shows the northernmost part of TAPS.

00098108

The Cronin (2002) citation is not in the lit cited. It is in Volume 3 of the DEIS, however. A better, published reference for this citation on pages 3.21-15 and 3.21-16 paragraph 2 is Cronin et al. (1998a). A better reference for the citation on page 3.21-16 paragraph 1 is Bergerud et al. (1984). These are already in the literature cited.

00098109

The Cronin (2002) citation is not in the lit cited. It is in Volume 3 of the DEIS, however. A better, published reference for this citation on pages 3.21-15 and 3.21-16 paragraph 2 is Cronin et al. (1998a). A better reference for the citation on page 3.21-16 paragraph 1 is Bergerud et al. (1984). These are already in the literature cited.

00098110

The Cronin (2002) citation is not in the lit cited. It is in Volume 3 of the DEIS, however. A better, published reference for this citation on pages 3.21-15 and 3.21-16 paragraph 2 is Cronin et al. (1998a). A better reference for the citation on page 3.21-16 paragraph 1 is Bergerud et al. (1984). These are already in the literature cited.

00098111

The reference Cronin et al. (1998) should be (1998b).

00098112

The Garshelis and Johnson reference is now published. It's 2001, volume 38: pages 19-35.

00098113

The statement about caribou avoidance up to 0.6 mi. should use the original reference (Cameron et al. 1992) which is in the lit cited in Vol 3 of the DEIS.

00098114

Treatment of this subject in the DEIS has considered only selected literature. It would be appropriate to consider the following relevant publications:

Wiens, J.A., R. H. Day, S.M. Murphy, and K. R. Parker. 2001. Drawing conclusions nine years after the Exxon Valdez oil spill: a commentary on Irons et al. (2000). Condor 103: 886-892.

Wiens, J.A., T.O. Crist, R. H. Day, S. M. Murphy, and G.D. Hayward. 1996. Effects of the Exxon Valdez oil spill on marine bird communities in Prince William Sound, Alaska. Ecological Applications 6: 828-841.

Wiens, J.A., T.O. Crist, R.H. Day, S. M. Murphy, and G.D. Hayward. 2001. A canonical correspondence analysis of the effects of the Exxon Valdez oil spill on marine birds. Ecological Applications 11: 828-839.

Also, there is a new list of recovery status from the Exxon Valdez Trustees that should be used to update the information in the DEIS:

Exxon Valdez oil spill restoration plan Draft update on injured resources and services. August 6, 2002. Exxon Valdez oil spill Trustee Council, Anchorage, Alaska.

00098115

Treatment of this subject in the DEIS has considered only selected literature. It would be appropriate to consider the following relevant publications:

Wiens, J.A., R. H. Day, S.M. Murphy, and K. R. Parker. 2001. Drawing conclusions nine years after the Exxon Valdez oil spill: a commentary on Irons et al. (2000). Condor 103: 886-892.

Wiens, J.A., T.O. Crist, R. H. Day, S. M. Murphy, and G.D. Hayward. 1996. Effects of the Exxon Valdez oil spill on marine bird communities in Prince William Sound, Alaska. Ecological Applications 6: 828-841.

Wiens, J.A., T.O. Crist, R.H. Day, S. M. Murphy, and G.D. Hayward. 2001. A canonical correspondence analysis of the effects of the Exxon Valdez oil spill on marine birds. Ecological Applications 11: 828-839.

Also, there is a new list of recovery status from the Exxon Valdez Trustees that should be used to update the information in the DEIS:

Exxon Valdez oil spill restoration plan Draft update on injured resources and services. August 6, 2002. Exxon Valdez oil spill Trustee Council, Anchorage, Alaska.

00098116

There is a new reference that should be cited to support the exchange of caribou among herds in Arctic Alaska:

Cronin, M.A., J.C. Patton, N. Balmysheva, and M.D. MacNeil In Press. Genetic variation in caribou and reindeer (Rangifer tarandus). Animal Genetics.

This paper shows that the Arctic caribou herds constitute a single interbreeding population.

00098117

The words "The number of" should be deleted to make the sentence read properly.

00098118

The DEIS should note that the decline in the north slope moose population has been followed by recovery. See Carol, G. 2002. The rise, fall, and recovery of the Colville River moose population. Moose Call, Vol.14. (See Argonne Document #3371)

00098119

The statement on caribou herds' overlap would read better as follows: These herds have distinct calving areas, but SOMETIMES overlap during other times of the year (Cronin et al. 1998a).

00098120

In Paragraph 6 & 7, it is worth noting that a NMFS biologist recommends delisting the Bering Sea stock of bowheads in:

Shelden, K.E.W., D. P. DeMaster, D. J. Rugh, and A.M. Olson. 2001. Developing classification criteria under the U.S. Endangered Species Act: Bowhead whales as a case study. Conservation Biology 15:1300-1307. (See Argonne Document #3373)

00098121

The TAPS ROW and facilities are EAST of the areas in western Alaska that are described here. Change "west" to "east".

00098122

Note that the sea otter is now considered recovering by the Exxon Valdez Trustee Council and new information is in a report on status of resources:

Exxon Valdez oil spill restoration plan Draft update on injured resources and services. April 10 2002. Exxon Valdez oil spill Trustee Council, Anchorage, Alaska. (See Argonne Document #3332)

00098123

Several communities note that the Exxon Valdez oil spill reduced subsistence activity. However, it should be noted that Reports by the Subsistence Health Task Force following the Exxon Valdez oil spill generally found that subsistence foods were safe to eat. See Report 279, Food Safety Testing 1993, from the Exxon Valdez oil spill Trustee Council (available from the Trustees (907) 278-8012, or www.oilspill.state.ak.us).

00098124

Several communities note that the Exxon Valdez oil spill reduced subsistence activity. However, it should be noted that Reports by the Subsistence Health Task Force following the Exxon Valdez oil spill generally found that subsistence foods were safe to eat. See Report 279, Food Safety Testing 1993, from the Exxon Valdez oil spill Trustee Council (available from the Trustees (907) 278-8012, or www.oilspill.state.ak.us).

00098125

The text states there are about 7500 wolves in Alaska and the table indicates that 1609 were harvested in a year.

Note that In the "Biology of Wolves" from the ADFG website, it says "...in 1994-95 approximately 7,500 to 10,000 wolves...were believed to be in the state." The estimate in the text is thus the low end of the range. For harvest, ADFG says "In the past decade the annual harvest of wolves ranged from 669-1,580 and averaged 1,081, or about 11-16 percent of the estimated population." So the table shows the top of the harvest range. The DEIS should state the ranges of these parameters to give the reader a better view of wolf numbers and harvests. (See Argonne Document #3372)

00098126

The text states there are about 7500 wolves in Alaska and the table indicates that 1609 were harvested in a year.

Note that In the "Biology of Wolves" from the ADFG website, it says "...in 1994-95 approximately 7,500 to 10,000 wolves...were believed to be in the state." The estimate in the text is thus the low end of the range. For harvest, ADFG says "In the past decade the annual harvest of wolves ranged from 669-1,580 and averaged 1,081, or about 11-16 percent of the estimated population." So the table shows the top of the harvest range. The DEIS should state the ranges of these parameters to give the reader a better view of wolf numbers and harvests. (See Argonne Document #3372)

00098127

The Tanana River Milepost should read 531-532.

00098128

Please clarify which response time this table is illustrating (best, average, worst).

00098129

The spill events detailed in the paragraph might be better presented as a table rather than a collection of sites and numbers that become a little unwieldy in a single paragraph. A table in this section that lists all of the scenarios would be useful (as it would save looking up tables in sections included much earlier).

00098130

Table 4.4-9 deals with Maximum Public Exposure to Soot etc. not predicted volumes of oil as stated here. You probably need to refer to Table 4.4.-19.

00098131

Include a reference to Table 4.4-20 after "throughput of 0.3 million bbl/d."

00098132

Table 4.4-22 gives a MP range of 736-800 with the location for maximum oil release at MP 741, BWT. The text says MP720-800.

00098133

Paragraphs 2 and 3: the information presented in these two paragraphs would be much more accessible if presented as a summary table.

00098134

Delete or reword: "The generally direction of the movement depended on the wind direction."

00098135

Define HAP -- Hazardous Air Pollutants.

00098136

The definitions of the meteorological conditions referenced should be expanded (D Class, F Class etc.).

00098137

The Prince William Sound Tanker Oil Discharge Prevention and Contingency Plan was amended in September 2001 and January 2002. These revisions affect the number and type of escort vessels discussed in the following paragraphs. Suggested changes to the DEIS text are provided in subsequent comments.

00098138

Replace the last sentence with the following:

"SERVS uses 10 vessels equipped for tanker escort and docking and for spill response."

00098139

Paragraphs 2 and 3: The vessel configuration at SERVS has changed. Currently, SERVS has 10 vessels equipped for tanker escort and docking and for spill response. (These are no longer referred to as "ERVs" since all but one of the original ERVs have been replaced; rather they are termed "escort vessels.") The 10 vessels are as follows:

-- 2 Enhanced Tractor Tugs (ETTs) (identified in paragraph 3)
-- 3 Prevention and Response Tugs (PRTs)
-- 1 Utility Vessel (formerly ERV)
-- 4 Tugs

The four response barges staged in the Sound are not vessels and are thus not included in the 10 vessels listed above. The last sentence in paragraph 2 should thus be made a separate bullet.

Paragraph 4: The "ocean-going tug" at Hinchinbrook is one of the 10 escort vessels listed above.

Paragraph 6: The last sentence should be deleted because it confuses the vessel count.

00098140

Well written summary of biological resources.

00098141

General comments on the Affected Environment -- Birds section:

1. Why are scientific names not presented at first mention of common names in the Bird section? In some cases use of scientific names would be useful to the reader (e.g., p 3.20-2 paragraph 3 line 10 where Brant are described as "another type of goose"; p 3.20-6 paragraph 2 line 1 in reference to the recently renamed long-tailed duck [formerly oldsquaw]).
2. In the Raptor section (3.20.1.2) perhaps there should be some specific references to the ZRAs (Zones of Restricted Activity), many of which are in place to protect sensitive raptor nesting habitats.

00098142

Edit ". . .migrations that can range. . ." to ". . .migrations can range. . ."

00098143

A more appropriate citation is the ADF&G hunting regulations or the enabling state legislation for the DHCMA, not the TAPS Owners document.

00098144

Regarding Table 3.21-2, the harvest numbers for all species in the table should be better described. Do the numbers include firearm (i.e., gun) and archery harvest (where applicable by GMU and species)? Resident and non-resident harvest (where applicable by GMU and species)? Subsistence harvest (where applicable by GMU and species)? Also, the years should be included in the table title.

00098145

Why is the herd definition statement a footnote? It is important enough to be included as part of the text.

00098146

A citation is required for the 7 seasonal phases.

00098147

Change ". . .that forces the caribou. . ." to ". . . that force the caribou. . ."

00098148

Regarding Table 3.21-3, not all herds were censused in 2000. It would be more appropriate and informative to provide in parentheses the census year beside the estimate. In addition, we assume that all herd estimates were generated with standard survey or census methods. If this assumption is not correct (e.g., herd size estimated from harvest data), this information needs to be elaborated upon. And finally, information regarding harvest data is not complete; do the numbers include firearm (i.e., gun) and bow harvest, resident and non-resident harvest, subsistence harvest?

00098149

Change "phenloic" to "epoxy"

00098150

Delete " also need corrosion control" add " need repair"

00098151

The TAPS Owners have applied for renewal of an array of rights, ranging from the mainline right-of-way to oil spill contingency plan sites. See TAPS Owners' Applications, Line Lists at Vol. 2, Tabs D through H. Those rights are properly identified in portions of the DEIS, see, e.g., p. 2.1, but are too narrowly described elsewhere in the document, see, e.g., pp. ES-1 to ES-2, 1-2 to 1-7, and 1-7 to 1-8. Given the criticality of the description of the rights to be renewed to the analysis being undertaken and the decision that the BLM is making, the DEIS should be modified to accurately and comprehensively describe the rights under analysis that will be renewed.

00098152

The information in this paragraph would be much easier to follow if presented as a table.

00098153

The data in this paragraph do not appear to be included on the tables that summarize the other spill scenarios.

00098154

Add at the end of this paragraph, "The use of native seed specifically grown for revegetation projects would reduce the incidence of exotic species."

00098155

Spell out: AO and SPC . It would help the reader to define each one when they are first used in a new section.

00098156

Although spill response activities could reduce productivity, you should note that they are also likely to reduce mortality of adults. Spill response activities would be likely to disturb animals and move them away from the spill location.

00098157

Define all abbreviations at first use-- ESA-Endangered Species Act, SC-Species of Concern etc.

00098158

Note that cetaceans might avoid a spill area themselves, or they may be disturbed by the response activities and so leave the area.

00098159

The sidebar notes that few visitors go to areas where the pipeline is located. In fact, pipeline visitor centers are some of the most popular visitor sites in Alaska. Visitation numbers are available from BLM.

00098160

Define ACEC here as it is the first use of the abbreviation in this section.

00098161

Section 4.4.4.3 does not mention the number of rivers and streams crossed by TAPS.

00098162

"fathering center" should be "gathering center."

00098163

Define "CSU"

00098164

The Northstar oil field is currently producing. References to the "proposed Northstar project" should read: "Northstar Project" (i.e., delete "proposed")

00098165

Footnote a: The DEIS reference to Table 4.7.5-1 -- does not appear to exist perhaps it should be Table 4.7-1 or 4.7-2.

00098166

Define: AQRV

00098167

Define NORM -- Naturally Occurring Radioactive Material

00098168

Define: TSDFs. While there is an appendix that defines all abbreviations, it would be helpful to the reader to define each abbreviation at the point of first use in each major section.

00098169

Define BWTF: Ballast Wastewater Treatment Facility

00098170

Define units: 50 uR/h = micro rads per hour

00098171

Define: FTE

00098172

Change "anathropogenic" to "anthropogenic."

00098173

Acres is misspelled. "10,900 acres"

00098174

Suggest insert: after (MMS 1998). "There have been no significant offshore oil spills on the North Slope to date, and subsequently no mortality of seabirds and waterfowl."

00098175

Diesel spills are primarily confined to gravel pads and so have had a negligible biological impact. Also, provide documentation for the reference to "hundreds of acres."

00098176

The DEIS states: " . . . only several hundred caribou, at most, might die from oiling. . ."

It is hard to imagine any North Slope spill scenario that would result in "hundreds" of caribou dying as a result of oiling. Caribou would be hazed from spill sites, and would probably avoid spill response areas due to the level of activity. Oiling would only be likely to occur during the period of time between a spill happening and a response team being mobilized to the location. It would be more accurate to say: "some caribou might contact oil and be negatively impacted, but impacts to the herd would be negligible."

00098177

Paragraph beginning: "For listed species. . ."

This paragraph should specifically state that the "past and present activities" that result in a moderate rating are not associated with past or present TAPS/oil field operations.

00098178

The table should clearly state that the use of a moderate or large rating under baseline for Spectacled eider, Steller's eider and bowhead whale are for reasons not associated with current or past oil field activities -- the declines are due to impacts in areas outside of the North Slope.

00098179

The table should clearly state that the species given a minor, moderate or large rating are so rated due to non-oil related activities i.e. past whaling activities or fisheries impacts.

00098180

It should be stated that most behavioral changes noted in cetaceans are very subtle -- and many can only be deduced following statistical analysis. Just because behavioral changes sometimes occur also does not necessarily translate to any biological impact -- either individually or population-wide.

00098181

General Comment for Entire Section: Benchmarking is an important tool for assessment of pipelines and other assets. Benchmarking data can be used to place the scale of health, safety, or environmental impacts into a meaningful quantitative perspective. This section of the DEIS should be expanded to include information relative to the spill performance of TAPS compared to other domestic pipelines and marine transportation systems.

The DEIS does not compare and contrast the relative performance of the TAPS system. TAPS has been shown to have a better record than the average of all other US pipelines on a barrels spilled per billion barrel-mile basis (TAPS Owners, 2001). Because much of the risk based analysis is based upon the historical spill performance of the pipeline, it is appropriate to discuss that performance and put it into context by comparing TAPS to other US pipelines. If this useful information does not warrant a full section, then it should be included as a sidebar.

Reference: TAPS Owners. (2001). Draft Environmental Report for Trans-Alaska Pipeline System Right-of-Way Renewal. Available electronically at <www.tapsrow.com>.

00098182

Several issues need to be addressed in the passage and figure describing the top ten pipeline crude oil spills:

"The descriptions and locations of the top 10 spills, with spill volumes greater than 10,000 gal of crude oil, that have occurred along the pipeline from 1977 through November 2001 are shown in Figure 4.4-1." -- Page 4.4-9, Para. 3, Line 17-22.

The excerpt suggests that all of these spills occurred along the pipeline. However, Figure 4.4-1 lists one spill at the VMT.

The text leads one to believe that the spill information presented in Figure 4.4-1 was taken from the TAPS Owners reference cited earlier in the passage (Column 1, Para 3, line 6). If this is the case, then Fig 4.4-1 is incomplete. The oil spill database used in the TAPS Environmental Report lists two more crude oil spills in excess of 10,000 gal. Both of these spills are listed as occurring at the East Impound Basin at the VMT. One occurred on August 25, 1983, and released 12,600 gal of crude oil and the other occurred on July 25, 1984, and released 24,570 gal of crude oil.

If the source for Fig 4.4-1 is ADEC, 2001b as cited in the figure, it should be noted in the text.

A final suggested edit follows: "The descriptions and locations of the top 10 spills listed in the ADEC spill database, with spill volumes greater than 10,000 gal of crude oil, that have occurred along the pipeline and at the VMT from 1977 through November 2001 are shown in Figure 4.4-1." --Page 4.4-9, second column, Para. 1, Line 9-14.

00098183

Based on the Exxon Valdez experience, the largest economic impact of an oil spill would be employment and income generation in the cleanup effort. Offsetting this could be a reduction in fishing, recreation, tourism, etc., activity.

00098184

It makes no sense to consider the revenue loss from an oil spill assuming throughput of 2 million barrels per day if there is no likelihood that throughput will rise above 1 million barrels per day in the next 30 years.

00098185

There is little point in this analysis if in fact lost revenues from temporarily shutting down the pipeline would be eventually recovered by faster production sometime later. As is suggested in footnote "a" of Table 4.4-38. Note "c" to accompany Table 4.4-38 is missing. The captions to this table should be revised for clarity.

00098186

Significant recreation occurs around Valdez and Wrangell St. Elias National Park. There is also recreation in Prince William Sound.

00098187

Box Entitled: Impacts of Oil Spills on Property Values and Overall Economic Activity: If there is little alternative use for land, then the loss in value from a spill would be negligible rather than "hard to establish."

00098188

The use of the term "likely" is inappropriate here. A loss in oil revenues would CERTAINLY increase state budget deficits absent the imposition of budget balancing measures not addressed in the DEIS.

00098189

Box Entitled: Impacts of No-Action Alternative on Population, Gross State Product, Employment, and Income: This summary characterization of the economic impact of the no-action alternative is completely inadequate. Native population growth is independent of the pipeline. The impacts on employment and income are indeed smaller than the impact on GSP but they are not "small." Their drops in the later half of the decade reflect a protracted period of severe depression for the Alaska economy. To completely ignore this by saying that over the entire 30-year period the rate of growth is positive is ludicrous. The depression would result in a population loss from out-migration, a crash in the value of all fixed assets, such as real estate. State general fund revenues would virtually disappear overnight, pushing state government in a crisis. Local government would follow shortly thereafter because so much financial support for local government comes from the state.

00098190

There is no mention here of what would happen to the instate refineries in the absence of a supply of oil from the North Slope.

00098191

This same comment applies to the proposed action alternative, but it is of much greater significance in terms of the no-action alternative. The DEIS correctly notes that "the absence of almost all state oil revenues would mean that significant additional sources of funds would be needed . . . to cover slowly increasing General Fund expenditures." However, the DEIS analysis simply assumes that these additional funds will be available and from such a source that little or no adverse impacts (other than on GSP) would result. This stretches credulity. In the year 2000, state expenditures were reported (see Table 3.23-9) as approximately $5.2 billion ($8,358 per capita), of which the oil and gas industry provided (see Table 3.23-7) approximately $2.4 billion ($3,823 per capita) of this total. The state faces a $1 billion annual deficit even if oil and gas revenues continue. What is the likely impact if these revenues were to disappear?

The analysis of the no-action alternative assumes that state expenditures can increase to $6.4 billion by 2034 (Table 4.6-19) even though revenues from the oil and gas industry are virtually zero because TAPS and the ANS fields are shut down beginning in 2004.

Any of the options discussed to date (reduced expenditures, increased taxes, and sale of assets) to balance the state budget would entail economic consequences not considered in the analysis of the no-action alternative. As a result, the adverse economic impacts -- carefully depicted in the Environmental Report prepared by the TAPS Owners -- presented in the DEIS are significantly misrepresented! This is a fundamental flaw in the analysis; effects of this assumption are reflected throughout the economic and other sections.

Any of the options discussed to date (reduced expenditures, increases taxes, and sale of assets) to balance the state budget would entail economic consequences not considered in the analysis of the no-action alternative. As a result, the adverse economic impacts -- carefully depicted in the Environmental Report prepared by the TAPS Owners -- presented in the DEIS are significantly misrepresented! This is a fundamental flaw in the analysis; effects of this assumption are reflected throughout the economic and other sections.

00098192

General Comment for Entire Section: The results of this analysis stand in sharp contrast to those depicted in the TAPS Owners Environmental Report. This analysis provides no indication of the sharp and deep recession (see Fig. 4.4-14 of the Environmental Report) forecast in the Environmental Report, nor of the enduring differences in total personal income, disposable income, or employment impacts. We believe that your erroneous assumption that the State will find a way to balance the budget at current spending levels regardless of the actual economic losses incurred by removing the oil industry from Alaska is the cause of the inaccurate and misleading results.

00098193

Comparing Tables 4.6-13 and 4.3-8, it is difficult to believe that there would be such small differences in the GSP projections for state government between the proposed action and no-action alternatives. This result is probably an artifact of the unrealistic assumption that the state is able to sustain deficits or to find other sources of funding for state programs.

00098194

The GSP numbers for the individual industries do not add to the total. In particular, in 2004 the GSP falls by nearly 9 billion. However the only sector showing a loss is oil and gas, which falls about 2 billion. If the pipeline closes, one would expect to see some drop in transportation GSP. If the refineries shut down, that should be reflected in manufacturing.

Table 4.3-8 (p. 4.3-70) has the same difficulty -- sums across industries (excluding tourism) do not equal the Alaska total.

00098195

The use of the term "moderate" to describe the loss of personal income in the event of nonrenewal of the pipeline is perhaps consistent with the numerical estimates shown in Table 4.6-16, but does not reflect what is actually likely to happen. Based upon Goldsmith's analysis of this alternative using the same MAP model the actual reduction in personal income or disposable personal income per capita (depicted in Figs. 4.4-7 and 4.4-8 of TAPS Owners, 2001) the differences between the proposed action and no-action alternatives are substantial and enduring.

The loss would be considerable as would the wealth of Alaska households (primarily real estate). Although the average growth over the 30-year period might indeed be positive, if there is a depression during the 30-year period, it is unconscionable to ignore it.

00098196

This table shows an increase in state (12.9%) and local (19.9%) government employment during the 30-year projection period. In fact a shortfall of revenues starting at about $2 billion in 2004 and growing over time would almost certainly precipitate a dramatic decline in state and local government employment. This would in turn have a negative multiplier effect on the economy, lengthening and deepening the economic depression that would accompany the no-action alternative.

00098197

This analysis concludes that the Permanent Fund Dividend per capita would be 12.2% higher in 2034 under the no-action alternative ($965, see Table 4.6-16) compared to the proposed action alternative ($860, see Table 4.3-11) -- a result that strains credulity. Presumably the reason for this finding is that the Permanent Fund distribution is divided among fewer people in the case of the no-action alternative.

00098198

The DEIS asserts that "The loss of oil production and the end of pipeline operations would only have a moderate impact on the ability of local governments to maintain existing service levels. This conclusion is reached because the analysis assumed that state transfers to local governments would not be affected by the loss of state oil revenues with the nonrenewal of TAPS."

As noted in other comments, the assumption that state budgets will not be severely impacted by the loss in petroleum revenues if the no-action alternative is selected appears unreasonable. It may well be beyond the scope of the EIS (noted on page 4.6-63 bottom paragraph 2) to forecast just exactly what options will be selected by the state to address the significant revenue shortfall that would result if the no-action alternative were selected. But it is also unreasonable to assume that the resulting fiscal crisis can be addressed without significant impacts (e.g., budget cutbacks, liquidating assets, drawing down reserves, etc.).

The consequences of this inaccurate and ultimately misleading assumption are reflected throughout the economic analysis of the no-action alternative in terms of state (Table 4.6-19) and local government (Table 4.6-20) expenditures, Permanent Fund Dividend (Table 4.6-23), and at many other places in the analysis.

00098199

This paragraph states that State revenues would fall about 25% from the loss of oil revenues. This implies the state could, albeit with some difficulty, absorb the loss. In fact this loss represents the elimination of all but about 20 percent of the general fund budget -- from which unrestricted spending originates. A quarter of the budget is nondiscretionay federal grants, a quarter is the earnings of the Permanent Fund that according to the DEIS analysis continues to be directed to the dividend. The rest is agency receipts for activities such as the operation of the airport. In sum the loss means the state cannot continue to fund basic programs without severe dislocations within the economy.

00098200

Box Entitled: Impacts of No-Action Alternative on Tax Revenues: The direct revenue loss to local government would be from the petroleum property tax. However, the economic depression would devastate property values and this would reduce general local property tax receipts. The loss of state revenues and resulting budget cuts would mean a loss in local government transfers, including support for K-12 education. Finally, the loss in state revenues would lead to the elimination of programs that benefit rural parts of the state, particularly in the area of health and social services.

00098201

This illustrates why summarizing the economic impacts by reporting only the average rate of change over the 30-year period misses what is important. Although state revenues fall by more than $1 billion overnight, the text reports only that "overall tax revenues in the state would decrease at an annual average rate of 1.5% over the 30-year period." This gives the Alaskan reader a false sense of the future without North Slope oil production and should be changed. An accurate illustration of state revenues is warranted.

00098202

As indicated in an earlier comment, the loss of economic activity at the local level would be severe due to the loss of employment in pipeline and oil production activities, the loss of public revenues -- state and local.

00098203

The economic depression that would accompany the closure of the pipeline and shutdown of North Slope oil production could result in a migration from rural to urban Alaska. No one can say for sure, but if it were to happen it would merely represent an amplification of a trend that has been occurring in Alaska for some time.

00098204

This is another example of how summarizing the economic impacts by reporting only the average rate of change over the 30-year period misses what is important. This statement completely ignores the income loss and economic depression. As shown in Figure 4.4-8 of the TAPS Environmental Report (TAPS Owners, 2001), disposable personal income is projected to decrease sharply from 2004 to 2008 and then slowly recover but not reach 2004 levels until well past 2015.

Reference

TAPS Owners. 2001. Draft Environmental Report for Trans Alaska Pipeline System Right-of-Way Renewal. Anchorage, AK.

00098205

This is another example of how summarizing the economic impacts by reporting only the average rate of change over the 30-year period misses what is important. This statement completely ignores the jobs loss and economic depression. If the annual data were graphed, there would be an obvious trend that could not be ignored.

00098206

This is another example of how summarizing the economic impacts by reporting only the average rate of change over the 30-year period misses what is important. This statement completely ignores changes in unemployment, population changes, income loss, and economic depression. As shown in Figure 4.4-10 of the TAPS Environmental Report (TAPS Owners, 2001), the overall state population is projected to be approximately 16% lower in 2015 than if the proposed action is chosen. As another example, unemployment peaks at 11% in 2006/07 as compared to 8% in those same years if the proposed action is chosen.

00098207

The discussion on subsistence begins with the statement that "lost oil production and oil revenues in 2004 and beyond would affect subsistence through the slight decline in per capita Permanent Fund Dividend support to personal incomes in the Alaska Native community." Presumably, this statement refers to a temporal trend shown in Table 4.6-16 for the no-action alternative, rather than a comparison between the impacts of the proposed and no-action alternatives. Because of what we believe is an error in the economic analysis, the PFD per capita in 2034 is actually greater in the no-action alternative than in the preferred action alternative.

00098208

The statements in this paragraph that road conditions would decline on the Dalton Highway because the state would neglect to maintain it and secondly that the financial resources of Alaska residents would decline in the event of the no-action alternative are not unreasonable. They are, however, not fully supported by the results of the economic analysis. According to figures presented in the DEIS state expenditures in the year 2034 are lower in the case of the no-action alternative compared to the proposed action alternative ($6.4 billion compared to $7.3 billion), but so too is the population, with the result that the expenditures per capita are essentially identical ($6,606 per capita) in 2034 whichever option is selected. Personal income per capita in 2034 under the no-action alternative ($23,851 in Table 4.6-16) is only marginally lower than that ($24,980 in Table 4.3-11) in the case of the preferred action alternative.

The fault, in our view, does not lie with the subsistence comment on page 4.6.-71, but rather with the results of the economic analysis.

00098209

The actual economic impacts of the no-action alternative compared to the proposed action alternative -- as opposed to those depicted in the DEIS -- almost certainly entail significant economic hardships including recession, loss of incomes (including a probable loss or at least significant reduction of the PFD), and significant reduction in state and local (particularly the North Slope Borough and Valdez) spending. And loss of the PFD would probably exacerbate social problems -- a point that should be made in this section.

In order to do this yet maintain consistency with the results of the economic analysis will require that the economic analysis be modified -- at least to the extent that some acknowledgement is given that adverse economic impacts are understated.

00098210

The summary description of the economic impacts of the no-action alternative is incorrect for two reasons:

First, it significantly understates the adverse economic impacts that would result from selection of the no-action alternative.

Second, the summary as written is inconsistent with the more detailed findings. For example, the summary claims that there would be "initial declines in gross state product" followed by slow growth through 2034. This statement fails to adequately summarize the chart shown in Fig. 4.6-1 (see also Table 4.6-13). In fact, there is a precipitous (38%) drop in GSP in 2004 and despite "slow growth" the GSP does not recover to its 2003 pre-TAPS shutdown level by the end of the analysis period in 2034. Personal income per capita (see Table 4.6-16) likewise does not recover to pre-shutdown levels by 2034.

The summary of the economic impact on the state of the no-action alternative is totally inadequate. To characterize it as an 'initial decline to be "followed by slow growth" completely misses the critical point that it will result in a severe and protracted economic depression for the state.

00098211

General Comment for Entire Section: Overall, this section is well written and reaches generally sound conclusions despite the errors in the economic analysis on which some of it is based. In discussing adverse impacts on minority and low-income populations it should be noted that budget pressures in the state and in some other localities (e.g., the North Slope Borough) as a result of the decline in petroleum revenues might well impact funds for education. Largely because of relatively small school sizes (economies of scale) education is very costly in Alaska on a per pupil basis. We cannot forecast exactly how program budgets would be cut in response to sharply reduced revenues, but it is unlikely that any program would be untouched. State budget cuts affecting public schools would affect all students, including low income and minority students. However, available data from the US Department of Education, National Center for Educational Statistics, National Household Education Survey, 1993 indicate that children of parents with greater income or education are more likely to select private schools or to have their choice of residence determined by school quality. For example, on a national basis approximately 17.1% of students with family incomes less than $15,000 annually went to chosen schools (3.2% to private schools) for grades 3 to 12, compared to 24.1% (15.6% in private schools) of those with family incomes greater than $50,000 annually in 1993.

Thus, cuts in public education funds are likely to have a greater effect on minority and low-income populations.

00098212

In addition to the transfer programs from state to local government mentioned, the state funds most of education in rural Alaska, provides some services directly, and also funds some programs, particularly in health and human services that target rural communities. These would all be in jeopardy with the abrupt loss of oil revenues.

00098213

Reference to out-migration and potentially beneficial effects on subsistence needs to be checked against data presented in Table 4.6-12 showing that there is apparently a net in-migration (perhaps the error is in this table). The statement that subsistence will improve because of "the emergence of an economy that is not necessarily as conducive to sport hunting and fishing as the present economy" is more conjecture than fact. It is also possible that attempts to increase tourism in a depressed economy could result in increased hunting and fishing pressure from out-of-state residents.

00098214

". . .infant mortality among Alaska Natives decreased from approximately 36% between 1988-1990 and 1996-1998 . . . ." The Alaska Native infant mortality rate was not 36% in the 1988 to 1990 interval. The infant mortality rate (measured as the number of infant deaths per 1,000 live births) did decrease 36% from 10.5 in 1988-1990 to 6.7 in 1996-1998. The sentence should be corrected by deleting the word 'from' in line 23.

Paragraph 2 left, line 27: A figure of 'nearly 70%' is quoted here. On page 26 of the NSB 1998/99 Economic Profile and Census Report the actual percent of adults living in the North Slope Borough who have earned a high school diploma, GED, or attended some form of higher education is given almost 76% for 1998. Suggest updating the 70% figure to 76%.

Paragraph 1 right, line 16: Based upon the graph on page 5-5 of the Mental Health chapter of the Healthy Alaskans 2010 document available at the Alaska Department of Health and Human Services website (<http://health.hss.state.ak.us/dph/deu/ha2010/volume_1.htm>) the suicide rate fell to 39 in 1997, not 41 as given in the DEIS.

The statistics presented in the sociocultural section are interesting and useful in describing the improvements in health care and general well being of Alaska Natives. However, the DEIS does not drive home the point that some social changes are beneficial and that 'going back to the old ways' is not always a superior choice. Time trends for data show that Alaska Natives are much better off today than in the past with regard to the following statistics. For example, in 1940, infant mortality rates (measured as infant deaths per 1,000 live births) among Alaska Natives were as high as 120 and now as low as 6.7. Neonatal deaths rates (measured as deaths per 1,000 live births) averaged approximately 70 in 1950 and decreased to less than 5 by the mid-1990s. The life expectancy for an Alaska Native has increased from approximately 46 years of age in 1950 to over 65 years of age today (ECA, 2000). The DEIS may be improved with the inclusion of these statistics.

Reference

Everest Consulting Associates (ECA). 2000. Memo to Anne Brown, "Alaska Native Infant Mortality / Life Expectancy." December 7, 2000.

00098215

The following paragraph characterizes the cumulative sociocultural effects associated with the no-action alternative: "Not renewing the Federal Grant would remove a source of wage employment for rural Alaskans, which as noted can have positive as well as negative consequences. It would also remove a considerable amount of state and local (North Slope Borough) tax revenues used to fund public services, programs, and infrastructure. . ."

This description is incomplete and offers little perspective on the merits of the alternatives under consideration. It is certainly true that oil and gas developments have had both beneficial and adverse effects on sociocultural systems. However, it is difficult to imagine that the substantial adverse economic consequences (e.g., depression, loss of employment, loss of government services) that accompany the choice of the no-action alternative could be offset by commensurate social benefits. Choice of the no-action alternative is unlikely to reverse social change or to permit a return to the way things were. Rather it is likely to leave Alaskan society with the same social problems and fewer resources with which to cope with these problems. The "wage employment" effect noted in the above quotation not only includes those directly employed by the oil and gas industry and its contractors, but also jobs (e.g., teachers, nurses) supported by tax revenues from this industry.

00098216

It does not make sense to suggest that an oil spill would increase tax revenues at the state level.

00098217

This paragraph discusses the anticipated cumulative effects associated with the no-action alternative. Although the introductory paragraph on economics on page 4.7-115 indicates that a discussion of the no-action alternative is included in this section, only this one paragraph is included. (The no-action alternative is also mentioned in Table 4.7-13 on pages 4.7-129 and following.) This deficiency should be remedied. Understanding the cumulative economic effects of the no-action alternative is important. Some of the most significant points that should be considered are listed in Table 4.5-17 of the TAPS Environmental Report (TAPS Owners, 2001).

00098218

The statement that: "The gas pipeline and its related infrastructure would substantially add to the currently existing visual impacts along and within the TAPS ROW" is not supported by the facts. The gas pipeline will be buried and the only facilities visible along the ROW will be compressor stations -- analogous to pump stations for TAPS. Use of the word "substantial" seems unjustified. The DEIS should provide some idea of the number, nature, and areal extent of the gas pipeline facilities (available from other EISs) to justify such a judgment.

00098219

As noted in another comment, we believe that it is unreasonable to believe that the gas pipeline could go ahead in the event that the no-action alternative was selected. Thus, we believe that the sentence fragment: "However, the gas pipeline would still likely be built. . ." is incorrect. Additionally, the use of the word "likely" can be questioned. According to the most recent studies, a gas pipeline is not economically feasible at present. Although such a project may be "reasonably foreseeable" for purposes of a cumulative effects analysis, it is not necessarily "likely."

00098220

Strongly disagree with the following sentence: "Analyses indicate that high and adverse impacts would not be anticipated for cumulative actions combined with the proposed action, less-than-30-year renewal alternative, or the no-action alternative."

Specifically, in discussing the effects of the no-action alternative, the DEIS correctly states (page 4.6-83): "This DEIS anticipates impacts under the no-action alternative that may be considered high and adverse, specifically those associated with economic effects at the state and local levels of discontinuing the TAPS."

What is it about the cumulative case that would change the environmental justice impacts of the no-action alternative? The only two potentially significant projects included in the cumulative case are the NMDS in Ft. Greely and the gas pipeline. It is acknowledged in the economics section (page 4.7-116) that the NMDS would create "a total of 360 direct operations jobs and additional 110 indirect jobs. . . Currently 600 civilian and military jobs are under threat as part of the plan to close the base at Ft. Greely." Thus, the NMDS project would not even compensate for anticipated job losses. We believe that it is absolutely unreasonable to assume that the gas pipeline would go forth if the no-action alternative were selected. But, even if it did, the economic benefits of the gas pipeline are very much smaller than those associated with TAPS. The gas pipeline would not provide enough revenues to the state to balance the budget or to maintain Permanent Fund Dividends at their present levels.

It is inconsistent to claim that the no-action alternative would have environmental justice impacts that "may be considered high and adverse," yet elsewhere in the same document to claim that the cumulative environmental justice effects would not also be high and adverse.

00098221

The summary of the anticipated cumulative economic effects of the no-action alternative is incomplete and flawed. The "summary" is limited to brief mention of the possibility that a gas transmission system might partially offset economic losses associated with the no-action alternative. There is no mention of the economic consequences of the no-action alternative.

Moreover, it is very difficult to imagine circumstances under which either the federal or state government would decide not to renew the TAPS right-of-way, yet allow natural gas development to take place. Engineers should comment on the technical feasibility of producing solely gas from fields closed because the ROW is not renewed. From a business perspective, the risks and returns of gas development assuming that the government chose not to renew the TAPS ROW are not likely to be commensurate. In the Environmental Report prepared by the TAPS Owners (2001), it is assumed that selection of the no-action alternative would foreclose ANS gas commercialization.

Thus, instead of stating that a gas project might somehow compensate for the loss of the ANS oil fields, the description of the no-action alternative should note that the choice of the no-action alternative has the added negative impact of stranding major gas deposits.

Even assuming, for argument's sake, that gas development would take place in the event that the ROW was not renewed, the claim that gas development "might partially offset" the negative impacts associated with nonrenewal should be backed up with calculations and estimates of the degree of "offset" that would occur. According to data presented in the Spring 2002 Revenue Sources Book, published by the Alaska Department of Revenue, oil revenues to the state totaled nearly $2.3 billion in fiscal year (FY) 2001. This same source estimates that a 4.5 bcf gas line would generate $400 million in new state revenue if gas prices were $3 per million Btu in Chicago. The report goes on to state, however, that "many gas price forecasters do not expect prices to hold much above $3 per million Btu on a consistent basis over the next decade" and noted that a recent study concluded that "the [gas] project is not economic based on their cost estimates and market projects." In practical terms, a gas commercialization project -- even if it commenced with certainty in the short-term -- would not "offset" a loss in oil revenues to any great extent.

Reference

TAPS Owners. (2001). Draft Environmental Report for Trans-Alaska Pipeline System Right-of-Way Renewal. Available electronically at <www.tapsrow.com>.

00098222

The summary of the cumulative sociocultural impacts of the three alternatives under consideration is incomplete and confusing. The table entries for the "less-than-30-year renewal alternative" and the "no-action" alternative are identical and read "same impacts as under the proposed action." Do the authors mean that the effects are qualitatively similar or that these effects are identical? Would a rational decision-maker concerned only with social effects be absolutely indifferent to the choice among these alternatives?

00098223

The text states there were originally 2 breaches in the Endicott Causeway. This is true, but it would be appropriate to note that there are now 3 breaches in the causeway.

00098224

This comment refers to all the Maps for Figure 4.7-6.

The exploration well drilled in the ANWR by the Kaktovik Inupiat Corporation and partners is not indicated on the maps.

00098225

It is stated that the human health impacts of spills are not insignificant and of the same order as those from ingestion of smoked meats and fish. This needs to be referenced. Reports by the Subsistence Health Task Force following the Exxon Valdez oil spill generally found that subsistence foods were safe to eat. See Report 279, Food Safety Testing 1993, from the Exxon Valdez oil spill Trustee Council (available from the Trustees (907) 278-8012, or www.oilspill.state.ak.us).

00098226

It is stated that the human health impacts of spills are not insignificant and of the same order as those from ingestion of smoked meats and fish. This needs to be referenced. Reports by the Subsistence Health Task Force following the Exxon Valdez oil spill generally found that subsistence foods were safe to eat. See Report 279, Food Safety Testing 1993, from the Exxon Valdez oil spill Trustee Council (available from the Trustees (907) 278-8012, or www.oilspill.state.ak.us).

00098227

There are several changes to references and wording that will make this section more accurate.

1. Line 9. Replace Pollard et al (1996a) with Murphy and Lawhead (2000) which is already in the citations.
2. Lines 14-18. Reword as follows: SOME will avoid roads "following partuRition" (CAMERON ET AL. 1992, Cronin et al. 1994). These citations are already listed.
3. Lines 18-21. Reword as follows: Caribou, including cows with calves, do not avoid developments during the post-calving period (Pollard et al. 1996b, Cronin et al. 1998a). These citations are already listed.

00098228

It is stated that ADF&G enforces fishery regulations. Note that the Alaska Dept. of Public Safety (State Fish and Wildlife Protection) also enforce fish and game regulations.

00098229

The statement about the numbers of caribou in the Central Arctic Herd should be updated. The 2000 census showed about 27,000 animals. References for the censuses in the 1990's-2000 are:

Cronin, M.A., H.A. Whitlaw, and W.B. Ballard. 2001. Addendum. Northern Alaska oil fields and caribou. Wildlife Society Bulletin 29:764.

Cronin, M.A., H.A. Whitlaw, and W.B. Ballard. 2000. Northern Alaska oil fields and caribou. Wildlife Society Bulletin. 28:919-922.

00098230

The statement about loss of scores of bear and deer from a tanker spill should be rewritten to reflect documented moralities to these species from the Exxon Valdez spill. Cite references.

This comment also applies to Tables 4.7-9, 4.7-10 and 4.7-11.

The approach to identify cumulative impacts is interesting and has merit. The presentation of an existing baseline is particularly useful for putting the proposed action and other future actions in perspective. A potential oversight, however, is that a baseline ranking definition for species listed under the MMPA (see point 5 below) was not provided. The following points are relevant to the baseline rankings in Tables 4.7-9, 4.7-10, and 4.7-11.

1. The definition of the baseline rankings (footnote "b" in the tables) could imply that the past impacts of TAPS and other actions is the cause of the baseline status of the species. It should be explicitly noted in the text and table footnotes when the cause of the baseline status of the different species is not known, and that there is no evidence that TAPS resulted in the baseline condition of these species. The different definitions for baseline rankings (i.e., ESA or State Species of Special Concern category) should also be in footnote "b".

2. Footnote "a" defines the ranking terms in relation to predicted effect of an action (as described in the text on page 4.7-102), but does not differentiate these ranking definitions from the baseline definitions (i.e. for listed species). You should clearly differentiate the definitions for baseline and action cumulative effects in the text and tables.

3. For the Table 4.7-9 entry for Pacific Walrus in the Beaufort Sea, it is not clear why a "minor" baseline and cumulative effect is noted. The species appears healthy in the Bering Sea, and rarely occurs in the central Alaskan Beaufort Sea. It is not listed as depleted, threatened or endangered.

4. It is not clear why the sea otter in Prince William Sound is listed as having a "moderate" baseline and cumulative effect in Table 4.7-11, because is not listed as depleted, threatened, or endangered in Prince William Sound.

5. The Beluga whale in Prince William Sound has a baseline ranking of "moderate" in Table 4.7-11, but is mis-classified. First, footnote "e" for Table 4.7-11 references the Beaufort-Chukchi stocks, but probably should refer to the Cook Inlet Stock, which can occur in Prince William Sound. Second, there is no ranking category for the MMPA depleted category status in paragraph 4 on page 4.7-102. The Cook Inlet beluga stock is listed as depleted under the MMPA (due to over harvest) but not listed under the ESA. Add a definition for MMPA depleted status in paragraph 4 on page 4.7-102.

00098232

This would be more clear if stated: "The size of the power units range are 400 and 800 KW and the number of generator sets varies at the stations depending on the required power. The installed power ranges is from 1.3MW at PS-12 to 4.7MW at PS-6."

00098233

The batteries ARE the power supply and NOT the backup. The small propane fired generators are essentially trickle charges that keep the batteries charged. It should read: "Each RGV is powered by batteries. . . . The batteries provide the source of power for the RGVs. Propane-fired generators and where available, commercial power serve as battery chargers."

00098234

Not all pigs are smart pigs. Suggested change: "Pigs are cylindrical objects inserted into the pipeline periodically that are propelled by the moving oil or gas and used for cleaning. Sometimes the pigs are instrumented (hence their name smart pigs) to detect corrosion, deformation, wall-thinning, or curvature changes in the pipe."

00098235

SERVS escort tankers to approximately 17 miles outside of Hinchinbrook Entrance, not sure if this is international waters. Suggest using this fact to better describe the escort pattern.

00098236

The last sentence is incomplete and should end with ". . . from either the Federal [add: or State] On-Scene Coordinator"

00098237

This section identifies a flare stack at the Valdez Marine Terminal. There is no flare stack at the VMT. The terminal has no flares.

00098238

The sentence is incomplete and is left hanging.

00098239

Each of the pump stations 1,3,4,7,9, and 12 are envisioned to also receive new pump modules and electrical switchgear. This should be reflected in the equipment to be added.

00098240

The loading ARMS are the subject of removal (not legs). Also, the same sentence incorrectly indicates removal of the VOC control (only from Berth 3),. . . Berth 3 is one of the berths that does NOT have vapor controls.

00098241

The GCI fiber optic cable is not part of TAPS, and is not owned by the TAPS Owners. It occupies its own separate right-of-way.

Add as last sentence: "The FOC in some places is attached directly to the pipe and in other areas it is connected to the VSMs or workpad and pipeline bridges. In these locations the FOC would have to be removed and either buried or supported by other means."

00098242

Pipe friction is not a significant contributor to atomizing crude oil. The most the temperature rise across a limited length of pipe is across a pump station and here the maximum temp rise is only a few degrees F and not likely to cause a problem. Suggested rewrite: ". . . Crude oil movement in pipelines requires pressurized flow. Small leaks would tend to create an aerosol spray along with the liquid crude oil. If an ignition source was present, a flash fire. . . "

00098243

Freon is incorrectly identified as the fire suppression agent. The correct agent is Halon.

00098244

The wall thickness of the tanks is greatest at the bottom. Reword the sentence to read: "Wall thickness is 1 ½ at the bottom, decreasing to 1 1/8 at the top."

00098245

The report indicates that the pressure in the pipeline at MP 178 would exceed 1,000 psi that oil would likely flow to the surface and . . . . Our calculations indicate 700 psi at 1 MMBD and up to 850 psi at max throughput during normal operations (upsets may exceed this amount). Suggest rewording to eliminate any specificity and read as follows: "Because the pressure in the pipeline exceeds hundreds of psi, it is likely that the released oil. . . "

00098246

The last sentence of the paragraph states "No federal noncompliance events have been reported (TAPS Owners 2001a)." This statement is made in reference to Alyeska NPDES permits. Some minor noncompliances with the linewide permit have been self-reported by Alyeska.

00098247

The entire section is committed to discussing groundwater, and this paragraph in particular discusses the impact of sanitary wastewater to the groundwater. Remove ". . . and the fact that releases must be within the guidelines of the linewide NPDES permit." The linewide NPDES permit regulates wastewater releases to surface water of the U.S. and does not regulate sanitary discharges to groundwater.

00098248

4th Paragraph -- There is no NPDES permit upper limit to the volume allowed to be discharged for hydrostatic testing therefore modifications to the line-wide NPDES permit would not occur simply because of an increase in the volume of hydrostatic test waters. The last sentence of the 4th paragraph should be removed.

5th Paragraph. -- Remove the 3rd sentence. The NPDES permit will not be amended simply because we are producing wastewater at those locations where new pipeline segments will be buried.

00098249

1st bullet -- each site could release 500,000 gallons. In my opinion this estimate is very low. Consider rewording as follows: "Dewatering 15 to 20 corrosion repair sites per year that could release an annual total of approximately 500,000 gallons of water per site to the environment."

00098250

Last sentence of paragraph -- The second half of the last sentence states that there have been no formal NPDES incidents of noncompliance. . . This is not true and should be removed from the sentence. There have been formal incidences of noncompliance regarding excavation dewatering. It is assumed that "noncompliance" means violations of the NPDES permit.

NOTE: Find other NPDES comment and replace language.

00098251

Include the word "domestic" between "treated" and "wastewater". Also, remove the words "to land" because this makes the sentence confusing to anyone who knows NPDES. NPDES by definition refers to discharges to Waters of the US.

00098252

"Surface water regime" affected by sanitary wastewater discharge etc? Correct to read: "Surface water quality".

00098253

"Along the Jim River . . .the above ground pipeline parallels the riverbed . . ."

Note, both buried and elevated crossings exist here.

00098254

(". . . e.g. unanticipated release flows on the Tazlina River in 1997 significantly modified . . .and required rapid response. . . .")

Glacier dammed lake releases were clearly anticipated on the Tazlina River -- the Design Criteria document (Argonne Document reference #133) indicates the years the releases occurred. What is not certain is the timing of any release as it depends on rainfall, snowmelt as well as characteristics of the glacier.

A "rapid" response was not required in the sense that the bank armoring constructed was an emergency action. The remaining river-to-bank buffer was still substantial even after the flood in 1997. However, it was felt that the next large flood -- the 1997 flood was a record event -- could reduce the buffer to a point that was unacceptable for a major bridge structure. So Alyeska constructed the armoring as a prudent measure to minimize future concerns (see Figure 4.1-8 notes).

00098255

"Adding spur dikes. . ..used to protect eroding stream banks"

Spur dikes are also used to protect shallow buried line in the floodplain. The spur dikes reduce velocities and scour which allow shallower pipe burial depth.

00098256

1) "Riprap islands are often placed around the piles".

Islands of riprap at the VSMs are rarely used.

2) Line 17: "A similar method. . .is used to armor access areas to pipeline valves."
The riprap at R6V34, MP 186 protects the entire valve installation, not just the access.

3) Paragraph 3, line 6 from the bottom, "Because an integral component of structural design. . ."

This should read "river training structure design."

00098257

"Erosion and sedimentation were wide spread problems during the initial construction . . .most have been eliminated. . ."

This page addresses overall river processes and the usage of various river training structures to protect the pipeline from these processes. On the other hand, the Draft EIS probably refers to construction induced impacts such as:
- initial bank erosion at an installed buried pipeline crossing until revegetation ore restoration was complete,
- instream sedimentation (both suspended and bedload) caused during the construction of large buried crossings.

Thus the comparison of problems during construction versus what is happening now is not relevant.

00098258

"The major flood that occurred on the Sag River in 1992 produced a peak flow of about 42,900 ft 3/s."

This was the estimated peak flow at the USGS flow monitoring station near Sagwon. Due to very high inflows from the Ivishak River, which enters the Sag River downstream of Sagwon, the flows downstream were much higher and estimated to be about 2 times the Pipeline Design Flood.

00098259

"At small stream crossings, the pipeline has produced local ponding of water."

Should low water crossings be included in this "Flooding" section? The issue with them certainly is not their performance at high flow but usually their impact at low flow.

00098260

"Gravel bags or riprap are stockpiled at a number of locations. . ."

Large gravel bags are on the left bank of the Sag River at MP 47 -- they were placed as an interim measure in 1992 to halt bank erosion. I am not aware of any other large bags on the ROW. Certainly riprap is stockpiled at a number of locations.

00098261

Box Entitled: Aufeis -- "Accumulation of aufeis can affect the hydrologic regimen of river basins. . . "

It is unclear what this means. Aufeis certainly affects spring water levels and floodplain overflow areas, but not the regimen of river basins.

00098262

DEIS states: ". . .innovative technologies such as the Rosgen technique are being used to train the streams. The Rosgen technique allows control of river or stream erosion with minimal construction. . . "

While it is true that the Rosgen stream stabilization technique does not require placement of revetments or dikes, it should be noted that significant in-stream work is required. Reference required for Rosgen technique.

00098263

The DEIS states: "The probability of floods along the TAPS ROW is high and the need for maintenance or additional new works in response to a flood is high"

The probability of a flood on any specific stream along TAPS is the same as for any other location or project. This statement could therefore be misleading. Likely the intended points were:

- TAPS crosses numerous rivers and is located extensively in floodplain areas,
- Thus the probability of a flood occurring at a TAPS crossing is high (for example if you have 100 distinctly separate river systems crossed by a project, a 100 year flood will occur, on the average, only once every 100 years).

The need for new work at crossings has been and is expected to be low. The majority of the new work done in response to major floods since 1992, have been in floodplain or areas where the line is parallel to the river.

00098264

The DEIS States: "Short term impact such as. . .possibly rupturing the pipeline, might produce measurable damage. . . "

The DEIS indicates that if past mitigation measures are followed, the "long term impacts. . . would be expected to be similar to those seen historically".

Since historically, there have been only several very minor* exposures at stream crossings, which certainly posed no integrity concerns, it does not follow that similar impacts and mitigation would result in "possibly rupturing the pipeline. . ."

_____

* In about 1983 about 1000 feet of pipeline was exposed in the P.S.12 area. The construction of an adjacent uphill and parallel power line caused the blockage of a very small stream (in the clearing process) and this diverted all the flow down the ROW.

00098265

The DEIS states: "In northern area, the presence of ice can complicate and modify the movement and spreading of an oil slick". In fact, the presence of ice can complicate a spill response, or it can assist a spill response, depending upon the circumstances of a particular spill.

With respect to the "box" on impacts of Oil Spills: the probability of an aircraft/helicopter crashing into the bridge is very low,
in the case of the Gulkana River bridge, the bridge structure would likely absorb the impact with little structural damage to the line.

00098266

The DEIS states: " . . . and the continued presence of river structures. . ."

It is incorrect to indicate impacts from river training structures would increase with time because:
- the vast majority of the river training structures were constructed upon construction of the pipeline,
- in most cases, especially with guidebanks and revetments, the impact of the structures occurred shortly after their construction and certainly does not increase with time,
- in the case of new structures like revetments, the bank armoring essentially maintains the present location of the river (e.g., Tazlina northbank, M.F. Koyukuk River MP 231.5).

00098267

Correction, see Table 3.13-3:

PS10 and VMT are largest sources for SO2 (not PS2). PS2 is smallest source for SO2. Should state also that both PS2 and 10 are ramped down.

00098268

Error in emission rates for PS11 to Valdez compared to PS12 to Valdez. PS12 to Valdez should be smaller than PS11 to Valdez.

00098269

Tank vapors at VMT are incinerated, not flared.

Suggested Wording: Sources of HAPS at TAPS facilities include the combustion of the displacement vapors from the Valdez Marine Terminal vapor recovery system in the VMT power boilers as well as the incineration of any excess vapors in the vapor incinerators.

00098270

Reference (g): Source is HMH 2001, not NMH 2001.

00098271

Include reference of ambient monitoring data source in North Pole (NOx and SO2, Williams Petroleum Refinery).

Suggestion: (2) City of Fairbanks ambient air pollution monitoring program for CO (1996) and Williams North Pole Refinery ambient monitoring program for NOx and SO2 near Pump Station 8.

00098272

"Air quality is also affected by the release of VOC from overpressure vents . . ." There is no evidence that air quality (or standards) is affected since there are no off-site monitoring data.

Suggested Wording: Potential releases of VOCs from overpressure vents may affect the air quality in the vicinity of the pump stations.

00098273

"Air quality impacts by portable fuel combustion units . . . Air quality is also locally impacted from sandblasting for surface corrosion . . .." There are no air quality impacts as long as they are not measurable beyond the TAPS-ROW.

Suggested Wording: Air quality may be impacted in the vicinity of the pump stations from sandblasting for surface corrosion.

00098274

It should be noted that CO2 is not a regulated air pollutant for TAPS (See also comment for 4.5.2.9).

Suggestion: Remove reference to CO2 as an air pollutant. May discuss suspected relationship between CO2 and global warming in a qualitative sense and the relatively small contribution of TAPS on a global scale.

00098275

Motor vehicle emissions: It is not clear why and which cumulative effects would cause the health risk factors for benzene in the city of Valdez to increase to levels that would require additional controls for mobile and point sources. If the contribution of the VMT of benzene in the city of Valdez is less than 10%, additional controls of VMT emission sources would not be effective.

Section 3.17.2.4 indicates that only 10% of the impacts in Valdez stem from the VMT. This section (4.7.6.11.2) indicates that future increases in VOC impacts in Valdez trigger more controls at the VMT. These two statements are contradictory and one should be changed.

00098276

This comment applies to Tables 4.4-29 through 4.4-32.

The comparison concentrations should label all values as either 1-hour or 15-minute averages. The 15-minute average values are non-conservative (under-estimating) compared to the 1-hour health impact values.

Suggestion: Use EPA's ambient impact scaling factors or scaling formula for time averaging periods for ambient impacts to either 15 minute or 1-hour averages (Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD) US Environmental Protection Agency, EPA-450/4-87-007, May 1987).

00098277

While the "No-Action Alternative Analysis" describes in notable detail (i) activities that would likely occur if this alternative were selected and (ii) the potential environmental consequences of those activities, see, e.g., DEIS § 4.6, including the description of activities at pp. 4.6-1 to 4.6-2, elsewhere in the document elements of the alternative are described in a manner that suggests that they are so speculative as to prevent reasonable analysis. See, e.g., pp. 4.7-1 ("No action has not received engineering and environmental study and its description remains somewhat speculative.") and 4.2-21 ("No specific approved plans or designs for termination activities currently exist. Such plans and designs would have to be developed before specific action could be taken."); see also pp. ES-2 and 2-5 (citing need for additional NEPA documentation for termination process). It is recommended that: (i) early in the FEIS a more comprehensive description of those activities that would occur if the no-action alternative were selected should be identified and (ii) descriptions of those activities as "speculative" should be deleted. See, e.g., pp. ES-2, 2-5, and 4.7-1.

00098278

The DEIS defines the "AO" as the "Authorized Officer (Joint Pipeline Office)" at pp. xxix. That is not correct for purposes of the decision to renew TAPS -- the AO is BLM's Authorized Officer for TAPS Renewal. The DEIS definition at p. xxix should be changed so that there is no confusion as to the appropriate official making the TAPS renewal decision.

00098279

Add "foundation underlain by" before "permafrost."

00098280

Not clear why different comparison standards are used between the pipeline and the Valdez scenarios. The Valdez scenario comparison concentrations should be made for all appropriate NAAQS averaging periods (1,3,8,24-hour averaging periods). Comparisons are not meaningful since there is no indication what the 8-hour impacts are compared against.

Suggestion: Use EPA's ambient impact scaling factors or scaling formula for time averaging periods for ambient impacts to either 15 minute or 1-hour averages (Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD) US Environmental Protection Agency, EPA-450/4-87-007, May 1987).

00098281

The pipeline does not cross the Hines Creek Fault. This sentence should be corrected to say that the pipeline crosses the McGinnis Glacier Fault (in addition to the Denali Fault which is cited in Line 7).

The correct reference to the three faults crossed by TAPS (Denali, McGinnis Glacier and Donnelly Dome) is made in Section 3.4.

00098282

At the end of the third paragraph following the sentence: "These areas are under close surveillance and monitoring (see Section 4.1, Existing Mitigation Measure."), add an additional sentence: "The remainder of the TAPS route is also being monitored for changes in geotechnical conditions."

Refer to the sentence that reads: "The thawed ground at MP 735-736 may create potential for soil liquefaction if a major earthquake occurs near that general area."

To be accurate, it is suggested that the sentence be replaced with: "The thawed ground at MP 735-736 may create potential for soil liquefaction in scattered soil lenses and layers at depths less than 25 feet, if a major earthquake occurs in close proximity. Recent geotechnical field investigation and engineering analysis conducted by Alyeska indicate that the pipeline remains in compliance with TAPS design criteria for the changed geotechnical conditions."

A geotechnical and engineering investigation was conducted for the Milepost 735-736 area to assess the effect of changed conditions on the VSM supports and the aboveground pipeline. At Milepost 735, liquefiable sediment occurs only in lenses and layers penetrated in a few of the boreholes. These lenses and layers do not appear to be continuous across the site, and all are at depths less than 25 ft. The small amount of liquefiable sediment encountered and the lack of continuity of liquefiable layers between boreholes indicate that lateral ground displacement, through flow failure or lateral spread, is unlikely. If a loss of shear strength occurs in the potentially liquefiable lenses and layers, the VSMs should still retain sufficient friction and bearing capacity to support gravity loads. Potential changes in VSM capacity were investigated in a seismic response analysis. The results of this analysis indicated the pipeline and VSMs to be in compliance with TAPS stress criteria.

At Milepost 736, most of the sediment in the upper 20 to 30 feet of the soil profiles at Mileposts 736 appears to have blow counts in the liquefiable range and to be composed of sandy silt with some coarser grained material, a type of sediment that is typically liquefiable. The site conditions at Milepost 736 indicate a flat, wetland area with high water table, but little ground slope. The flat terrain precludes potential for widespread flow failure and lateral spread.

In conclusion, based on recently obtained geotechnical information, it appears that liquefaction is possible only in scattered lenses and layers generally less than about 25 ft deep. The possibility of a temporary loss of shear strength was factored into an engineering investigation of the aboveground pipeline and VSMs, and the pipeline was found to remain in compliance with TAPS stress criteria. There is no concern for general site instability, i.e., due to lateral movement of soil mass. .

(Reference: MP 735 Aboveground Pipeline Assessment, Michael Baker Jr., Inc., December 2001. -- See Argonne Document #3349)

00098284

1. In the sentence that reads, "However, locally overstressed conditions might develop along the pipeline if the extent of the liquefaction area was intermediate", we suggest changing the word "intermediate" to "extensive".

2. Following the sentence, "The pipeline would also become vulnerable if a landslide occurred on a cross slope, resulting in the pipe's being carried down the slope with the slide (APSC 2001e)," we suggest adding the following sentence to alleviate concern that there are potentially hazardous areas that Alyeska has ignored:

"Based on available geotechnical data and ongoing surveillance and monitoring programs, Alyeska is unaware of any field geotechnical conditions that could potentially lead to earthquake-induced ground failure of sufficient severity to cause pipeline failure (loss of pressure integrity)."

Note that Section 4.1.2.4 acknowledges that the pipeline has been designed for ground movements.

00098285

General Comment: DEIS ignores the fact that liquefaction can occur only in a rather narrow range of geologic and soil environments characterized by granular soils that remain loose and uncemented after deposition and lie beneath a shallow ground water table. This typically involve relatively young deposits during recent geologic time (modern or late-Quaternary eras, but presumably could happen in older deposits that were frozen soon after deposition. Quite often, permafrost has a high silt or clay content, which would preclude liquefaction. It is acknowledged that subsidence of the ground surface could result when permafrost thaws, but this is not liquefaction, and it would occur as thawing progresses, and not wait until an earthquake happens. In conclusion, thawed deposits could be liquefiable if they contain the requisite loose granular soils, not flocculated clay or loosely packed silt.

Refer to the following two sentences: "This weakening can be significant in soils composed of loosely packed silt or flocculated clay with a high content of ground ice. When these soils are shaken by strong ground motions during an earthquake, liquefaction may result."

Suggest deleting the above two sentences and replacing with: "This weakening can be significant in soils composed of loosely packed silt or flocculated clay with a high content of ground ice and may lead to subsidence of the ground surface." If the thawed soils are saturated, loose granular deposits, strong earthquake ground motions could cause them to liquefy.

00098286

The DEIS states that mineral material sites and disposal sites are used for ". . .general pipeline maintenance and handling of hazardous and nonhazardous waste." This implies, incorrectly, that Alyeska uses these sites for hazardous waste disposal. This is not the case. There are few instances when hazardous waste would actually be handled in any manner at material sites and disposal sites. This statement should be corrected.

00098287

The sentence states: "No direct spills to surface water have been documented." This is not accurate. There have been pipeline spills to surface water, such as the Atigun pipe buckle and there are spills to Port Valdez from tanker loading. The point should be that spills to surface waters are very infrequent.

00098288

More recent information on MP 400 spill response has been supplied to Argonne. (See Argonne Documents #3199 and 3272)

00098289

Add "also" before "governed" in first sentence.

00098290

In this paragraph the DEIS states that "Volumes of sanitary wastewaters delivered to the turbine exhausts or treated at pump stations are nominally low and normally do not exceed 12,000 gal per year." This number is incorrect, it should read: ". . . approximately 12,000 gal per day."

00098291

This paragraph states "Ultimately, and always after no more than 2 years of storage, contaminated media are trucked to a commercial facility where they undergo thermal treatment." This statement is generally correct, but it is a common practice to store more than 2 years with ADEC approval. This allows time to accumulate and achieve some economy of scale. In most cases the VMT stockpiles soils for more than 2 years.

"Ultimately, and always" should be changed to "Typically." Non-hazardous petroleum-contaminated soils from spill cleanup can remain in storage for more than 2 years before being remediated if approved by ADEC. Alyeska has from time to time used methods other than thermal treatment to dispose of non-hazardous spill debris (mainly oils).

00098292

The TAPS Owners have applied for renewal of an array of rights, ranging from the mainline right-of-way to oil spill contingency plan sites. See TAPS Owners' Applications, Line Lists at Vol. 2, Tabs D through H. Those rights are properly identified in portions of the DEIS, see, e.g., p. 2.1, but are too narrowly described elsewhere in the document, see, e.g., pp. ES-1 to ES-2, 1-2 to 1-7, and 1-7 to 1-8. Given the criticality of the description of the rights to be renewed to the analysis being undertaken and the decision that the BLM is making, the DEIS should be modified to accurately and comprehensively describe the rights under analysis that will be renewed.

00098293

The TAPS Owners have applied for renewal of an array of rights, ranging from the mainline right-of-way to oil spill contingency plan sites. See TAPS Owners' Applications, Line Lists at Vol. 2, Tabs D through H. Those rights are properly identified in portions of the DEIS, see, e.g., p. 2.1, but are too narrowly described elsewhere in the document, see, e.g., pp. ES-1 to ES-2, 1-2 to 1-7, and 1-7 to 1-8. Given the criticality of the description of the rights to be renewed to the analysis being undertaken and the decision that the BLM is making, the DEIS should be modified to accurately and comprehensively describe the rights under analysis that will be renewed.

00098294

The first and last sentences of this paragraph are contradictory. The first sentence says that moose are a relatively recent resident of the North Slope and the last sentence says that the reason for the dramatic decline of the adult moose population throughout the North Slope in recent years is not known. There is no reference given or basis for saying that the moose population on the North Slope is, in fact, declining.

00098295

Suggest that the Environmental Atlas for the Trans Alaska Pipeline System be included in the documents referenced as incorporating ". . . environmental considerations. . ." The Environmental Atlas provides information on important fish and wildlife considerations for TAPS.

00098296

There is also a septic system at VMT that is not mentioned in this section. It is a relatively minor issue, but should be corrected.

00098297

Box Entitled: Dust Shadow -- There is a note box that discusses the dust shadow for the Dalton Highway. It may be useful to point out that the "dust shadow" will become less of an issue with the ongoing upgrading of the Dalton Highway by ADOT/PF. The new sections that have been "chip sealed" have very little dust. ADOT/PF over the next several years plans to complete "chip sealing" of most, if not all, of the Dalton Highway.

00098298

The summary of impacts in this table says that a negative effect reducing subsistence is "(e.g., continued TAPS-related traffic on the Dalton Highway possibly disrupting migration)". There is no basis for this statement to be in the summary. There is no finding in the text of the subsistence section to support such a statement. The statement should be eliminated or reworded to reflect the language in the text.

00098299

Box Entitled: Hazardous Waste Management Under the No-Action Alternative -- This paragraph makes reference to "Alyeska-owned landfills". There are no "Alyeska-owned landfills", only "Alyeska-operated landfills". The 3 landfills that Alyeska operate are on BLM lands for which we have land rights. The term "Alyeska-owned landfills" is also used elsewhere in this section.

00098300

In the spill scenarios there is not a 3,000 bbl diesel spill. Does this refer to the 3,000 "gal" diesel spill (see Table 4.6-2).

00098301

The problems associated with degradation of permafrost have been well recognized by Alyeska Pipeline Service Company since the original design of the TAPS. The design assumes that all buried pipeline segments will thaw surrounding permafrost, where permafrost is present. Additionally, Alyeska assumed that the thermal disturbance of the workpad would initiate thawing of permafrost in the aboveground segments except around VSM (piles) that were protected by thermosyphons. The exception is the aboveground pipeline workpad located in the northern section where a special insulated workpad limits thawing beneath the workpad in cold permafrost (mean annual temperature less than -5 degrees C).

Alyeska conducted detailed analysis of all pipeline slopes and assessed the liquefaction potential of all slopes, including permafrost slopes. The liquefaction assessment program assumed all permafrost slopes could thaw. The frozen slopes identified as having a high potential for liquefaction were addressed in the original design the same as thawed slopes with a high potential for liquefaction.

Where potentially unstable slopes could not be avoided, mitigative design measures were employed to assure long-term integrity for the pipeline. For aboveground design segments the most common measure was the required use of thermal VSM supports. For the belowground the most common was deep burial below the potentially liquefiable soils. Other buried pipeline mitigation used was the grading of slopes to less than 2 percent, removal and replacement of potentially liquefiable soils and a special design with insulated pipe and thermosyphons.

Detailed documentation of the original design and procedures is available in the document, Trans Alaska Pipeline System, 1974, Appendix Volume 3 - Geotechnical Aspects. This is Argonne Document #133 of ER literature cited material.

The fourth sentence states that, "The effects of TAPS on the processes can involve disruption of the stability of the thermal regime of the permafrost, resulting in degradation (melting). . ."

The disruption of the stability of permafrost and the consequences of thawing has been recognized in Alaska since the time of early pioneers. The disruption of the stability of permafrost is a critical element in the design of TAPS. The design accounts for the long-term degradation caused by the disturbance of permafrost areas by construction grading and interaction between permafrost and the warm pipeline. One of the major mitigative measures was the development of an aboveground design that decouples the warm oil from permafrost. The stability of the supports for the aboveground design is protected by thermosyphons in areas of potentially unstable permafrost.

After 25 years of TAPS operation the effects of thermal disturbance are approaching equilibrium. Increased warming due to climate change may have a minor effect on the continued, but very slow progression of thawing. The initial increase in heat input into the permafrost soils caused by the change in surface heat balance (decreased albedo) due to the civil grading (aboveground) and the combined effect of the civil grading for maintenance and operation of the warm buried pipeline most likely is greater than any current or anticipated effects from warming climate.

00098303

The statement is made that "Frost heaving commonly occurs in silty soil and is caused by expansion in soil volume because of the formation of ice in soils".

For accuracy, this sentence should be replaced by the following: "Frost action in fine-grained soils increases the volume of the soil not only by freezing of in situ pore water (about a 9 percent expansion) but also by drawing water to the freezing front where ice lenses form."

00098304

Frost heave and subsidence is not just related to the TAPS ROW. Frost heave and subsidence have historically (and prehistorically) occurred throughout Alaska.

There is no technical basis for stating that the settlement of a VSM can cause integrity problems in the aboveground pipeline system due to differential settlement. The aboveground pipe is capable of losing a minimum of two adjacent supports (four VSMs) without excessive pipe bending.

For buried pipe, the thaw bulb has reached its maximum extent and any thaw-unstable areas not detected during design and construction phases were expressed as differential pipe settlement in the early years of operation. Since the buried pipe thaw bulb reached maximum extent earlier in the operations phase, no differential settlement is expected to occur during the renewal period. Therefore, for both above-ground and buried pipe, pipeline integrity threats from permafrost changes are not expected.

00098305

The DEIS states; "As the pipeline ages. . . Activities on the part of the owners to maintain the pipeline [delete: would] [add: could] change."

00098306

Potential slope instabilities or liquefaction-susceptible soils were assessed and identified for the entire TAPS route. See comment for section 3.3 below. The buried pipeline was installed within zones of potentially liquefiable soils only where the ground slope was less than two percent (therefore no soil movement during potential liquefaction) or in special design areas where the special insulated pipeline is protected by maintaining frozen conditions.

Section 3.3 comment: The problems associated with degradation of permafrost are well recognized by Alyeska Pipeline Service Company since the original design of the TAPS. The design assumes that all buried pipeline segments will thaw surrounding permafrost, where permafrost is present. Additionally, Alyeska assumed that the thermal disturbance of the workpad would initiate thawing of permafrost in the aboveground segments except around VSM (piles) that were protected by thermosyphons. The exception is the aboveground pipeline workpad located in the northern section where a special insulated workpad limits thawing beneath the workpad in cold permafrost (mean annual temperature less than -5 degrees C).

Alyeska conducted detailed analysis of all pipeline slopes and assessed the liquefaction potential of all slopes, including permafrost slopes. The liquefaction assessment program assumed all permafrost slopes could thaw. The frozen slopes identified as having a high potential for liquefaction were addressed in the original design the same as thawed slopes with a high potential for liquefaction.

Where potentially unstable slopes could not be avoided mitigative design measures were employed to assure long-term integrity for the pipeline. For aboveground design segments the most common measure was the required use of thermal VSM supports. For the belowground the most common was deep burial below the potentially liquefiable soils. Other buried pipeline mitigation used was the grading of slopes to less than 2 percent, remove and replacement of potentially liquefiable soils and, special design with insulated pipe and thermosyphons.

Detailed documentation of the original design and procedures is available in the document, Trans Alaska Pipeline System, 1974, Appendix Volume 3 - Geotechnical Aspects. This is Argonne Document #133 of ER literature cited material.

00098307

Climate change to a warmer climate may be a trend in Alaska. Sentences seven and eight refer to temperature increases and a lowering of the permafrost table in Fairbanks, Alaska. Unless the monitoring site is in disturbed terrain, it is inconsistent with Figure 3.12-4 that shows a cooling trend for Fairbanks.

Additionally, the first graph on Figure 3.12-4 is unlabeled.

00098308

The statement is made that: "The construction and operation of a buried warm-oil pipeline could induce thaw in permafrost soils". This statement should be changed to read, "The construction and operation of a buried warm-oil pipeline has thawed permafrost soils".

The TAPS was buried in permafrost areas only where soils below the pipe were determined to be thaw-stable. Surficial soils (above the pipeline) in a particular buried segment may be fine-grained and ice-rich. The thawing of the soils located above the buried depth of the pipeline have resulted in subsidence of the ground surface and in some cases the down slope movement of the thawed mass as the thaw bulb formed. None of the above consequences affect the integrity of the pipeline.

Examples are documented in the following reference:

Metz, Michael C., T.G. Krzewinski, and E.S. Clarke, 1982, "The Trans-Alaska Pipeline System Workpad - An Evaluation of Present Conditions", The Roger J.E. Brown Memorial Volume, Proceedings Fourth Canadian Permafrost Conference, National Research Council of Canada. (See Argonne Document #3356)

00098309

The flow of warm oil in a buried bare pipeline results in long-term thawing of permafrost soils. The growth of the thaw bulb is caused primarily by the flow of warm oil through the pipe, but also by the presence of the workpad and disturbed construction surface. Add "thaw stable" before "permafrost." See comment on section 3.3.2 below.

Comment 3.3.2: The fourth sentence states that, "The effects of TAPS on the processes can involve disruption of the stability of the thermal regime of the permafrost, resulting in degradation (melting). . ."

The disruption of the stability of permafrost and the consequences of thawing has been recognized in Alaska since the time of early pioneers. The disruption of the stability of permafrost is a critical element in the design of TAPS. The design accounts for the long-term degradation caused by the disturbance of permafrost areas by construction grading and interaction between permafrost and the warm pipeline. One of the major mitigative measures was the development of an aboveground design that decouples the warm oil from permafrost. The stability of the supports for the aboveground design is protected by thermosyphons in areas of potentially unstable permafrost.

After 25 years of TAPS operation the effects of thermal disturbance are approaching equilibrium. Increased warming due to climate change may have a minor effect on the continued, but very slow progression of thawing. The initial increase in heat input into the permafrost soils caused by the change in surface heat balance (decreased albedo) due to the civil grading (aboveground) and the combined effect of the civil grading for maintenance and operation of the warm buried pipeline most likely is greater than any current or anticipated effects from warming climate.

00098310

The fourth sentence states, "The shrinking and growing of thaw bulbs could promote frost heaving and settlement, respectively, near the TAPS".

The thaw bulb beneath the TAPS workpad and beneath the TAPS buried pipeline is approaching equilibrium after 25 years of operation. Further expansion of the thaw bulb will be limited.

The possibility that the thaw bulb will shrink in buried pipeline areas (due to aggrading permafrost from the base of the thaw bulb or laterally from the sides) will depend on the temperature of the pipeline (at low flow rates), the continued thermal impact of the workpad and disturbed construction zone, and the temperature regime of the surrounding permafrost. On the northern end of the pipeline (north of Atigun Pass) the permafrost is cold (mean annual temperature less than -5 degrees C) and it is conceivable that some refreezing of the thaw bulb can take place, even with a warming climate. In the warm permafrost region (south of Atigun Pass) little or no refreezing is expected due to the continued thermal input from the pipeline (even at low flow rates) and solar input through the workpad.

Whether or not refreezing of thaw bulbs in permafrost will occur is a non-issue for TAPS. The very nature of the thaw-stable soil required for burial in permafrost, and as defined in the TAPS Stipulations makes it also a non-frost susceptible soil. Frost heave would therefore not be expected to occur, upon refreezing of these soils below the pipe.

00098311

Alyeska continues to monitor processes that could impact the pipeline and the changing conditions on the pipeline route. As provided in the comment on section 3.3, one of the common mitigative designs in the aboveground design for potentially liquefiable areas is the use of thermal VSMs. Maintaining a frozen bulb around each VSM bent is critical to the stability of the support if a liquefaction event occurs. Alyeska has identified the possibility that there may be isolated areas where the frost bulb around the VSM is not being maintained as intended in the original design.

As part of an ongoing program to maintain the pipeline, Alyeska Pipeline Service Company is conducting a comprehensive study to review and reevaluate potential liquefaction concerns related to the TAPS. The study is designed to utilize information beginning with the original mile-by-mile design and liquefaction evaluation integrated with post construction monitoring information and new information on changed conditions of the ROW. The program will provide an update of potential liquefaction hazards for the TAPS and provide a comparison database for continued monitoring and tracking of conditions that could affect potential liquefaction hazards.

00098312

Recordable injury rates are overstated in the DEIS. The last four year average is 61 recordables per year. During 2002 through July 21, there have been 29 total recordable injuries for Alyeska and their contractors combined. During 2002 through July 21, there were 9 Lost Time injuries. The 4-year average for Lost Time injuries is 19.

It is not clear whether the statics provided in this sentence reflect average rates since construction. However, the DEIS clearly does not reflect current injury rates.

00098313

Similar to comment from 3.17.1 -- regarding Pump Station Fire Protection Response Team

On reading this last sentence and referenced Table 3.1-5 -- it seems to imply that the Pump Stations have stand alone resources that make up a Fire Protection Response Team. These are not stand-alone teams of individuals. The main duty of the personnel on site is operations and maintenance, one duty for them is to support and man an Emergency Response Team for their facility. One function of that ERT is to respond to a fire.. There is periodic first responder fire response training, and annual ERT Leader training.

The Pump Stations are not like the Valdez Marine Terminal that have specific teams trained for Fire Protection as a Fire Brigade.

00098314

This sentence, implies that Pump Stations have dedicated fire protection response teams, whose only function is fire protection response.

It would be better to state that Operation and Maintenance personnel also have emergency response duties, one of which is initial fire response. Other emergency response duties include evacuation, oil spill, chemical spills, medical emergencies, security issues, etc. It would be better to use the term "Emergency Response Teams" instead of Fire Protection Response Teams.

00098315

The DEIS treatment of incident rates is very confusing because in some places rates are reported per 200,000 man-hours, in other places rates are reported per 100,000 FTEs, and other in places rates are reported per 100 full-time workers. It would be much cleared to select a single method and use it consistently.

For example: In Table 3.17-1, there is a Note (b) that provides the formula for the incidence rate -- it uses 200,000 man-hours. In the next paragraph fatalities are calculated using 100,000 FTE's (Full time equivalents) and references Table 3.17-1.

00098316

This comment applies to Table 4.3-4 also.

These sections (and table) point out that the ambient concentrations of HAPs measured in 1990-91 were employed to determine the human cancer risk resulting from continued pipeline operation. While it is appropriate to determine cancer risk for the pipeline operations through the end of 1997, it is not appropriate for periods after that. This is because the emissions of the HAPs from the VMT have decreased dramatically (by a factor of 10 by 2001) as a result of operational changes and the installation of tanker vapor controls. As such, the concentrations measured in 1990-91 no longer exist -- particularly at the VMT fenceline.

The ambient HAP concentrations were scaled based on pipeline throughput levels and it would be proper to also scale them down by a factor of the emission reduction in estimating the future cancer risk. If this were done, the cancer risks, particularly at the VMT fenceline, would very likely be substantially lower.

00098317

This table lists the nearest town to the VMT as two miles to the east. This is incorrect. As can be seen in Figure 4.3-3 on page 4.3-41 the nearest town or resident is about 4 miles to the north. Going east, the nearest resident is 6-7 miles away.

00098318

Seismicity: Change "likelihood of happening is unknown" to "happening is highly unlikely."

00098319

The TAPS general location map could be improved by: 1) deleting the "north slope pipeline", which is almost invisible, perhaps substituting a general location of the North Slope oilfields; 2) showing the Mackenzie River connecting to the Beaufort Sea; 3) consider adding the Canning River, Kaktovik, and perhaps the boundaries of the NPRA and ANWR, and 4) providing the name of the Copper River.

00098320

Drag reducing agent is first mentioned here. While it is described in detail later, a footnote referring to the later description or providing brief explanation of its nature and the role of this key substance would be helpful here. e.g., "Drag reducing agent (DRA) is a viscous hydrocarbon added in small quantities to the crude oil to improve flow in the pipeline. See page --"

00098321

The text concerning the relationship of TAPS to BLM policies, plans and programs would better fit into the introduction with an explanatory paragraph which details the significance or relevance to the EIS of the BLM multiple use plans. After the first sentence, perhaps insert something like: "These plans set forth specific BLM land management and use policy within the area boundaries. All three plans recognize the importance of energy production and transportation on these BLM-managed lands and are consistent with long term continuation of TAPS operations as well as further energy exploration and development in the plan areas adjacent to, or which could be served by, the pipeline. Accordingly, existing BLM policies and plans are consistent with the proposed action."

00098322

Figure 1-4 is a photo of PS-1, which is more complex than, and atypical of, an average pump station. The text should be amended (in Section 1-3 "Pump Stations") to indicate that the figure is PS 1, or the figure itself labeled, or the photo of another PS used showing more typical features and configuration.

00098323

The fourth paragraph needs its own heading -- the matters discussed in that paragraph do not relate to subsistence. A possible heading "Discretionary Regulatory Authority."

00098324

The analysis of a shorter term renewal does not include consideration of the effects of what is likely to occur at the end of the shorter term. If the TAPS owner predictions about the viability of the pipeline well beyond 2034 are correct, the ROW renewal process will simply recur, and the substantive differences in the two alternatives will be minimal except for the very significant costs of discouraging, through uncertainty, further Alaska petroleum exploration and development--and the non-trivial costs of the renewal process itself.

The description of the North Slope would be more correctly stated (line 4, 1st paragraph) as follows: The North Slope is a gently sloping to flat, treeless plain, covering about 88,000 square miles, extending from the foothills of the Brooks Range to the Beaufort Sea (Arctic Ocean). It encompasses the coastal plain portion of the Arctic National Wildlife Refuge, the westernmost boundary of which is located about 90 miles east of the Prudhoe Bay oilfield. . .Prudhoe Bay is also used generally to describe the oil exploration and development province on Alaska's North Slope, which includes more than a dozen separate oilfields spread across several hundred square miles of land in the vicinity of Prudhoe Bay.

In the 2nd paragraph, 1st line should read: "Modern petroleum exploration and development. . . "

Page 3.1-22, 2nd paragraph:3rd line, add (or place in a footnote) "Oilfields are legally organized into producing units, which customarily group all of the owners of the leased area over a petroleum accumulation to avoid conflicts over extraction and ownership of the resource." 5th line "This unit (delete 'essentially') began production. . ." 7th line "Recent developments combined with (in) the Prudhoe Bay Unit include. . ."

Page 3.1-22, paragraph 3: The seawater treatment plant at Oliktok Point is part of the Kuparuk River Unit, so the two sentences discussing the Milne Point Unit, should be moved to the end of 3rd paragraph.

Page 3.1-22, Paragraph 5. Delete mention of Liberty. You might want to add mention of the Phillips discoveries in the NPRA and the exploration leasing and potential in that federal area. Also, add the following to the end of the last sentence: (E)exploration, and oil companies continue to explore for and develop new resources in the region. However, despite intense efforts, no petroleum deposits of the size needed to fully replace the declining production of the giant Prudhoe Bay field have been found, nor are any likely to be found. New discoveries are smaller and likely to be farther away from existing infrastructure, making them costly and economically marginal, especially if oil prices fall. Further, the cycle between lease acquisition and full production is frequently in excess of a decade. All of these factors highlight the increasing importance of a stable and efficient oil transportation system.

00098326

A number of the discoveries shown on the map are not "producing oil fields" (e.g. Liberty, Tabasco(?), Ugnu , maybe others.

The map could also be improved a bit by changing some confusing features: e.g., delete the Point McIntyre and Ugnu-Kuparuk place names in different type, delete the TAPS fuel gas pipeline, make all pipelines the same color, delete Umiat from the small location map. Is NPRA correctly titled? (Is it "National Petroleum Reserve Alaska" or "in" Alaska?)

Because the EIS evaluates the possibility of future production, it might be useful to have a map of both producing fields and leased and proposed-for-leasing areas.

00098327

The effects of a less-than-30-year renewal on the implementation of a natural gas project are omitted here in the assessment of economic effects. While these effects are appropriately discussed in the cumulative effects sections, they are important enough to be mentioned here as well. If the TAPS ROW renewal were for a shorter term, decision making on a gas pipeline or other natural gas commercialization projects(s) would have to take into account the possibility that the existing oil infrastructure would be unavailable to or fully supported by the gas project, making the gas project significantly more expensive and risky. This in turn could foreclose or defer the gas project and would at very least have an adverse effect on the cost and availability of capital needed to finance the project, lowering returns to the state and other stakeholders.

00098328

If the no action alternative were selected, a gas pipeline or other commercialization alternative would probably be precluded or made much more difficult to bring to fruition. The financial and practical success of any gas project depends upon sharing the existing oil production infrastructure, including wells, processing facilities, utilities, and services. If the North Slope oilfields were closed or in the process of being ramped down, the gas project alone would have to bear the costs of reconstructing or reinstituting those facilities, an overwhelming burden. As the DEIS recognizes, this issue would be included in a subsequent , thorough environmental review should the no action alternative be selected. However, because a gas project is so important to the projected economic future of the state, at least a brief mention of the probable interrelationship of the two events should be included in the analysis here. In any event, there does not appear to be any discussion about the fate of the natural gas in the economic analysis of the no action alternative.

00098329

This comment also applies to Figure 04.07-03 and Figure 04.07-06.

The tables and maps could be improved by providing a North Slope vicinity map that shows the location of the named oil fields and exploratory locations. The time series maps provide an excellent depiction of the general extent of activity, but do not identify specific oil field locations.

00098330

"Supporting infrastructures" (line 3) should include oil and gas separation and processing facilities. . .

Paragraph 1, last sentence could be more complete, by being modified to read: "Facilities enabled in remote locations, including those offshore or distant from the Prudhoe Bay and Kuparuk fields, vary in configuration from those closer to the principal infrastructure centers; they are more compact and are generally designed to operate with minimal personnel."

A general comment -- it might be helpful to provide in connection with the discussion on pages 4.7-19 and following a simple diagram showing how facility and well design and practice has changed over time. These are available from the field operators, and would be a useful supplement to figure 4.7-7 in understanding the discussion.

00098331

On page 4.7-37, paragraph 1, the last sentence could be improved by modifying it to read: "While it is not entirely clear (that) how and when this gas will be commercialized, the two most likely gas commercialization projects are described in some detail below for purposes of this analysis (to be) as surrogates for whatever project might eventually be built." The following might then also be added: "It seems likely that it would take at least a decade to complete any gas commercialization project, although the decision on a project and commencement of construction could come sooner. However, recent declines in natural gas prices and routing controversies have once again reduced enthusiasm for rapid commencement of an Alaska North Slope natural gas commercialization project."

In the second paragraph, after the sentence describing the LNG option, add a sentence stating: "Another project discussed but not considered reasonably foreseeable is the construction of a gas-to-liquids production facility on the North Slope that would convert natural gas into liquid hydrocarbons for shipment to Valdez on TAPS."

The last two sentences in the second paragraph could be improved by reading as follows: "Although it is not clear which proposal might eventually be developed, it was considered reasonably foreseeable that within the 30 year proposed action ROW renewal period a natural gas commercialization project would be in place. The cumulative effects analysis accordingly uses assumptions about the project and its implications based upon the two most likely alternatives -- the southern route pipeline and the LNG project."

00098332

A general comment about North Slope Water use: a significant percentage of fresh water used in the developed oilfields comes from flooded gravel mine sites rather than (natural) "lakes". Fish have migrated into or been transplanted in several of these reservoirs, so withdrawals can be limited just as they are from natural lakes. Generally, these mine site reservoirs are much deeper than the natural lakes in the vicinity, and both are refilled annually by river overflows and surface sheet flow each spring.

00098333

The assumption that gas production and exploration on the North Slope would continue in the event that the no-action alternative were to be selected is wrong. As noted in prior comments, any gas commercialization project would depend physically and economically upon the continued operation of the existing oil production and related facilities. If oil production were stopped and the facilities mothballed or removed, the gas project would face substantial cost increases. Moreover, although a small amount of gas might be cycled if oil production were stopped (relative to what is cycled now), it is not correct to imply that gas production would continue at current levels.

00098334

A general comment about North Slope groundwater resources. The DEIS gives the reader the impression that conventionally understood groundwater exists on the North Slope. This is erroneous, since the North Slope is underlain by a thick layer of permafrost, which is not penetrated by surface discharges. There is some surface water flow in the summer as the top layer of the permafrost melts to about 2 feet, but this and virtually all other fresh water subject to oil exploration and development activities would properly be called surface water. Deep well injection also occurs, but into saline or oil producing formations thousands of feet deep which do not qualify as groundwater resources.

00098335

Transportation of North Slope oil to Alaska refineries would stop in the event that the TAPS ROW were not renewed.

00098336

The North Slope underground injection wells used to dispose of produced water or production wastes are Class II, not Class I.

00098337

If the no action alternative were selected, and TAPS dismantled starting in 2004, activity in the oilfields would cease. It would be unreasonable to expect the gas project to commence in 2010 given that the oil fields would have been abandoned for six years at that time.

The second sentence of this section in discussing the renewal of the Federal Grant and related facilities contains several inaccuracies. First, where the DEIS states that "The renewed Federal Grant would cover not only the original TAPS ROW. . . but also. . .(the related facilities). . . ," it inaccurately indicates that the renewed Federal Grant would encompass the various separately granted related facilities. In fact, the renewed ancillary facilities would continue under separate rights-of-way. Second, the use of the word "originally" at item 2 of the sentence pertaining to access roads fosters the misimpression discussed above. Third, items 4 and 5, generically referencing the Prospect Power & Communication Line and the Gulkana Communication Site and Access Road, respectively, should be revised to more accurately cover the subject rights.

In order to resolve the inaccuracies described in the preceding paragraph, the second sentence of Section 2.2 on page 2-1 of the DEIS should be revised to read as follows:

The renewal of the Federal Grant would cover not only the original TAPS ROW issued under two serial numbers (F012505 and AA-5847) but also the ROWs for (1) a fuel gas pipeline that provides gas from Prudhoe Bay south to PS 4, (2) access roads authorized under numerous serial numbers, (3) oil spill contingency plan sites authorized through an MOU issued in June 1991, (4) a power and communication line running to the Prospect Airport, and (5) a communication site and associated access road near the Gulkana River crossing of TAPS (see the "line List" furnished as part of the TAPS Owners' application for renewal, as amended [see www.tapsrow.com])

The referenced section and pages discuss the Alaska Coastal Management Program ("ACMP"); however, the discussion contains some inaccuracies:

This section states that the Alaska Coastal Management Act ("ACMA") was last amended in 1994; however, the Alaska Legislature last amended the ACMA during its most recent 2002 legislative session.

This section mischaracterizes the scope of the ACMP as encompassing "all activities that occur within a coastal zone or that may affect coastal resources." The applicability and scope of the ACMP has recently been clarified in regulations approved by the Alaska Coastal Policy Council. Although these regulations are not yet effective, they are intended to restate existing law. As indicated in what will shortly become a revised version of 6 AAC 50.005, the ACMP is only applicable to (i) projects that require one or more of a specific list of state permits, (ii) federal activities, or (iii) projects that require one or more of a specified list of federal permits, AND then only if the project also is either (i) located in the designated state coastal zone, or (ii) is subject to a federal consistency determination under 15 CFR 930. Thus, the ACMP does not apply to "all activities that occur within a coastal zone," nor does it apply to projects that "may affect coastal resources" but are located outside the coastal zone. A copy of the clarified version of 6 AAC 50.005 recently approved by the Alaska CPC is provided for the record as Attachment A -- below.

The CPC's clarifying revisions to the ACMP regulations are clear that renewals, such as the present proposed action, are exempt from ACMP review. A copy of the CPC's revised 6 AAC 50.720 is provided for the record as Attachment B -- below.

Section 3.27.2 concludes by stating that the TAPS operations and maintenance "have been found to be consistent with" the North Slope Borough and Valdez Coastal Management Programs. It is certainly true that many operational aspects of TAPS, including the spill prevention, response and control plans, have undergone previous periodic ACMP reviews and have been found to be consistent with the NSB and Valdez CMPs, as well as the applicable state-wide ACMP standards. However, the statement in the DEIS as written could be misinterpreted to imply that the State of Alaska has already found the proposed TAPS renewal to be consistent with the ACMP. The TAPS owners have submitted an application for a consistency review; however, that review is being coordinated with this NEPA process and has not been concluded at this time. This statement should be corrected to state that the applicant has submitted a certification that the proposed action is consistent with the ACMP -- a determination over which the State of Alaska may concur after completing its separate but coordinated processes.

These same comments are equally applicable to the other discussions of the ACMP in the DEIS (e.g., § 4.7.4.7.3 at page 4.7-43; Appendix A, § A.12.2).

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Attachment A

6 AAC 50.005
AS ADOPTED BY
THE ALASKA COASTAL POLICY COUNCIL,
JULY 2002

6 AAC 50.005. APPLICABILITY OF THE ACMP CONSISTENCY REVIEW PROCESS. (a) A project is subject to the consistency review process described in this chapter when

(1) any activity that is part of the project
(A) requires a state agency authorization identified under 6 AAC 50.750;
(B) is a federal activity;
(C) requires a federal authorization identified under 6 AAC 50.405; or
(D) is described in an Outer Continental Shelf (OCS) exploration or development and production plan; and

(2) the activity is
(A) located within the coastal zone; or
(B) subject to a consistency determination under 15 C.F.R. 930.

(b) Only one consistency review process applies to a project. The consistency review process described in

(1) Article 2 (6 AAC 50.200-.280) applies when a project requires only an authorization from one or more state agencies;

(2) Article 3 (6 AAC 50.305-.395) applies when a project is a federal activity that may also require a state agency authorization; and

(3) Article 4 (6 AAC 50.405-.495) applies when a project requires a federal authorization or is an OCS exploration or development and production plan that may also require a state agency authorization.

(c) The consistency response under 6 AAC 50.305-.395 or 6 AAC 50.405-.495 is the only consistency determination required for a project that is a federal activity or federally regulated activity that may also require a state agency authorization.

(Eff. ___/___/200__, Register ___)
Authority: AS 44.19.145, AS 44.19.161, AS 46.40.096
AS 44.19.160, AS 46.40.040

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Attachment B
6 AAC 50.820
AS ADOPTED BY
THE ALASKA COASTAL POLICY COUNCIL
JULY 2002

6 AAC 50.820. AUTHORIZATION RENEWALS, RE-ISSUANCES, AND EXPIRATIONS. (a) When an authorization for an existing project is subject to renewal, re-issuance, or the authorization has expired and the applicant does not propose a modification to the project, no further action under this chapter is necessary.

(b) When an authorization for an existing project is subject to renewal, re-issuance, or the authorization has expired and the applicant proposes a modification to the existing project, the proposed modification shall be subject to the provisions of 6 AAC 50.810. (Eff. ___/___/200__, Register ___)

Authority: AS 46.40.040, AS 46.40.096

00098340

This section of the DEIS addresses fish in the affected environment and references essential fish habitat ("EFH") as determined pursuant to the Magnuson-Stevens Act on page 3.19-1 and elsewhere throughout the section. The BLM has prepared a specific EFH analysis and has initiated consultation with the National Marine Fisheries Service in compliance with the Magnuson-Stevens Act. See our comments below elaborating on the consultation and consultation document. The FEIS should reference BLM's EFH analysis and discuss EFH consistent with that analysis.

00098341

This comment also refers to Section 4.4.4.10.

These sections of the DEIS address impacts to fish under the proposed alternative for normal operations and with respect to oil spills. The BLM has prepared a specific EFH analysis and initiated consultation with the National Marine Fisheries Service in compliance with the Magnuson-Stevens Act. See our comments below elaborating on the consultation and consultation document. The FEIS should reference BLM's EFH analysis and discuss EFH consistent with that analysis.

00098342

Under the issue area "Soils and permafrost" in Table 4.3-23, impacts are summarized by stating that earthquake-triggered liquefaction from an "extremely large earthquake could threaten the integrity of the TAPS, causing spills, but would be highly unlikely." However, under "Seismicity," which is the next issue area in Table 4.3-23, it is stated that "soil liquefaction and landslides due to an extremely large earthquake could threaten the integrity of TAPS, although the likelihood of this happening is unknown." The latter statement is in conflict with the former and should be revised to reflect that such an occurrence is "highly unlikely."

Under the issue area "Biological resources" in Table 4.3-23, the impact summary states that "anticipated negative impacts to threatened, endangered, and protected species are not expected to exceed population-level impacts accompanying natural variation." This statement is of uncertain meaning and does not track well with either the conclusions reached in the DEIS or the related consultation by BLM under § 7 of the Endangered Species Act. As discussed in our comments below, the findings in the DEIS are that the proposed project will have either "none" or "negligible" impacts upon threatened, endangered, and protected species. As discussed in our comments below regarding the § 7 consultation, the BLM has found, and the National Marine Fisheries Service and U.S. Fish & Wildlife Service have concurred, that the proposed alternative is not likely to affect threatened or endangered species or designated critical habitat. It would be helpful for purposes of clarity if Table 4.3-23 summarized impacts by using the defined terms "none," "negligible" or "not likely to affect" rather than the present undefined terminology.

This comment also applies to Section 4.1.

The analyses in §§ 4.1 and 4.4 of the DEIS, supported by other relevant information and findings, lead to the conclusion that no additional mitigation measures should be recommended or adopted as a part of this ROW renewal process with respect to spill prevention, detection, response, and mitigation. This conclusion by BLM is well warranted and merits explicit elaboration in the FEIS.

Normal operations of TAPS are not anticipated to result in significant spills. Accordingly, the spill risk associated with the proposed alternative arises from the potential for accidental events or intentional criminal acts. Table 4.4-39 on pages 4.4-138 and --139 summarize the anticipated impacts under the analyzed spill scenarios. In general, the DEIS considers the consequences of spills for all impact areas under four probability categories: anticipated; likely; unlikely; and very unlikely. Included in these categories of pipeline spills are accidental leaks and spills during pipeline or pump station operations, leaks due to maintenance-related damage, leaks due to overpressurization from inadvertent RGV closure, valve leaks due to gasket failure or large packing leaks, leaks due to sabotage or vandalism, leaks due to washout damage from proximity to a stream or river, leaks due to corrosion, leaks due to pipeline settlement, leaks and cracks due earthquakes, and guillotine breaks of the pipeline due to a seismic initiated landslide and various catastrophic accidental or intentional events (impact of large truck, aircraft crash, or helicopter). See Table 4.4-1 at pp.4.4-4 through 4.4-6. Table 4.4-2 lists a similarly appropriate array of possible spill scenarios for the VMT. The DEIS generally finds that spill volumes and impacts increase as probability decreases. The DEIS makes explicit that, without downplaying the anticipated adverse significance of a severe accident at a sensitive location, it is important to place such events in the context that accidents of great severity are not probable during the renewal period, and would be subject to explicit response and mitigation requirements.

The existing mitigation measures applicable to TAPS are detailed in § 4.1 of the DEIS. Most of these mitigation measures are directly or indirectly relevant to pipeline or VMT spill prevention, detection, response, and mitigation. Thus, these existing measures are directed specifically to minimizing the likelihood of the actual occurrence of a spill as a result of the mechanisms identified in the spill scenarios, to detecting and responding to such spills in order to minimize spill impacts, and to mitigation measures in the event of a spill event. Categorically, these mitigation measures include:

-- JPO oversight, including a comprehensive adaptive monitoring program designed to ensure that TAPS activities (construction, operation, maintenance, and termination) are conducted so as to best protect the safety and health of the public and the environment. Activities having the greatest potential impacts to the environment and to pipeline integrity are examined more closely and more often under the JPO's risk-based compliance monitoring. JPO oversight includes coordinated planning and response for abnormal accidents. See DEIS § 4.1.1.

-- TAPS has numerous design elements designed specifically to reduce the potential for spills and to mitigate impacts of such spills. Major mitigating design features include special installation techniques and foundations, corrosion control features, earthquake mitigation measures, special design considerations for river crossings, TAPS valves (RGVs and check valves) as mitigation features, and main-line TAPS Leak Detection Systems. See DEIS § 4.1.2.

-- In addition to the intrinsic design features, numerous routine TAPS operations provide mitigation against potential spill occurrences and impacts, or provide reliable data upon which response and mitigation decisions may be based. These monitoring, surveillance, and maintenance measures include pipeline integrity monitoring, corrosion control system monitoring, bridge monitoring, rivers and floodplains monitoring, seismic/earthquake monitoring, slope stability monitoring, glacier surge monitoring, and other measures. See DEIS § 4.1.3.

-- TAPS is also subject to detailed and specific federal and state spill prevention and response planning under authorities of many of the JPO agencies. Legislation and regulations enacted after the Exxon Valdez spill significantly strengthened spill prevention and response requirements and standards for oil tankers, terminals, pipelines, and oil exploration and production facilities. Current spill prevention and response plans applicable to TAPS are subject to periodic agency and public review. See DEIS § 4.1.4 (detailing the plans applicable to TAPS, the VMT, Prince William Sound tanker transport, and North Slope oil exploration and development).

-- Finally, many of the existing mitigation measures are directed specifically at the social, cultural, and economic impacts of potential spills, including mitigation of subsistence impacts. See DEIS § 4.1.5.

The reliability of the existing mitigation measures is demonstrable from the observed impacts from existing and continuing operations. When combined with the adaptive nature of the Federal Grant, JPO monitoring and specific spill control prevention and response planning, the BLM's determination that additional mitigation measures are not needed at this time is reasonable and well supported by the record.

One additional related subject merits further discussion. Security measures, including related surveillance and monitoring, are generally outlined in the DEIS. See, e.g., DEIS at p. 3.1-16. Security measures are an important aspect of TAPS operations related to spill prevention and monitoring, and are the subject of specific JPO oversight, monitoring, and review. However, there is an inherent and very real tension, particularly in light of the heightened concerns of recent times, between public disclosure of security measures and the effectiveness of such security surveillance and other measures. While the TAPS' owners believe that the confidentiality of TAPS' security measures is of paramount importance, the FEIS should nevertheless, clarify in greater depth that BLM and JPO have carefully reviewed and considered TAPS security measures, monitor such measures regularly for adequacy, and find that detailed disclosure of such measures in this NEPA process would be contrary to National Security and the broader public interest.

The record on ACMA should be corrected as discussed on our comment for Section 3.27.02. That comment is repeated below:

Section 3.27.2 Comment: The referenced section and pages discuss the Alaska Coastal Management Program ("ACMP"); however, the discussion contains some inaccuracies:

This section states that the Alaska Coastal Management Act ("ACMA") was last amended in 1994; however, the Alaska Legislature last amended the ACMA during its most recent 2002 legislative session.

This section mischaracterizes the scope of the ACMP as encompassing "all activities that occur within a coastal zone or that may affect coastal resources." The applicability and scope of the ACMP has recently been clarified in regulations approved by the Alaska Coastal Policy Council. Although these regulations are not yet effective, they are intended to restate existing law. As indicated in what will shortly become a revised version of 6 AAC 50.005, the ACMP is only applicable to (i) projects that require one or more of a specific list of state permits, (ii) federal activities, or (iii) projects that require one or more of a specified list of federal permits, AND then only if the project also is either (i) located in the designated state coastal zone, or (ii) is subject to a federal consistency determination under 15 CFR 930. Thus, the ACMP does not apply to "all activities that occur within a coastal zone," nor does it apply to projects that "may affect coastal resources" but are located outside the coastal zone. A copy of the clarified version of 6 AAC 50.005 recently approved by the Alaska CPC is provided for the record as Attachment A -- below.

The CPC's clarifying revisions to the ACMP regulations are clear that renewals, such as the present proposed action, are exempt from ACMP review. A copy of the CPC's revised 6 AAC 50.720 is provided for the record as Attachment B -- below.

Section 3.27.2 concludes by stating that the TAPS operations and maintenance "have been found to be consistent with" the North Slope Borough and Valdez Coastal Management Programs. It is certainly true that many operational aspects of TAPS, including the spill prevention, response and control plans, have undergone previous periodic ACMP reviews and have been found to be consistent with the NSB and Valdez CMPs, as well as the applicable state-wide ACMP standards. However, the statement in the DEIS as written could be misinterpreted to imply that the State of Alaska has already found the proposed TAPS renewal to be consistent with the ACMP. The TAPS owners have submitted an application for a consistency review; however, that review is being coordinated with this NEPA process and has not been concluded at this time. This statement should be corrected to state that the applicant has submitted a certification that the proposed action is consistent with the ACMP -- a determination over which the State of Alaska may concur after completing its separate but coordinated processes.

These same comments are equally applicable to the other discussions of the ACMP in the DEIS (e.g., § 4.7.4.7.3 at page 4.7-43; Appendix A, § A.12.2).

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Attachment A

6 AAC 50.005
AS ADOPTED BY
THE ALASKA COASTAL POLICY COUNCIL,
JULY 2002

6 AAC 50.005. APPLICABILITY OF THE ACMP CONSISTENCY REVIEW PROCESS. (a) A project is subject to the consistency review process described in this chapter when

(1) any activity that is part of the project

(A) requires a state agency authorization identified under 6 AAC 50.750;

(B) is a federal activity;

(C) requires a federal authorization identified under 6 AAC 50.405; or

(D) is described in an Outer Continental Shelf (OCS) exploration or development and production plan; and

(2) the activity is

(A) located within the coastal zone; or

(B) subject to a consistency determination under 15 C.F.R. 930.

(b) Only one consistency review process applies to a project. The consistency review process described in

(1) Article 2 (6 AAC 50.200-.280) applies when a project requires only an authorization from one or more state agencies;

(2) Article 3 (6 AAC 50.305-.395) applies when a project is a federal activity that may also require a state agency authorization; and

(3) Article 4 (6 AAC 50.405-.495) applies when a project requires a federal authorization or is an OCS exploration or development and production plan that may also require a state agency authorization.

(c) The consistency response under 6 AAC 50.305-.395 or 6 AAC 50.405-.495 is the only consistency determination required for a project that is a federal activity or federally regulated activity that may also require a state agency authorization.

(Eff. ___/___/200__, Register ___)
Authority: AS 44.19.145, AS 44.19.161, AS 46.40.096
AS 44.19.160, AS 46.40.040

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Attachment B
6 AAC 50.820
AS ADOPTED BY
THE ALASKA COASTAL POLICY COUNCIL
JULY 2002

6 AAC 50.820. AUTHORIZATION RENEWALS, RE-ISSUANCES, AND EXPIRATIONS. (a) When an authorization for an existing project is subject to renewal, re-issuance, or the authorization has expired and the applicant does not propose a modification to the project, no further action under this chapter is necessary.

(b) When an authorization for an existing project is subject to renewal, re-issuance, or the authorization has expired and the applicant proposes a modification to the existing project, the proposed modification shall be subject to the provisions of 6 AAC 50.810. (Eff. ___/___/200__, Register ___)

Authority: AS 46.40.040, AS 46.40.096

Under the topic "Threatened and Endangered Species" it is stated in Table 4.7-12 that the proposed alternative's "[i]mpacts to threatened, endangered, and protected species are anticipated to be negligible to minor and should not threaten population viability." This statement is not an accurate summary of the more specific data and conclusions presented in Tables 4.7-9, 4.7-10 and 4.7-11 on pages 4.7-103 through 4.7-105. In the latter tables, the cumulative impacts of the proposed action are shown to be "none" or "negligible." No impacts from the proposed alternative were found to be of the "minor" magnitude with respect to threatened, endangered, or protected species.

In addition, please see the comments below regarding § 5.5, which details the results of the BLM's consultations with the National Marine Fisheries Service ("NMFS") and the U.S. Fish & Wildlife Service ("FWS") under § 7 of the Endangered Species Act ("ESA"). As detailed there, the two Services have concurred in the BLM's conclusion that the proposed alternative is not likely to adversely affect ESA listed species or ESA designated critical habitat.

This section of the DEIS identifies certain "agency consultations" conducted in conjunction with the NEPA process. One of the identified consultations discussed is the BLM's § 7 ESA consultations with NMFS and FWS. This discussion in the DEIS should be updated in the FEIS to describe the now-completed process and results, which are identified below. In addition, this section should identify and discuss the current consultation process by the BLM under § 305(b) of the Magnuson-Stevens Act regarding essential fish habitat ("EFH"). The status of the BLM's EFH consultation is also commented on below.

-- ESA Consultation

Section 7 of the ESA requires federal agencies, including BLM, to ensure that their actions avoid jeopardizing listed species or adversely modifying designated critical habitat. In accordance with these requirements, BLM formulated a biological evaluation ("BE") analyzing the effects of the ROW renewal on listed species occurring within the action area. On May 7, 2002, BLM submitted the BE to NMFS and to the FWS, thus initiating consultation with the Services. On June 18, 2002, FWS issued a letter concurring that the proposed action is not likely to adversely affect listed species under its jurisdiction. On July 1, 2002, NMFS likewise issued a letter concurring with the findings contained in the BE that the proposed action is not likely to adversely affect listed species or designated critical habitat under its jurisdiction. Copies of the BE and associated concurrence letters are attached for inclusion in the record as Appendix A.

As the enclosed BE indicates, BLM concluded that the proposed action is not likely to adversely affect either the spectacled eider, Steller's eider, humpback whale, fin whale, or Steller sea lion. Because no critical habitat for these species exists within the action area, BLM also concluded that the proposed action is not likely to adversely affect critical habitat. Among other evidence, these conclusions are supported by the fact that TAPS has not had direct, indirect, or cumulative adverse affects on these species during its 25 years of operation.

-- EFH Consultation

Section 305(b) of the Magnuson-Stevens Act requires federal agencies, including BLM, to consult with NMFS if their actions may adversely affect designated essential fish habitat. During an EFH consultation, NMFS may recommend conservation measures that minimize the effects of the proposed action on EFH. In the present case, BLM has prepared an EFH assessment, and has determined that ROW renewal may result in short-term adverse effects to EFH under certain circumstances. Consequently, BLM is presently engaging in EFH consultation with NMFS to ensure its proposed action adequately minimizes the potential effects of ROW renewal and associated pipeline operations on designated freshwater and marine EFH. A copy of the EFH assessment is attached for inclusion in the record as Appendix B.

As discussed in the enclosed EFH assessment, in freshwater areas, adverse effects may result from existing facilities (e.g., disturbance of runoff patterns); normal operations (e.g., water withdrawals or discharges); routine maintenance (e.g., road maintenance); and repair activities (e.g., ground-disturbing activities). In addition, river and low-water crossings involve potential disturbance of EFH through channel alteration, water quality changes, blockage to migration, and sediment runoff, which can affect both physical EFH habitat and salmon or their prey. In estuarine or marine areas, EFH may be affected by surface runoff from facilities and permitted discharges.

Based on past operations of TAPS, accidental oil spills are anticipated or likely to occur in freshwater, estuarine, or marine waters where EFH is present. Most of the effects of these spills are expected to be short-lived, with anticipated recovery following cleanup. Further, oil spill modeling results and historical operations indicate that the magnitude of predicted spill events into marine and fresh waters will be such that no significant adverse effects will occur.

Best management practices, regulatory compliance, surveillance, and specific plans (e.g., oil spill prevention, erosion, and sedimentation) have been established to avoid, minimize, and mitigate potential adverse effects of the continued operation of TAPS on EFH. Pipeline operations have also incorporated design features (e.g., shut-off valves) and monitoring systems to detect problems that might occur. In addition, there is extensive Federal and State oversight (e.g., oversight through the JPO) and enforcement of the statutes and regulations governing the ROW. With these measures, it is anticipated that any potential adverse effects of TAPS and the associated ROW on designated EFH would be short-term in duration, and would not be significant in nature.

In summary, based on the past experience with TAPS, as well as available modeling and other information, BLM has determined that the proposed action may result in short-term adverse effects on designated EFH. However, these effects are expected to be adequately minimized and mitigated by existing conservation measures associated with the proposed action. In accordance with applicable EFH regulations, BLM has requested that NMFS engage in abbreviated EFH consultation, and confirm that existing mitigation and minimization measures adequately protect designated EFH.

-- NHPA Consultation

This section currently contains a brief discussion of NHPA consultation processes engaged in by BLM. The FEIS should more explicitly link the tribal consultations that have occurred to the satisfaction of all NHPA consultation requirements. See DEIS pp. 3.26-7 and 4.3-91.

Appendix A at A-19 makes reference to § 7 ESA consultation by the BLM. This discussion should be updated as commented on above to reflect NMFS' and FWS' concurrence in the BLM's conclusion that the proposed alternative is not likely to adversely affect threatened or endangered species or designated critical habitat.

In addition, although Appendix A refers to analysis of EFH (page A-16), there is no mention of BLM's consultation with NMFS under § 305(b) of the Magnuson-Stevens Act. This subject should be addressed as commented on above to reflect that BLM is engaging in EFH consultation with NMFS and to incorporate into the record the EFH assessment BLM has prepared.

The record on ACMA should be corrected as discussed on our comment for Section 3.27.02. That comment is repeated below:

Section 3.27.2 Comment: The referenced section and pages discuss the Alaska Coastal Management Program ("ACMP"); however, the discussion contains some inaccuracies:

This section states that the Alaska Coastal Management Act ("ACMA") was last amended in 1994; however, the Alaska Legislature last amended the ACMA during its most recent 2002 legislative session.

This section mischaracterizes the scope of the ACMP as encompassing "all activities that occur within a coastal zone or that may affect coastal resources." The applicability and scope of the ACMP has recently been clarified in regulations approved by the Alaska Coastal Policy Council. Although these regulations are not yet effective, they are intended to restate existing law. As indicated in what will shortly become a revised version of 6 AAC 50.005, the ACMP is only applicable to (i) projects that require one or more of a specific list of state permits, (ii) federal activities, or (iii) projects that require one or more of a specified list of federal permits, AND then only if the project also is either (i) located in the designated state coastal zone, or (ii) is subject to a federal consistency determination under 15 CFR 930. Thus, the ACMP does not apply to "all activities that occur within a coastal zone," nor does it apply to projects that "may affect coastal resources" but are located outside the coastal zone. A copy of the clarified version of 6 AAC 50.005 recently approved by the Alaska CPC is provided for the record as Attachment A -- below.

The CPC's clarifying revisions to the ACMP regulations are clear that renewals, such as the present proposed action, are exempt from ACMP review. A copy of the CPC's revised 6 AAC 50.720 is provided for the record as Attachment B -- below.

Section 3.27.2 concludes by stating that the TAPS operations and maintenance "have been found to be consistent with" the North Slope Borough and Valdez Coastal Management Programs. It is certainly true that many operational aspects of TAPS, including the spill prevention, response and control plans, have undergone previous periodic ACMP reviews and have been found to be consistent with the NSB and Valdez CMPs, as well as the applicable state-wide ACMP standards. However, the statement in the DEIS as written could be misinterpreted to imply that the State of Alaska has already found the proposed TAPS renewal to be consistent with the ACMP. The TAPS owners have submitted an application for a consistency review; however, that review is being coordinated with this NEPA process and has not been concluded at this time. This statement should be corrected to state that the applicant has submitted a certification that the proposed action is consistent with the ACMP -- a determination over which the State of Alaska may concur after completing its separate but coordinated processes.

These same comments are equally applicable to the other discussions of the ACMP in the DEIS (e.g., § 4.7.4.7.3 at page 4.7-43; Appendix A, § A.12.2).

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Attachment A

6 AAC 50.005
AS ADOPTED BY
THE ALASKA COASTAL POLICY COUNCIL,
JULY 2002

6 AAC 50.005. APPLICABILITY OF THE ACMP CONSISTENCY REVIEW PROCESS. (a) A project is subject to the consistency review process described in this chapter when

(1) any activity that is part of the project

(A) requires a state agency authorization identified under 6 AAC 50.750;

(B) is a federal activity;

(C) requires a federal authorization identified under 6 AAC 50.405; or

(D) is described in an Outer Continental Shelf (OCS) exploration or development and production plan; and

(2) the activity is

(A) located within the coastal zone; or

(B) subject to a consistency determination under 15 C.F.R. 930.

(b) Only one consistency review process applies to a project. The consistency review process described in

(1) Article 2 (6 AAC 50.200-.280) applies when a project requires only an authorization from one or more state agencies;

(2) Article 3 (6 AAC 50.305-.395) applies when a project is a federal activity that may also require a state agency authorization; and

(3) Article 4 (6 AAC 50.405-.495) applies when a project requires a federal authorization or is an OCS exploration or development and production plan that may also require a state agency authorization.

(c) The consistency response under 6 AAC 50.305-.395 or 6 AAC 50.405-.495 is the only consistency determination required for a project that is a federal activity or federally regulated activity that may also require a state agency authorization.

(Eff. ___/___/200__, Register ___)
Authority: AS 44.19.145, AS 44.19.161, AS 46.40.096
AS 44.19.160, AS 46.40.040

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Attachment B
6 AAC 50.820
AS ADOPTED BY
THE ALASKA COASTAL POLICY COUNCIL
JULY 2002

6 AAC 50.820. AUTHORIZATION RENEWALS, RE-ISSUANCES, AND EXPIRATIONS. (a) When an authorization for an existing project is subject to renewal, re-issuance, or the authorization has expired and the applicant does not propose a modification to the project, no further action under this chapter is necessary.

(b) When an authorization for an existing project is subject to renewal, re-issuance, or the authorization has expired and the applicant proposes a modification to the existing project, the proposed modification shall be subject to the provisions of 6 AAC 50.810. (Eff. ___/___/200__, Register ___)

Authority: AS 46.40.040, AS 46.40.096

Comments provided on Appendix E -- ANILCA Section 810 Analysis of Subsistence Impacts, apply here as well. They are:

Appendix E Comment: Appendix E provides the BLM's proposed § 810 ANILCA analysis of subsistence impacts. The proposed analysis finds on page E-5 that "impacts of the proposed action on subsistence would not reach the threshold of 'may significantly restrict' subsistence uses." However, the proposed analysis also finds on page E-10 that "[c]umulative impacts associated with the proposed action on subsistence meets the threshold of "may significantly restrict" subsistence uses. As discussed below: (1) the finding that cumulative impacts "may significantly restrict" subsistence uses is unwarranted and attributable in large measure to misapplication of the term "cumulative impacts;" and alternatively, (2) the record fully supports a determination by the BLM that the criteria specified in ANILCA § 810(a)(3)(A), (B) and (C) are met.

1. The proposed cumulative impacts finding is unwarranted.

Notwithstanding the lesser threshold embodied in § 810 of ANILCA*, the reasonably foreseeable cumulative impacts of the proposed action do not support a finding that the proposed project "may significantly restrict" subsistence access. In large measure, the flaws in BLM's analysis flow from application of incorrect legal standards in the analysis of cumulative impacts in the DEIS.
NEPA requires not only analysis of the potential effects associated with the proposed action and alternatives, but also consideration of other activities that may affect the area of potential impact that have occurred, are occurring, and will occur. See, e.g., 40 C.F.R. §§ 1508.7 and 1508.25(a)(2). Future activities that need be considered are not all that may occur -- only "reasonably foreseeable" activities need be addressed. See, e.g., 40 C.F.R.. §§ 1508.7 and 1508.8. As the DEIS properly recognizes, "reasonably foreseeable" activities (i) are those with "firm near-term plans," such as "[p]roposals for which NEPA documents are in preparation or finalized," "[p]roposals in a detailed design phase," "[p]roposals listed in formal Notices of Intent published in the Federal Register or state publications," "[p]roposals that are funded," "[p]roposals for which enabling legislation has been passed," and "[p]roposals that have been submitted to federal and state regulators to begin the permitting process," and (ii) do not include "uncertain or speculative actions." See, e.g., DEIS at p. 4.7-13 (emphasis added). Those conclusions square with controlling case law. See, e.g., Kleppe v. Sierra Club, 427 U.S. 390, n.20 (1976) (rejecting argument that NEPA requires "a comprehensive impact statement covering contemplated projects in the region as well as those that have already been proposed," as the term "proposed" is construed under NEPA) (emphasis added); Presidio Golf Club v. National Park Service, 155 F.3d 1153, 1163 (9th Cir. 1998) ("Agencies must consider only those indirect effects that are 'reasonably foreseeable.' They need not consider potential effects that are highly speculative or indefinite.").

Although the DEIS recognizes these settled limitations, the analysis of cumulative effects it employs is inconsistent with them. For instance, the DEIS considers the cumulative effects arising from oil and gas activities in over two dozen undeveloped areas that in all cases do not satisfy the limitations identified above. Compare, for instance, Tables 4.7-2 and 4.7-3, as well as "human habitation and development" in northern and central Alaska projected to occur over the next 30 years. See also p. 4.7-36 ("This DEIS assumes that it is reasonably foreseeable that sometime in the next thirty years natural gas will be transported from the North Slope to market in Canada and the United States") (emphasis added). Moreover, the analysis should recognize that, through processes such as Resource Management Plans and actions taken by Congress, TAPS ROW uses have priority and ROW lands will not be granted for other purposes, the paradigm case where cumulative effects must be considered. See, e.g., Council On Environmental Quality's Considering Cumulative Effects Under The National Environmental Policy Act at p. 19 ("To include all proposals ever considered as other actions would most likely overestimate the future effects of cumulative effects on the resources, ecosystems, and human communities; therefore, the analysts should develop guidelines as to what constitutes 'reasonably foreseeable future actions' based on the planning process within each agency") (emphasis added). The result is a cumulative effects analysis that overstates cumulative impacts associated with the proposed action and alternatives, such as those addressing subsistence. See, e.g., pp. E-8, E-10, E-12, and E-13.

A second important flaw in the analysis flows from BLM's community subsistence analysis. Based on 25 years of on-the-ground experience (including observed subsistence impacts and a five-fold increase in caribou population), the results of studies, and other factors, the DEIS concludes that the potential effects on subsistence uses are minimal and localized. See, e.g., pp. ES-3, 4.3-84, 4.3-86, and 4.7-108. The DEIS then addresses what is known and unknown about subsistence uses in over 20 villages. See, e.g., Appendix D. While the latter information is useful, it is not necessary for purposes of the analysis required by NEPA, ANILCA, and other legal requirements. Indeed, in the current ANILCA analysis, community-based subsistence information from limited areas seems to be the single factor that led to a "may significantly restrict" finding. See p. E-10.

IN SUM, THE FEIS SHOULD: (i) ADDRESS THE CUMULATIVE EFFECTS OF THOSE ACTIVITIES THAT ARE TRULY REASONABLY FORESEEABLE, NOT ALL ACTIVITIES THAT MAY OCCUR WITHIN THE NEXT 30 YEARS; AND (ii) SHOULD ANALYZE IN A GENERAL FASHION POTENTIAL EFFECTS ON SUBSISTENCE, REACH CONCLUSIONS BASED ON THAT ANALYSIS, AND STATE CLEARLY THAT COMMUNITY INFORMATION PROVIDES BACKGROUND INFORMATION THAT IS USEFUL BUT NOT CRITICAL TO THE BROADER CONCLUSIONS REACHED. A REASONED CONCLUSION BASED UPON SUCH AN ANALYSIS SHOULD FIND THAT SUBSISTENCE IMPACTS FROM THE PROPOSED ACTION ARE EVEN LESS THAN THOSE IDENTIFIED IN THE DEIS AND DO NOT EVEN MEET THE LESSER "MAY SIGNIFICANTLY RESTRICT" ANILCA STANDARD.

2. Alternatively, the BLM should determine that the ANILCA § 810(a)(3) criteria are met:

ANILCA § 810(a) provides that no "withdrawal, reservation, lease, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected" until the Federal Agency gives the required notice and holds a hearing in accordance with § 810(a)(1) and (2), and makes the three determinations required by § 810(a)(3)(A), (B) and (C). The BLM's proposed findings in its subsistence evaluation are that all the alternatives (including the no-action alternative) may significantly restrict subsistence uses. As a consequence of this finding (if left unchanged), the BLM should document, in the FEIS, that it undertook the requisite notice and hearing procedures required by ANILCA § 810(a)(1)-(2).

In addition, unless the BLM reconsiders its cumulative impacts findings, it must also make the three determinations required by § 810(a)(3)(A), (B) and (C):

A. that such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands;

B. that the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition; and

C. that reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.

Such determinations are warranted and supported by the record.

As an existing use with a 25-year operational history, TAPS' potential impacts to subsistence resources and uses are well-documented, minimized, and effectively mitigated to the point that adverse impacts attributable to the Preferred Alternative are found to be "extremely small." DEIS at pp. 4.3-84, 4.3-86 and 4.7-108 ("The evaluation of impacts to subsistence under the proposed action concludes that any negative impacts that occurred would be extremely small."). Applicable existing measures and stipulations to pre-empt or mitigate impacts to subsistence resources and uses are detailed in the DEIS in § 4.1, including the general requirements of JPO oversight and its adaptive compliance monitoring system (§ 4.1.1), special buried or elevated pipeline designs for wildlife crossings (§ 4.1.2.10), numerous stipulations mitigating or preempting impacts to biological systems (§ 4.1.3.3 and Table 4.1-2), spill prevention and response requirements (§ 4.1.4), and social, cultural and economic mitigation measures (§ 4.1.5).

These measures, subject to the ongoing adaptive compliance monitoring and mitigation provisions of the Federal Grant, are intended to specifically ensure that subsistence resources and uses are not significantly restricted by the proposed action. Because of the numerous existing restrictions and protections, and their demonstrated effectiveness over the 25-year operational history of TAPS, BLM has found that the Preferred Alternative by itself would not result in significant restrictions of subsistence resources and uses. However, considered together with past, present, and reasonably foreseeable future cumulative effects, the possibility exists that all the activities combined may significantly restrict subsistence uses. This possible restriction on subsistence uses cannot be avoided while accomplishing the purposes and needs identified with respect to TAPS in § 1.1 of this DEIS. Nor can this possible effect be avoided if the BLM were to adopt either the less-than-30-years alternative or the no-action alternative because the cumulative impacts of these alternatives still reach the "may significantly restrict" threshold under ANILCA § 810.

With respect to the amount of public lands involved, the existing nature of TAPS and the functional requirement that TAPS extend the full 800 miles from the North Slope to Valdez, establishes real and certain limitations and requirements. As presently configured, although TAPS extends 800 miles, it encompasses only 16.3 square miles of land (including the privately-owned Valdez Marine Terminal, which is not within the ROW being renewed). See Environmental Report for the Trans-Alaska Pipeline System Right-of-Way Renewal at Table 2.1-1. The typical width of the ROW on federal lands is 54 feet for buried sections and 64 feet for elevated sections. Id. Only 47 percent of the 800-mile ROW is on federal lands. DEIS at p. 3.3-72. Thus, the amount of public lands involved in the Preferred Alternative does represent the minimum necessary to accomplish the needs and purposes of TAPS.

The BLM has considered and balanced all these factors, including, in particular, the existing restrictions, limitations, and mitigation measures applicable to the Preferred Alternative to address subsistence concerns. These measures have provided significant and effective protection for subsistence resources and uses during the 25-year operating history of TAPS. Accordingly, the BLM should determine that the significant restriction that may occur under the Preferred Alternative (or any other of the alternatives analyzed in the DEIS), when considered together with the cumulative impacts resulting from past, present, and reasonably foreseeable future actions: (A) is necessary, consistent with sound management principles for the use of the public lands included within this TAPS ROW renewal; (B) will involve the minimal amount of public lands necessary to accomplish the purposes of the Preferred Alternative; and (C) reasonable steps have been and will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.

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* The BLM has made a valuable observation about differing standards for the NEPA and ANILCA § 810 analysis. As stated at page E-8, it is possible to reach a conclusion under NEPA (or other federal or state statutes and regulations that address subsistence) that direct, indirect, and reasonably foreseeable cumulative impacts are not significant for NEPA purposes, while at the same time finding under ANILCA that the "may significantly restrict" standard embodies a lower threshold and is met. Although the TAPS owners believe that the ANILCA standard has not been met, it is important to emphasize that the BLM's proposed finding is not inconsistent with or directly comparable to other conclusions reached by the BLM regarding subsistence.

The DEIS states: "While the subsistence harvest of wild food (fish, terrestrial and marine mammals, birds, shellfish) only represents 2% of the fish and game harvested annually in Alaska (ADF&G, 2000a), that harvest contains about 35% of the caloric requirements of the rural population."

Suggested change to make the statement more complete: "The subsistence harvest of wild food (fish, terrestrial and marine mammals, birds, and shellfish) represents 2% of the fish and game harvested annually in Alaska (commercial harvesting accounts for 97% and sportfishing/hunting for 1%), which contains about 35% of the caloric requirements of the rural population (ADF&G, 2000a)."

The statistics in parentheses are presented on a later page (3.24-2), but should also be included here for clarity and perspective.

(Please note: Table for this comment could not be included in this database. For full comment, please see Argonne Document #3351)

This section should be augmented to provide a more complete explanation of State/Federal subsistence issues. Recommend deleting all after the sentence ending with "different parts of the state" on line 16 of paragraph 5 on page 3.24-1 through the end of paragraph 1 on page 3.24-2 and replacing this text with the following.

Suggested Insert:

Part of the complexity associated with subsistence issues in Alaska relates to differences in applicable State and Federal laws in terms of the definition of a subsistence user. Table 1 (State of Alaska, Office of the Governor available electronically at <http://www.gov.state.ak.us/subsistence/>) provides a subsistence management chronology for the years from 1925 to 2002.

Of particular relevance in this chronology, Alaska passed a comprehensive subsistence law in 1978 that required, once sustained yield was ensured, that reasonable subsistence uses be allowed, with a priority if necessary. (This law was modified in 1986 to limit those eligible for subsistence priority to rural residents.) In 1980, Congress passed the Alaska National Interest Lands Conservation Act (ANILCA). Title VIII of ANILCA mandates that the state maintain a subsistence hunting and fishing preference for rural residents or forfeit management of these subsistence uses on public lands. In 1982 the Department of the Interior certified that the state's law was in compliance with ANILCA. However, in 1989 the Alaska Supreme Court found that the rural subsistence preference contained in the 1986 state law violated the clause of the Alaska constitution which reserves fish and wildlife resources for "the common use" of all residents of the state. Thus, the court ruled the state's law unconstitutional (Fall, 1990). The Federal government determined to take over management of fish and game on Federal public lands in 1990, arguing that the state was not in compliance with ANILCA because the rural priority was eliminated. This initiated the era of so-called "dual management" of fish and game in Alaska, with separate administration and regulations applicable to State and Federal public lands. In 1994, the U.S. District Court issued a final ruling that interpreted ANILCA as giving the Federal government broad authority to manage subsistence on Federal public lands and extended jurisdiction to include navigable waters on Federal lands.

Since 1990, the State has not decided how to resolve the subsistence issue. In 2001 Governor Knowles established a Subsistence Summit, which developed a proposed constitutional amendment, accompanying set of regulations, and "drafting comments" (see <http://www.gov.state.ak.us/subsistencesummit/trans_to_gov.html>) designed to resolve the conflict between ANILCA and the state law. To date, the state legislature not agreed that a constitutional amendment is appropriate. A key sticking point involves whether or not a subsistence priority -- already embodied in state law (Alaska Statutes [AS] 16.05.258 Subsistence Use and Allocation of Fish and Game) -- is solely a rural priority or alternatively, whether certain urban residents can also qualify as subsistence users. (Important features of Alaska's present subsistence law are discussed in Section 4.7.8.1.)

Resolution of the rural preference issue has pitted rural against urban Alaskans.* As noted by Governor Knowles in a 2001 address to the Alaska Federation of Natives (AFN):

"For 12 years, the permanent protection of rural subsistence has been denied us. That's because a small minority of urban legislators refuse to allow Alaskans the opportunity to vote on a subsistence amendment to our state constitution.

Five special sessions of the Legislature called by three different governors and 10 years of related court suits have brought us only hardened positions and hardened hearts." (Knowles, 2001.)

It is not possible to predict if or when this contentious issue will be resolved and the state constitution amended to include a rural subsistence priority.

At present, therefore, there are differing definitions (state/federal) of exactly who is a subsistence user. On state lands, all Alaska residents are potentially subsistence users. On Federal public lands and navigable waters, only rural Alaskans are potential subsistence users. To simplify the following discussion, this DEIS uses the current federal definition of subsistence, including its requirement of rural residency.

* Strohmeyer (1993) provides a popularized summary of the early political battles between urban sports hunters/anglers and subsistence users.

References:

Botelho, Attorney General B. M. 2001. "Subsistence Summit Recommendations." Available electronically at <http://www.gov.state.ak.us/subsistencesummit/trans_to_gov.html>.

Fall, J. A. 1990. The division of subsistence of the Alaska Department of Fish and Game: An overview of its research program and findings: 1980 -- 1990. Arctic Anthropology 27(2):68-92.

Knowles, Gov. T. 2001. Alaska Federation of Natives Annual Convention. Egan Convention Center, October 25, 2001. Available electronically at <http://www.gov.state.ak.us/speech/01_AFN.html>.

State of Alaska. 2001. Joint Resolution No. in the Legislature of the State of Alaska Twenty-Second Legislature -- Second Session.

Strohmeyer, J. 1993. Extreme Conditions: Big Oil and the Transformation of Alaska. Simon & Schuster, New York, NY.

(Please note: Figures for this comment could not be included in the database. For full comment, please see Argonne Document #3352)

The DEIS should provide a useful overview of sportfishing and hunting in Alaska. In several places where subsistence is discussed (and potential conflicts between subsistence and other uses of fish and game), the DEIS claims that there are critical data deficiencies. Undoubtedly, the subsistence database could be improved -- a useful observation -- but the DEIS should make better use of extant data. The following material should be inserted to describe sportfishing and hunting in Alaska. We recommend that this be inserted after the sentence ending in line 4 as an additional series of paragraphs.

Suggested Insert:

This section provides a brief overview of sport fishing and hunting in Alaska including the economic importance of these activities and relevant trends in participation and usage. Managed properly and with due regard for potential conflicts and legislatively mandated priorities among various user groups, (See footnote 1 below) the fish and game resources of Alaska are both abundant (although not sufficient to accommodate all user groups at all times) and renewable -- that is they provide a continuing economic benefit.

In aggregate the sport harvest of fish and game is equal to between one-third and one-half (by weight) of the subsistence harvest of these resources (Subsistence Myths, 2002; Larson, 1999). Additionally, Alaska's wildlife resources are exploited for wildlife viewing, a nonconsumptive use that is increasingly important economically.

Fishing and hunting are popular pastimes for Americans. Nationwide, 16% of the population aged 16 or older went fishing and 6% went hunting in 2001 (USFWS, 2002c). Participation rates are even higher in Alaska; 41% of Alaskans fished (the highest in the nation) and 16% hunted (USFWS, 2002c). Fish and game resources provide an attractive draw for nonresidents; according to preliminary data from the 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation -- State Overview (USFWS, 2002c), nonresidents accounted for 57% of the anglers in Alaska, the highest percentage of any state in the nation.

-Sport Fishing

Sport fishing is economically important to Alaska (see footnote 2 below). Annually, nearly 450,000 anglers (resident and nonresident) generate economic activity resulting from their expenditures for licenses and fees, fishing and camping gear, food, lodging, transportation, and guides. Revenues spur business activity, create employment in various sectors of the Alaskan economy, and provide funds for certain government programs. Additionally the number of anglers (among other factors) determines the amount of federally provided sport fish restoration funds (see footnote 3 below). For FY 2002, Alaska received more than $14.3 million in Federal aid for sport fish restoration, more than any other state.

Estimates of the economic significance of the sport fishery in Alaska vary (see e.g., Colt, 2001a,b; Alaska Sport Fish Council, 2002), but all agree it is material. Colt (2001a,b), for example, estimated sport fishing expenditures totaled over $600 million (1993 data converted to $1998 dollars), created over 9,000 Alaskan jobs (direct and indirect), and had a net economic value of $215 million. Another study estimated that sportfishing expenditures were more than $548 million in 1996, resulting in an economic output of nearly $1 billion and earnings of $261 million with direct and indirect employment totaling 12,626 (Alaska Sport Fish Council, 2002). The economics of several individual sport fisheries have been analyzed, including Southeastern Alaska and the Central and Lower Cook Inlet (Hamel et al., 2000; Herrmann et al., 2001).

Figure 1 shows a time series of state fishing licenses sold in Alaska since 1961 (Howe et al., 2001) (see footnote 4 below). Total license purchases increased from approximately 56,000 to 442,000 in this period -- a compound average annual growth rate of 5.6%. License sales to resident anglers increased at a compound average annual rate of growth of 6.3% over the years from 1961 to 1980, but the rate of growth decreased to only 1.42% over the period from 1980 to 1999. License sales to nonresidents increased at 9%/year over the period from 1961 to 1980 and decreased only slightly to a rate of nearly 7%/year since 1980.

Figure 2 shows the number of licenses issued to resident anglers in Alaska as a percent of the total (solid line left axis) and relative to the Alaska population (resident licenses per 100 population, dashed line, right axis). Because the rate of increase in the annual number of fishing licenses issued to Alaskan residents tapered off, the percentage issued to residents decreased and became less than 50% of the total in 1990. Nonresidents account for the majority of Alaskan sport anglers. However, because residents use the fishery for a greater number of days per year than do nonresidents, residents still account for a majority of the days fished (Howe et al., 2001) (see footnote 5 below).

Since 1980, the rate of growth of the Alaska population has been higher than the rate of growth of sales of fishing licenses to residents. Therefore, the number of resident licenses per 100 population has decreased. Despite this latter trend, sport fishing remains popular among Alaskan residents -- more popular in percentage terms than for any other state.

The data presented in Fig. 1 and Fig. 2 relate to angler participation (the number of anglers who fished). Another index used to characterize fisheries is the angler effort, typically measured in angler days. (One angler-day is equivalent to one angler fishing for all or a portion of a day.) Figure 3 presents a time series of angler effort from 1977 to 2000. (The post-1995 dip is probably a statistical artifact resulting from a change in the estimation procedure.) According to the most recent (and what are believed to be the most reliable) estimates, residents and nonresidents expended an effort of slightly more than 2.6 million angler-days in the year 2000.

Participation and effort vary with location throughout Alaska. Relevant estimates for the Alaska North Slope and the TAPS right-of-way (ROW) are summarized in a later section.

-Sport Hunting/Trapping

Sport hunting is also economically important to Alaska. As with anglers, hunters and trappers (resident and nonresident) generate economic activity by their expenditures for licenses and fees, gear, food, lodging, transportation, and guides. These expenditures spur business activity, create employment, and provide funds for certain government programs. Colt (2001a) estimates that 1999 sport hunting expenditures totaled approximately $165 million and created nearly 3,000 jobs in Alaska. These economic benefits are smaller than those for fishing (see above) are, but appreciable nonetheless. Additionally, the number of hunters in a state (together with the total area of the state) determines the amount of Federal Wildlife Restoration funds provided the state (see footnote 6 below). In FY 2002, these funds provided to Alaska totaled nearly $5.5 million, more than received by any other state.

Figure 4 shows a time series of the number of licenses issued to resident and nonresident hunters and trappers in Alaska from 1961 to 2000. Under Alaska law, all residents of age 16 or older must posses a valid license to hunt or trap. Residents of age 60 or older may apply for a permanent identification card in lieu of a license. Hunting or trapping licenses are required if hunting/trapping on state (ADF&G, 2002c) or Federal land (FSB, 2002b), and whether for sport or subsistence uses (see footnote 7 below). Thus, with the exception of younger (< 16 years of age) and older (age 60 or more) resident hunters, the statistics presented in Fig. 4 include both sport and subsistence hunters. Licenses included in this tabulation include those issued solely for hunting, combination licenses for hunting and fishing, and combination licenses issued for hunting, fishing, and trapping. Both annual and short-term (e.g., 7-, or 14-day licenses) are included as are licenses issued to military, low-income, and military veterans groups. Over the period from 1961 (see footnote 8 below) to 2000, the number of hunting licenses issued increased by a factor of 2.4 from approximately 41,500 to 100,000 (see footnote 9 below) -- a compound average annual growth rate of slightly more than 2.3%. In terms of the number of licensed participants, fewer people (including both residents and nonresidents) hunt than fish (in a ratio of approximately 1:4) in Alaska. In the late 1950s and early 1960s the numbers of fishing and hunting licenses issued in Alaska were approximately the same. However, the subsequent growth rate in fishing license sales has been significantly larger than that for hunting licenses.

Figure 5 shows the relative share of resident and nonresident hunting license sales. Nonresidents accounted for approximately 16% of the hunting licenses issued in the year 2000, slightly smaller than corresponding percentages in the late 1960s, but recently on the increase. Proportionately, there are fewer nonresident hunters and trappers than anglers.

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Footnotes:

1 -- Both Alaska and Federal laws provide for a subsistence priority, discussed in other sections.

2 -- Mention of the economic value of sport fishing or hunting does not imply that the economic value of either subsistence or commercial harvests is unimportant. The economic value of subsistence uses is discussed in Section 3.23.5. Colt (2001a) provides data on the economic value of commercial fishing.

3 -- The number of licensed anglers in the state and the size of its land and water area (among other factors) determine the amount of grant funds provided under the Federal Aid in Sport Fish Restoration Act (Dingell-Johnson and the Wallop-Breaux Amendment). The Sport Fish Restoration program is funded by revenues collected from the manufacturers of fishing rods, reels, creels, lures, flies, and artificial baits, who pay an excise tax on these items to the U.S. Treasury <http://federalaid.fws.gov/sfr/fasfr.html> (USFWS, 2002a). The Wallop-Breaux Amendment established a new Trust Fund, named the Aquatic Resources Trust Fund, which also includes funds from import duties on sport fishing equipment, pleasure boats and yachts, and tax on motorboat fuel sales. Funds are provided under a cost-reimbursement program, where the state is reimbursed by up to 75% of project expenses.

4-- Licenses serve as a convenient surrogate for the number of sport anglers. However, the correspondence is not exact because some (particularly out-of-state residents) anglers who purchase licenses do not fish in a given year and certain others (such as residents under the age of 16 or resident seniors) are not required to have a license in order to fish. Licenses are not required for subsistence fishing on state (ADF&G, 2001) or Federal waters (FSB, 2002a). Permits may be required for certain subsistence fishing (see 5AAC 01.015).

5 -- In 1997, for example, Alaska residents accounted for 63.3% of the days fished in Alaska, even though they accounted for fewer than 50% of the anglers (Howe et al., 2001).

6 -- These funds are provided from an 11% Federal excise tax on sporting arms, ammunition, and archery equipment, and a 10% tax on handguns and allocated under a formula specified in the Federal Aid in Wildlife Restoration Act, popularly known as the Pittman-Robertson Act <http://wwwfederalaid.fws.gov/wr/fawr.html> (USFWS, 2002b).

7 -- This differs from license requirements for subsistence fishing, where licenses are not required

8 -- Ms. Susan George, 907-465-6064, kindly provided Alaska hunting and fishing license data prior to 1990. (Post-1990 are available on the ADF&G website.)

9 -- The year 2000 license sales are in excellent agreement with the estimated number of resident and nonresident Alaska hunters (93,000) estimated from the 20001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation conducted by the U.S. Bureau of the Census for USFWS (USFWS, 2002c). The Census/USFWS estimate is based on a national survey, rather than state license data.

Suggest that these two paragraphs be reviewed carefully for accuracy. Much of this material seems to be abstracted from Haynes (2000). Specifically, lines 19 -- 22 of the 2nd paragraph contain the statement: "The main problem is the combination of subsistence and recreational harvest data, making it impossible to distinguish between the two." Haynes (2000) page 5 point 3 lines 1 and 2 actually states: "The wildlife harvest and fur sealing data represent statistics for both subsistence and non-subsistence harvests." There is no implication from this or other statements that fishing harvest data for sport and subsistence uses is commingled. Thus, in principle, it is possible to distinguish between these two, although not wildlife.

Here and at several other points in the text the DEIS comments on subsistence data deficiencies. The DEIS should recommend that the state and federal subsistence data collection effort be designed more efficiently and expanded if necessary. In aggregate, substantial resources are available to design and implement a functional subsistence data collection and analysis effort.

Reference:

Haynes, T. L. 2000. TAPS Right-of-Way Lease Renewal Project, Alaska Department of Fish and Game Division of Subsistence Work Order #1: Subsistence Information for Alyeska Pipeline Service Company Environmental Report. Alaska Department of Fish and Game (ADF&G), Fairbanks, AK.

(Please note: Figures for this comment could not be included in the database. For full comment, please see Argonne Document #3353)

The discussion regarding Fig. 3.24-3 is confusing. It needs to be clarified, and the figure itself should be redrawn and simplified to avoid confusion. The following text is suggested:

First, it is helpful to subdivide Fig. 3.24-3 into two plots, one showing the relationship between angler effort (000 angler-days) (see footnote 1 below) and time. A semi-log plot as illustrated in Fig. 1 makes it easier to see proportional trends (rates of growth or decline). Figure 1 presents a time trend of angler effort in the vicinity of the Dalton Highway in the North Slope subarea of the Arctic-Yukon-Kuskokwim (AYK) fishery management area over the years from 1984 to 1999 based upon the most recent annual fishery management report (Burr, 2001). There is substantial year-to-year variability (see footnote 2 below) in effort and the least squares estimate of the compound average annual rate of growth was approximately 5.8% per year over this period [R2 = 0.36 (see footnote 3 below)]. This apparent increase in sportfishing effort along the Dalton Highway might have been a return to an equilibrium demand following the reopening of the fishery in 1981 and/or the effect of increased access and larger numbers of anglers statewide. If attention is limited to the period from 1987 to 1999, the estimated annual rate of increase is lower (3.9% per year) and the time trend is not statistically significant.

Second, it removes clutter and facilitates understanding if the harvest data for this area are aggregated for all three species of fish harvested (lake trout, char, and Arctic char). Harvest data represent fish caught and kept (consumed). It is also useful to include available data on catch (fish caught, but not necessarily consumed) as well as harvest (see footnote 4 below). Some sport anglers (either by choice or regulation) engage in catch-and-release fishing. Burr (2001) and Haynes (2000) provide a time series of the catch of each of these species for the period from 1990 to 1999. (Earlier catch data are not available.) Figure 2 shows a semi-logarithmic chart of available data for both catch and harvest over this time period (total of all three species). As with the participation data for this area, there is substantial year-to-year variability, which reflects variation in (among other things) effort, abundance, and luck or skill. There is no statistically significant trend in total catch. However, the total harvest appears to have decreased (4.6% per year least square estimate, R2 = 0.22) over these years.

Considered together, the data on angler effort, success, and harvest do not indicate substantially increasing competition from sport anglers in this area over this period (see footnote 5 below). Moreover, state and federal regulatory authorities have the legislative authority and regulatory tools (see material presented elsewhere in these comments) to limit or prevent any competition from sport anglers that would reduce the harvest of subsistence users. In the past, they have exercised this authority. The DEIS is right to summarize the views and concerns of subsistence users. However, available data should be presented to quantify these potential impacts wherever possible.

Data are also available on participation, effort, success, and harvest for the entire North Slope subarea, which are also relevant (particularly for assessment of cumulative effects). These data, taken from Burr (2001) are plotted in Fig. 3 and Fig. 4 and are more useful than the data shown in Fig. 3.24-4 of the DEIS. Analysis of these data indicates that there is no statistically significant increase in either participation (000 anglers) (see footnote 6 below) or effort (000 angler-days) over this same time period (see Fig. 3). There is no statistically significant trend in catch (000 fish) over the years from 1990 to 1999. Harvest data indicate a weak declining trend (compound annual rate of -5.1% per year, R2 = 0.27) for the years from 1985 to 1999.

References:

Burr, J. 2001. Fishery Management Report for Sport Fisheries in the Arctic-Yukon-Kuskokwim Management Area, 1999-2000. Alaska Department of Fish and Game (ADF&G), Fishery Management Report No. 01-3.

Haynes, T. L. 2000. TAPS Right-of-Way Lease Renewal Project, Alaska Department of Fish and Game Division of Subsistence Work Order #1: Subsistence Information for Alyeska Pipeline Service Company Environmental Report. Alaska Department of Fish and Game (ADF&G), Fairbanks, AK.

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Footnotes:

1 -- Angler effort is usually measured in angler-days. One angler-day is equivalent to one angler fishing for all or a part of a day.

2 -- This could reflect actual time trends in effort, but also reflects year-to-year survey sampling error.

3 -- The R2 value is a measure of the variability of the dependent variable that is "explained" by variation in the independent variable(s). In this case 36% of the variability in angler effort is accounted for by the time trend -- a relatively low percentage.

4 -- The number of fish harvested is always less than or at most equal to the number of fish caught.

The discussion of these possible subsistence impacts in the DEIS identifies possibilities, but provides little logical or data-based analysis. Are these concerns supported by data? Can these impacts be mitigated? What is the relative likelihood or significance of these impacts? This section needs to be revised and clarified.

Consider the first bullet point, for example -- indicating that increased access by nonlocals using TAPS maintenance roads or employed at TAPS facilities might compete for or disrupt subsistence activities. This is certainly a concern in principle. However:

-- The DEIS also notes that after September 11, 2002, new access constraints have been put in place, which would reduce access to the TAPS right-of-way (ROW). Access to the Dalton Highway remains.

-- Data presented in the DEIS in Table 4.3-9 projects that total employment in mining (including gas and oil) throughout the state will increase only slightly from 10,381 persons in 2004 to 11,505 in 2034. In the Environmental Report (TAPS Owners, 2001, Table 4.3-17) pipeline employment is projected to decrease slightly from 2,638 persons in the year 2000 to 1,816 in 2015 and employment in North Slope oil field operations to increase only slightly from 5,823 persons in the year 2000 to 6,356 in 2015. In fact, employment at TAPS might actually be lower than projected as a result of rampdown of pump stations and other system changes.

-- Historically, the majority of hunters using the Dalton Highway to access hunting areas are from the Fairbanks/northern interior area and a substantial proportion of those hunters are on active military duty. A recent study notes that more than half of all hunters (53%) in 1998 reported home addresses in the Fairbanks/northern interior area with 17% from the "lower 48" and the remaining proportion from other portions of the state (Hicks, 1998). Of those hunters using the Dalton Highway, approximately 25 percent were on active duty (Smith, 1999). Smith (1999) also notes that because the figure does not include family members or visiting friends or relatives, the military community is a significant presence among hunters using the Dalton Highway to access hunting areas.

Given this information, it is hard to imagine that competition with subsistence fishing is likely to be a material effect. Likewise, the third bullet point on recreational hunting and fishing can be placed in perspective by referring to the angler and hunter data given elsewhere in these comments (see comment and data presentation for page 3.34-31).

This section does not address measures that can be taken by regulatory authorities to limit sportfishing (see detailed information presented elsewhere in these comments) in the event that the subsistence fishery suffers adverse impacts. State and federal agencies have the authority and the regulatory tools to control sport angler effort, technology employed, catch, and harvest by location and species. Thus, any adverse impact from competitive fishing pressure (by sports anglers) can readily be mitigated. The same is true for hunting pressure.
This entire section should be rewritten for greater clarity. Claims that we lack information or data notwithstanding, it is possible to project the effects of the proposed action alternative because this involves the continuation of an existing facility.

References:

Hicks, M. V. editor. 1998. Moose. Federal Aid in Wildlife Restoration Management Report: Survey-Inventory Activities 1 July 1995 -- 30 June 1997. Grants W-24-4 and W-24-5, Study 1.0. Alaska Department of Fish and Game (ADF&G), Division of Wildlife Conservation, Juneau, Alaska.

This section should be augmented to provide a more complete explanation of State/Federal subsistence issues. Suggested language follows:

Federal Subsistence Management

The Federal government has managed subsistence trapping, hunting, and fishing on Federal public lands and waters since July 1, 1990. On October 1, 1999, the Secretaries of the Interior and Agriculture published regulations (36 Code of Federal Regulations (CFR) Part 242 and 50 CFR Part 100) to expand Federal management of subsistence fisheries to Alaskan rivers and lakes and limited marine waters within and adjacent to Federal public lands. The expanded jurisdiction resulted from a decision by the Ninth Circuit Court in the Katie John case and meets the requirements of the rural subsistence priority in Title VIII of ANILCA. As noted in Section 3.24 of this DEIS, the assumption of Federal management was made necessary by the failure of the state law to comply with ANILCA.

Federal subsistence fishing and hunting regulations are published annually (see, e.g., Federal Subsistence Board (FSB), 2002a,b).

The FSB oversees the Federal Subsistence Management Program for both fish and game. The Federal Subsistence Management Program manages subsistence use by rural Alaskans on 237 million acres of federal lands, which encompass 66 percent of Alaska lands and 52 percent of Alaska's rivers and lakes (U.S. Fish and Wildlife Service, 2002). In the context of cumulative effects associated with the renewal of TAPS, it should be noted that Federal lands on the North Slope include the National Petroleum Reserve-Alaska and the Arctic National Wildlife Refuge.

The FSB includes the Alaska directors of the U.S. Department of Interior's Fish and Wildlife Service, National Park Service, Bureau of Land Management, Bureau of Indian Affairs, and the U.S. Department of Agriculture's Forest Service. The Chair of the FSB is a representative of the Secretary of the Interior with the concurrence of the Secretary of Agriculture (67 Federal Register 120, pp 42185-42187). As with the state BOF and BOG, Federal Subsistence Regional Advisory Councils provide input to the FSB, one from each of the ten Federal subsistence resource regions. (These regions are described and mapped in Federal Subsistence Board (2002a,b).) Members of these Regional Advisory Councils are appointed by the Secretaries of the Interior and Agriculture. Members were first appointed in 1993; initial appointments were for staggered terms of 1, 2, or 3 years. Subsequent appointments were for 3 years each. Requirements for membership include residence in the region and knowledge of regional subsistence uses and needs. Federal Subsistence Regional Coordinators are appointed to work with the Regional Subsistence Advisory Councils and the FSB.

Cooperative agreements have been developed between the Federal government and several Alaska Native organizations to manage some subsistence resources more effectively (see <http://www.r7.fws.gov/asm/brochur.html>). These advisory organizations provide technical information and biological data to the FSB. Traditional and local knowledge is weighed in subsistence management decisions.

Any individual or group can submit proposals to change Federal subsistence regulations, comment on proposals, and testify at meetings. The regulatory planning schedule and forms to describe specific proposals are widely published (see e.g., Federal Subsistence Board, 2002a,b). Meetings of the FSB and its Regional Advisory Councils are open to the public and meeting transcripts are published (electronic versions are available at <http://www.r7.fws.gov/asm/board02.html>).

Just as the State BOF or BOG may issue emergency orders, the FSB also issues emergency restrictions in time-critical situations, as happened recently when the FSB issued emergency restrictions to conserve Chinook and summer chum salmon in the Yukon River drainage (Federal Subsistence Board, 2000). In the past, the FSB has determined that additional public notice and comment requirements under the Administrative Procedure Act (APA) for emergency closures are impracticable, unnecessary, and contrary to the public interest because lack of appropriate and immediate conservation measures could seriously affect the continued viability of fish or game populations (67 Federal Register 120, pp 42185-42187).

Some, including Alaska's Lieutenant Governor Fran Ulmer have argued that so-called "dual management" of Alaska's fish and game resources is inefficient. In a speech before Commonwealth North, the Lieutenant Governor identified some of the problems of dual management as (Ulmer, 2002):

"Complicated and potentially conflicting regulations.
Immediate changes in commercial and sport fisheries access and allocations.
A heightened risk of over-harvesting from separate allocation decisions.
Slower and more cumbersome emergency regulatory procedures.
And associated higher public costs from duplication of effort."

However, the FSB and Federal officials generally have worked to facilitate dual management of fish and game resources in Alaska. As noted by Mitch Demientieff, Chair of the FSB in testimony before the Senate Committee on Indian Affairs (Demientieff, 2002):

"Dual management between the Alaska Department of Fish and Game and the Federal Subsistence Program is currently being guided through an Interim Memorandum of Agreement (MOA). This document provides a foundation and direction for coordinated interagency subsistence fisheries and wildlife management consistent with state and federal statutes. More specifically, it is intended to protect and promote the sustained health of fish and wildlife populations, to ensure conservation and stability in fisheries and wildlife management, and to include meaningful public involvement.

Through the implementation of the MOA, the federal agencies have worked with the State of Alaska to develop specific protocols that provide detailed guidance to the field managers for various aspects of dual management…These protocols address information sharing between the agencies, coordinated research projects and monitoring activities, and coordinated in-season management decision making.

Full-time federal and state liaison positions have also been established to facilitate this cooperative effort. Federal funding to support the State's liaison and coordination efforts is provided through cooperative agreements on an annual basis. This year's agreement provides $470,000 to the Alaska Department of Fish and Game for this purpose."

In practice, both the State and Federal governments have attempted to minimize potential problems associated with dual management. In most cases they have worked in unison; an assertion supported by experience. For example (USFWS, 2000), during the early 1900s moose were rare on the Alaskan North Slope. Moose gradually increased and peaked in the late 1980s. Later counts declined. in 1995 the State of Alaska Board of Game and Federal Subsistence Board issued regulations closing nearly all of the Alaskan North Slope to moose hunting (a small harvest of moose was authorized for subsistence in the vicinity of Nuiqsut). Hypotheses advanced to explain the decline in moose populations in this area included the possibility that moose populations exceeded the maximum level sustainable by the habitat, an increase in predator populations resulting from bear harvest restrictions established in the early 1970s and reduced aerial hunting of wolves, and increases in human harvest as the regional became more accessible resulting from the completion of the Dalton Highway USFWS, 2000). Whatever the cause, the BOG and the FSB were able to take coordinated action to try to correct the situation.

In addition to its internal research programs, the Federal government funds a variety of organizations to collect and analyze data about subsistence harvests and the status and trends of the various wildlife and fish populations in Alaska. In the past two years, $14 million has been expended to fund 119 fisheries monitoring studies (Demientieff, 2002). To date, the State of Alaska have received $5.9 million and Alaska Native and local rural organizations have received $5.3 million to perform these studies (Demientieff, 2002).

The Federal subsistence regulations apply to subsistence users only. The Federal regulations do not apply to nonrural residents or non-Alaska residents; these two groups are governed by ADF&G hunting and fishing regulations. Federal regulations do affect sport anglers and hunters, however, because the FSB may open or close Federal lands to various user groups. For example, on July 25, 2002, the FSB reopened sockeye fishing in the Redoubt Lake watershed and part of Redoubt Bay to all users—a decision that rescinded an earlier closing of all Redoubt Lake area freshwaters to nonsubsistence fishing in order to provide for a subsistence priority.

Summary

As the above discussion shows, the administrative mechanisms for fish and game management are well developed and a wide variety of regulatory tools are employed to accord subsistence users priority. Competition for subsistence resources from sport anglers or hunters/trappers can be mitigated or eliminated, although the management system has not always functioned as intended and a bias towards sport and commercial users has been alleged.

From the perspective of assessing the probable effects of renewal of the TAPS ROW it is appropriate to note that renewal alone does not cause increased competition between sport and subsistence users. The number of TAPS and ANS oilfield workers is not projected to increase substantially under the proposed action alternative. The State of Alaska can make the decision to continue to allow public access to the Dalton Highway or return this to a limited access road. And, even if the Dalton Highway were to remain open to the public and competition from urban and nonresident sport hunters and anglers were to threaten to imperil subsistence harvests, the State and Federal governments have the legislative mandate and sufficient regulatory tools to mitigate these adverse impacts. The responsibility for fish and game management lies with State/Federal government, not with the oil industry.

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Two important additional sources of pressure on subsistence are encroachment from nonresident tourist activities in general and resident population growth (even if it does not directly result in more hunting or fishing).

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This paragraph states in part "Although the establishment of Gates of the Arctic NPP did not disallow subsistence activities in the park area, it did introduce certain restrictions . . .that increased the difficulty of subsistence." Again on page 4.7-110 this discussion notes that ". . .subsistence for traditional and personal use is allowed within the parks, many subsistence practitioners feel that restrictions on subsistence in the parks makes that activity unduly difficult. . . " The accuracy of these parenthetical observations is not at issue, but the text does not explain why these observations are relevant. Are these examples offered merely to illustrate the point that other activities besides oil and gas development can affect subsistence?

The statement that "Certain types of development seem to create conditions that reduce subsistence productivity" is vague and misleading. Better to state that "Statistical analysis indicates that subsistence harvest levels have been shown to vary with physical and demographic factors (Wolfe and Walker, 1987)" and then summarize the findings of this analysis as has been done. Correlation is not the same as causation and although Wolfe and Walker use the term "productivity" in their article, it is harvest that is actually used as the dependent variable in the regression analysis.

The Wolfe and Walker (1987) paper and other publications by Wolfe (1996) provide valuable insights into the areal distribution of subsistence harvests. The relationships established by these authors, together with excellent graphics, could help the reader understand the vast amount of tabular and narrative detail presented in this appendix and in the main body of the DEIS.

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00098360

While the "No-Action Alternative Analysis" describes in notable detail (i) activities that would likely occur if this alternative were selected and (ii) the potential environmental consequences of those activities, see, e.g., DEIS § 4.6, including the description of activities at pp. 4.6-1 to 4.6-2, elsewhere in the document elements of the alternative are described in a manner that suggests that they are so speculative as to prevent reasonable analysis. See, e.g., pp. 4.7-1 ("No action has not received engineering and environmental study and its description remains somewhat speculative.") and 4.2-21 ("No specific approved plans or designs for termination activities currently exist. Such plans and designs would have to be developed before specific action could be taken."); see also pp. ES-2 and 2-5 (citing need for additional NEPA documentation for termination process). It is recommended that: (i) early in the FEIS a more comprehensive description of those activities that would occur if the no-action alternative were selected should be identified and (ii) descriptions of those activities as "speculative" should be deleted. See, e.g., pp. ES-2, 2-5, and 4.7-1.

00098361

The DEIS at p. 2-6, 7 eliminates from detailed analysis the alternative or issue of establishing an escrow account for TAPS removal and ROW rehabilitation, in large part because it would involve a separate rule-making procedure with its own NEPA analysis. As the DEIS also correctly points out, however, this alternative or issue need not be considered in its own right because Department of the Interior regulations and the terms of the Federal Grant require each TAPS Owner to demonstrate its ability to meet removal and rehabilitation requirements. See, e.g., 43 C.F.R. § 2883.1-4. Under those circumstances the second to last sentence of paragraph 7 should be modified by inserting before the word "Additional" the words "Moreover, it is

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This table states that TAPS includes 225 secondary roads, while elsewhere the DEIS consistently states that TAPS includes 284 secondary roads. See, e.g., pp. ES-2 and 3.1-10. The reference to 225 secondary roads should be changed to conform to other references in the DEIS so that there is no confusion as to the scope of activities that are being analyzed or rights that will be renewed.

00098363

The DEIS states at p. 3.26-2 that the "lack of eligibility determination [information regarding archaeological sites] is an important information gap in evaluating the effects of the proposed action on cultural resources." That statement suggests that the DEIS cannot properly analyze the effects of the proposed action and alternatives on cultural resources. That suggestion is incorrect and the discussion should be modified accordingly. As the DEIS correctly states elsewhere, under the National Historic Preservation Act and Federal Grant Stipulations additional on-the-ground activities cannot occur without consultation with the State Historic Preservation Officer or other official and activities that are undertaken must cease if a cultural resource is encountered. See, e.g., p. 4.26-91. Where, as here, the project proponent seeks only renewal of existing rights, see, e.g., p. 2-2, that is more than sufficient to protect known and unknown cultural resources as the DEIS itself recognizes. Id.

00098364

While the "No-Action Alternative Analysis" describes in notable detail (i) activities that would likely occur if this alternative were selected and (ii) the potential environmental consequences of those activities, see, e.g., DEIS § 4.6, including the description of activities at pp. 4.6-1 to 4.6-2, elsewhere in the document elements of the alternative are described in manner that suggests that they are so speculative as to prevent reasonable analysis. See, e.g., pp. 4.7-1 ("No action has not received engineering and environmental study and its description remains somewhat speculative.") and 4.2-21 ("No specific approved plans or designs for termination activities currently exist. Such plans and designs would have to be developed before specific action could be taken."); see also pp. ES-2 and 2-5 (citing need for additional NEPA documentation for termination process). It is recommended that: (i) early in the FEIS a more comprehensive description of those activities that would occur if the no-action alternative were selected should be identified and (ii) descriptions of those activities as "speculative" should be deleted. See, e.g., pp. ES-2, 2-5, and 4.7-1.

00098365

The geographic scope of the cumulative effects analysis is unclear, particularly regarding tanker traffic beyond the Valdez Marine Terminal. Page 1-2 states that the TAPS renewal cumulative impacts analysis includes "tanker traffic associated with transporting oil from the Valdez Marine Terminal to market." (Emphasis added.) The DEIS does not appear to include such an analysis. Moreover, the cumulative effects methodology at p. A-48 indicates that the cumulative effects analysis "end[s] with transport of oil in tankers departing from the Valdez Marine Terminal." Additional confusion is created by the statement at p. 4.4-105 that large spills from tanker accidents are not evaluated as part of the TAPS operation, but that they are discussed in the "cumulative analysis Section 4.7.4.4." Section 4.7.4.4, however, does not contain the referenced analysis, other than a limited discussion of some safety features at p. 4.7-38. The FEIS should clearly state the geographical scope of the area analyzed and ensure that the document effectively analyzes that area.

00098366

Geliflucation is also soliflucation. Soliflucation, which is not in the glossary, is the term used in the DEIS text, not geliflucation.

00098367

(Please note: Tables and figures for this comment could not be included in the database. For full comment, please see Argonne Document #3354)

In order to provide the proper context (and to be thorough in including all relevant subsistence data) for the DEIS analysis of subsistence, the "affected environment" chapter should include a discussion of historical changes in subsistence patterns. The following text could be placed in a new Section 3.24.4: "Historical impacts of TAPS and associated facilities on subsistence."

Suggested Insert:

This section provides a summary of historical changes in subsistence patterns in Alaska. Many trends and developments in Alaska may have affected subsistence and it is difficult to separate out the specific contribution of oil and gas development to the total impact. Moreover, as noted at length in this EIS, there are data gaps on participation in subsistence activities, subsistence effort, and subsistence harvest (see footnote 1 below). Notwithstanding data gaps and other analytical difficulties, it is possible to provide an assessment of historical changes in subsistence patterns. This section summarizes relevant information.

In principle, the qualitative subsistence experience and quantitative subsistence harvest could be affected (positively or negatively) by many factors, including economic growth and development, competition with sport or commercial fishing/hunting, government regulation of fish and wildlife resources, government research on various land or marine species, stock or habitat enhancement programs, access withdrawals or enhancements, and contamination of subsistence resources by oil or other materials associated with oil production and transportation. These factors are addressed below.

Finally, this section provides information on two major subsistence species, moose and caribou, as these are sought after by
both sport and subsistence hunters and also because these cases supplement data presented elsewhere in this EIS and serve as useful illustrations of subsistence impacts.

Growth and Development, a Useful Context for Analysis

Growth is one major potential cause of subsistence impacts. The prosperity of Alaska since it became a state has included population growth and infrastructure growth all of which have the potential to impact subsistence. Population growth (including urban as well as rural population) increases the number of persons potentially competing for available subsistence resources. Economic growth of certain industries (e.g., commercial fishing, tourism and sport hunting and fishing activity) may also reduce subsistence resource availability because their core activities exploit the same resource(s). Infrastructure growth (particularly transportation infrastructure, such as roads, railroads, and aircraft/airports) facilitates access to previously remote areas (see footnote 2 below), which may result in additional competition for subsistence resources.

The history of Alaska in the past century reflects continuing controversy over the desirability of various proposed resource developments and other opportunities for economic growth compared to alternative resource uses including conservation or preservation. Much of the popular literature (see e.g., Chasan, 1971; Coates, 1993; Hammond, 1994; Mead, 1978; Roderick, 1997; Roscow, 1977; Strohmeyer, 1993), even that focused on the oil and gas industry, chronicles the larger controversy over development in Alaska.

Eventually Alaska did grow. Table 1 provides statistics illustrating the quantitative changes in many factors that could potentially affect subsistence. This table compares 1960 (or thereabouts) levels with those in year 2000 in terms of population (urban, rural, and Alaska Native), highway mileage, annual fishing/hunting licenses issued, the annual commercial salmon harvest (see footnote 3 below) (also shown in Fig. 1), and the annual number of visitors to the state. All of these factors have the potential to affect subsistence.

Reference to Table 1 indicates that between 1960 and 2000 substantial growth occurred in many areas:

-- The State's population nearly tripled; the urban and rural populations increased by factors of 5.5 and 1.1, respectively. The Alaska Native population increased by a factor of 2.3.

-- The extent of the road infrastructure more than doubled (see footnote 4 below) facilitating access to remote areas by persons from elsewhere in the state and nonresidents.

-- The number of sport fishing licenses sold increased by a factor of nearly 8 (partly a reflection of a greater rate of increase in the number of nonresident licenses sold) and the number of hunting licenses sold increased by a factor of 2.4.

-- The weight of the Alaska commercial salmon harvest doubled.

-- The annual number of visitors to Alaska increased by a factor of nearly 30.

Government Decisions

State government decisions that relate both to access to subsistence resources and actual resource allocations also have the potential to affect subsistence resources. For example, as discussed elsewhere in this EIS, the state has opened the Dalton Highway (see footnote 5 below) (formerly a restricted haul road limited to traffic to service the North Slope oil fields and portions of TAPS) to the public, which enabled nonresidents to engage in sport fishing and hunting activity.

Additionally (see Section 3.24) in 1989 the Alaska Supreme Court found that the rural subsistence preference contained in the 1986 state law violated the clause of the Alaska constitution which reserves fish and wildlife resources for "the common use" of all residents in the state, enabling urban as well as rural residents to qualify as subsistence users and substantially increasing the number of potentially qualified subsistence users. Depending upon how rural is defined (the threshold or cutoff population at which a community is classified as urban), the fraction of the Alaska population that is rural is between 20% and 25%. Thus, a decision to add urban residents to the pool of persons eligible to be subsistence users increased the potential size of the subsistence population by a factor of 4-5.

Although the state retains a subsistence priority and the ability to discriminate among various groups of subsistence users (see Section 4.7.8.1), this change in the law is of great concern to Alaska Natives and other rural Alaskans.

Historical Changes in Subsistence

-Spills

As noted elsewhere in this EIS, oil and other (e.g., produced water, seawater, and antifreeze) spills have the potential to cause morbidity and mortality to fish and game resources and adverse effects on habitat. The magnitude of these effects depends upon the type and volume of material spilled, spill location, season, and other factors.

Historically, the most significant spill impacts were those associated with the Exxon Valdez Oil Spill (EVOS). (Technically, this is a cumulative impact, as this resulted from an accident along the marine transportation link, rather than the TAPS pipeline.) As discussed elsewhere in this EIS, the EVOS resulted in significant adverse impacts on subsistence resources and subsistence activity. However, most of the affected subsistence resources have now recovered or are recovering. According to a recent report on injured resources and services by the Exxon Valdez Oil Spill Trustee Council ("the Council"), the following human services that depend upon injured natural resources are deemed to be recovering; recreation and tourism, commercial fishing, passive uses, and subsistence (see footnote 6 below). Regarding subsistence, the Council noted:

"Fifteen predominantly Alaskan Native communities (with a total population of about 2,200 people) in the oil spill area rely heavily on harvests of subsistence resources, such as fish, shellfish, seals, deer, and waterfowl. Many families in other communities also rely on the subsistence resources of the spill area.

Household interviews conducted with subsistence users in communities throughout the spill area in 1989 indicated that subsistence harvests of fish and wildlife in most of the communities declined substantially following the spill. Key factors that reduced harvests included reduced availability of fish and wildlife, concern about possible health effects of eating oiled fish and wildlife, and disruption of the traditional lifestyle due to cleanup and related activities.

. . . Household interviews were repeated each year 1990-1993 and again in 1998. By 1993, the estimated size of the subsistence harvest and participation in subsistence activities appeared to have returned to prespill levels in some communities."

According to this report, subsistence has not recovered fully but recovery is underway.

Unlike EVOS effects, subsistence impacts resulting from spills associated with the operation of the TAPS pipeline, terminal, and the Alaska North Slope (ANS) oil fields have not been significant. This is true for two main reasons. First, pipeline and ANS spill volumes have been very much smaller than that for the EVOS; most spills have been less than fractions of a barrel. From 1977 to late 1999, over 10,000 spills of crude oil and refined product occurred at the ANS fields, along the pipeline, at the Valdez Marine Terminal (VMT), or along the marine transportation link. Yet the single EVOS spill accounted for nearly 79% of the total volume of crude and product spilled (TAPS Owners, 2001). Second, pipeline and other spills have, for the most part, occurred on land, rather than water, which minimized the areal extent of the spill and facilitated cleanup.

- Access

The transportation infrastructure such as airfields and the haul road (particularly the haul road made access by "outsiders" physically possible (see footnote 7 below). The state's decision to open the haul road to the general public in 1981 made access a reality. Second, access limitations on subsistence and sport hunters alike (motivated by safety and security concerns) were imposed for certain portions of the ANS, withdrawing lands that might otherwise have provided subsistence harvest. In short the impacts included access provided to others (possible competitors for subsistence resources) and access denied to traditional subsistence users.

(a) Increased Access for Potential Competitors

The haul road was originally limited only to vehicles servicing the ANS fields and portions of the TAPS pipeline. However, the state's decision to open the former haul road to the general public increased access to fish and game resources along its length. There is no doubt that this action created some additional pressure on subsistence resources by non-local sports hunters and anglers (see footnote 8 below). And concern over possible overharvest of fish and game resources lead to the imposition of more stringent hunting and fishing regulations (see Arvey et al., 1990; Arvey, 1991; Burr, 2001; Haynes, 2000 for details of the evolution of fishing regulations). In practice (see Section 3,24,3), fishing pressure (as measured by participation, effort, or harvest) does not appear to have increased substantially, at least in the years since the mid-1980s. Hunting statistics are reviewed in the subsection on moose and caribou.

Based upon the perceived need to limit access by hunters, primarily on the part of communities in Game Management Unit (GMU) 26 (<http://www.state.ak.us/adfg/wildlife/region3/ftyukon.htm>) the Dalton Highway Corridor Management Area (DHCMA) was established in 1980 and amended in 1985. The DHCMA, a controlled use area (CUA), is located 5 miles east and west of the Dalton Highway from the Yukon River north to the southern boundary of the Prudhoe Bay Closed Area. It is approximately 10 miles wide by 360 miles long (an area of 3,600 square miles) (see footnote 9 below). This area is closed to hunting; however, big game, small game, and fur animals may be taken in the area by bow and arrow only. No motorized vehicle, except aircraft, boats, and licensed highway vehicles, may be used to transport game or hunters within the Dalton Highway Corridor area. Hunters are required to stop at any check station operated by ADF&G. Alaska Statute (AS) 19.40.210 prohibits the use of off-road vehicles within 5 miles of the highway right-of-way in this area.

(b) Access Limitations Imposed on Traditional Subsistence Users

Access restrictions on the North Slope are a recurring concern for residents of several ANS communities. In the early 1970s (Haynes and Pedersen, 1989) an area around the Prudhoe Bay oil field was closed to the taking of big game for subsistence. Establishment of this closed area was prompted by public safety and security issues associated with the industrial facilities in the area. The Prudhoe Bay Closed Area encompasses 432 square miles (0.53 percent), not insignificant, but only a small fraction of the size of GMU 26. (GMU 26A totals 56,000 square miles, 26B 15,500 square miles and 26C totals 10,300 square miles.) Other ANS fields permit hunting with minimal restrictions.

Haynes and Pederson (1989) claim that, in addition to formal access restrictions, it is important to consider what might be termed "access deterrents" associated with ANS development. Their perspective in 1989 is summarized in the following excerpt:

"Oil field support facilities have continued to expand along the North Slope. Hundreds of miles of roads and secondary pipelines have been built, as have airstrips, numerous construction camps, and maintenance facilities. This creates an unusual obstacle course for hunters. Access to hunting areas in the oil fields is becoming more difficult. Hunters must cross networks of gravel roads, built eight to ten feet above the tundra."

As new exploration and production technology evolved, the relative area taken up by fixed facilities (e.g., wells and piping) in the ANS fields has decreased in proportion to the total field area. In the case of Prudhoe Bay (which began production in 1977), the area disturbed by mine sites and gravel placement was 2.62% of the unit area (Gilders and Cronin, 2000); the corresponding percentage for the Alpine field is 0.17%. Directional drilling, collocation of facilities, and making better use of existing production and power generation facilities are means used to minimize the areal extent of oil production facilities (Gilders and Cronin, 2000). These developments that reduce the visible "footprint" of the production infrastructure will also reduce access impediments in the future.

-Population Growth

Table 1 provides salient statistics on population growth in Alaska over the period from 1960 until 2000. This growth reflects Alaska birth and death rates as well as net in-migration by nonresidents seeking economic opportunity. Although the oil industry is capital rather than labor-intensive and accounts for only a very small proportion of Alaskan jobs, this industry was the principal engine of economic growth since the early 1970s. Purchases of goods and services by oil companies and their employees created more jobs. And revenues paid to the state and local governments created yet more jobs--some filled by Alaskans, but others filled by nonresidents. Additional population might create competition for subsistence resources.

In assessing the subsistence impact of TAPS and the ANS fields it is important to note that the oil industry was not the sole cause of economic or population growth in Alaska in the past and will account for an even smaller proportion in the future. Over the period from 1961 to 1997 (TAPS Owners, 2001), for example, Alaskan employment grew by a factor of nearly 3.3 from approximately 94,000 to 311,000 persons (of which the oil and gas industry accounted for approximately 10,000). But, over this same period, employment in the tourism industry grew by a factor of 14.4, employment in the support (including services trade finance, miscellaneous manufacturing, agriculture, and proprietors) sector increased by a factor of 8.5, and employment in state and local government increased by a factor of 6.5. Oil revenues accounted for growth in some, but not all, of these sectors. Tourism, for example, is an industry with little or no connection to oil exploration or production. And, although oil revenues flowing to state and local governments created the opportunity to expand services, the level of staffing was a ultimately a decision reached by these governments.

Two Cases of Interest, Moose and Caribou

This section provides information relevant to subsistence impacts on moose and caribou on the North Slope. These examples are of interest because (i) both of these species are much sought after by sports and subsistence hunters alike, (ii) moose abundance has declined and recovered in this area (GMU 26) since the late 1980s, whereas caribou populations have significantly increased, (iii) both of these cases illustrate the evolution of game management policies (iv) the quality and quantity of the available harvest data differ markedly for these two species and (v) competition between sports and subsistence hunters has only been at issue for moose; caribou have been sufficiently abundant to avoid the need for imposition of stringent harvest limits as part of a game management plan.

-Moose

Moose are found throughout most of Alaska and are prized by both sport and subsistence hunters. Historically moose were not abundant in the North Slope area. As noted by one researcher, "Moose were scarce in arctic Alaska before the early 1950s when populations expanded and reached relatively high densities in the limited riparian habitat in major drainages" (see Hicks, 1995a or USFWS comments available electronically at <http://www.r7.fws.gov/nwr/arctic/wtmoose.html>). Predation by wolves, as well as hunting by humans, contributed to the historical scarcity of moose in this area (Hicks, 1995a). Hicks (1995a) continues:

"The reduction in wolf numbers by federal control programs during the late 1940s and early 1950s was important in allowing moose populations to increase and become established in most of the riparian shrub habitat on the North Slope. Moose are at the limit of their range in the eastern Arctic."

Beginning in the 1950s, moose populations began to increase in the Arctic Slope--occasional animals ranged as far north as the arctic coast in summer, but wintering moose were confined primarily to the inland riparian systems. The greatest wintering densities occurred on the central Colville River and its tributaries (Coady, 1983). Beginning in the mid- to late-1980s (Hicks, 1995a; USFWS, op. cit.) moose populations in various portions of GMU 26 began a substantial decline. According to USFWS (http://www.r7.fws.gov/nwr/arctic/wtmoose.html), several possible explanations have been offered for this decline:

"During winter, moose are confined to relatively limited areas of riparian willows along the northern margin of the Brooks Range where snow is usually not drifted by the wind. There is some evidence that concentrations of moose in these areas reached or possible exceeded the maximum level that the habitat could support. Thus moose may have declined as a result of habitat overuse. Another consideration is that wolves and bears have become more abundant on the north slope as a result of bear harvest restrictions established in the early 1970s and reduced aerial hunting of wolves. In addition, during the 1980s, human harvest in some areas increased as the region became more accessible due to completion of the Dalton Highway. It is likely that all of these factors (habitat overuse, predation, and human harvest) in combination functioned to reduce moose populations on the Alaskan North Slope."

In 1995, the State of Alaska Board of Game (BOG) and the Federal Subsistence Board (FSB) issued regulations closing nearly all of the ANS to moose hunting. As of 2002 the applicable hunting regulations are as follows:

-- State rules (ADF&G, 2002i): GMA 26A is a controlled use area (CUA). From August 1 through Sept 14, the area is closed to the use of aircraft for moose hunting, including transportation of moose hunters, their hunting gear, and/or parts of moose. (However, this does not apply to transportation of moose hunters, their gear, or moose parts by aircraft between publicly owned airports in the CUA.) There is a bag limit of one bull for residents in GMU 26A during the open season from Aug. 1 through Sept. 14. GMUs 26A, B, and C are closed to nonresidents.

-- Federal rules (FSB, 2002): GMU 26A -- that portion of the Colville River drainage downstream from and including the Chandler River-1 bull. Federal public lands are closed to the taking of moose except by rural Alaska residents of Unit 26 (not including the Prudhoe Bay-Deadhorse Complex), Point Hope and Anaktuvuk. For the remainder of GMU 26 A; 1 bull during the period from Sept. 1 through Sept. 14. GMUs 26 B and C have no Federal open season.

Table 2 and Fig. 2 provide ADF&G data on moose harvest, number of hunters, and average harvest per hunter for GMU 26 for the years 1977 through 2001. The effects of the BOG and FSB actions are evident in these exhibits. These data series are complete and consistent with available collateral information. There is some data ambiguity, however, as both sport and subsistence harvests are included and it would be desirable of these data were disaggregated.

Table 3 shows identified big game prey populations and harvest objectives by species and GMU in Alaska. This reflects a finding made by the Alaska BOG for each species for each GMU. The finding for moose in GMU 26 (and all subunits) is negative, meaning that there is no planned harvest objective. Moose populations and harvests are managed in many other GMUs (see Table 3), including all or portions of GMUs 9, 13, 14, 15, 17, 19, 20, 21, 24, and 25.

As noted, the exact reason(s) for the decline in moose population are not known. However, hunting pressure is believed to a contributing factor. ADF&G clearly articulated this view for GMU 26 in 1995 (Hicks, 1995a):

"Habitat severely limits the number of moose that can be sustained and harvested, and the concentrated nature of moose distribution and open habitat create the potential for excessive harvest in accessible areas. Although travel to the area is expensive and often logistically difficult, hunting pressure around the larger and better-known aircraft landing sites is considerable. Concern about the excessive concentration of hunters has been expressed by guides, outfitters, hunters, and ANWR staff. The Dalton Highway in central Subunit 26B provides unique opportunities for viewing and photography, but also created the potential to adversely affect moose populations and associated human uses by increasing access to certain areas."

However, a biologist with the ADFG noted several factors other than hunters were responsible for the decline in moose numbers in the Colville River region of GMU26 (Carol 2002):

"The rapid decline appeared to result from a combination of factors. The moose population was at relatively high density and probably exceeded the carrying capacity of the area. Extra long winters and competition from hares may have reduced carrying capacity for the moose population. This led to poor calf survival, starvation, and disease induced mortality. The copper deficiency plus the northern location of the population could have made the population more susceptible to a decline. Physiological stress caused by insects during the hot "buggy" summer of 1995 may also have interfered with the moose's ability to recover from the winter. When the population began to decline, relatively high predator densities probably accelerated the process. Bear predation in the summer may have been a major factor in poor calf survival."

It is important to note that the population has since recovered. (Carol G. 2002. The rise, fall, and recovery of the Colville River moose population. The Moose Call vol. 14, pages 3-5.)

Hunting restrictions on moose in GMU 26 became gradually more stringent, prior to the virtual closure in 1995. (In the interests of space a detailed discussion of each change in the moose hunting regulations for GMU 26 is omitted.) One change of note followed the 1990 decision that all Alaska residents qualified as subsistence users under state law. To compensate for the large potential increase in hunters eligible for the subsistence season, the season was shortened to 5-15 September and 1 November -- 31 December, and the one-bull bag limit was extended to all hunters. Additionally, a 50-inch minimum antler size was established for nonresidents (Hicks, 1995a).

The case of moose in GMU 26 is interesting for three reasons:

-- It is consistent with the views of many rural subsistence users that the state's 1990 subsistence eligibility decision led to more stringent hunting regulations.

-- It is consistent with the views of some subsistence users that more stringent hunting regulations reduced some rural subsistence use. Neither TAPS nor ANS development has been implicated in moose population declines.

-- It shows that useful subsistence data are available for some GMUs and some species. Subsistence data for moose are generally available for most GMUs although not disaggregated into sport and subsistence users.

-Caribou

Caribou in GMU 26 are also an interesting case. Like moose, caribou are prized by sport and subsistence hunters. GMU 26 covers important caribou territory, being occupied (in various parts) by the Western Arctic Caribou Herd (WAH), Teshekpuk Caribou Herd (TCH), Central Arctic Caribou Herd (CAH), and the Porcupine Caribou Herd (PCH) [Murphy and Lawhead, 2000; Ballard et al., 2000]. The Central Arctic Herd's range most directly overlaps the North Slope oilfields. Because of the proximity of the range areas of these herds to oil development on the ANS, these herds have been studied extensively by biologists interested in activity budgets, movements, behavioral responses, habituation, and population level effects [Murphy and Lawhead, 2000; Ballard et al., 2000 and references contained therein]. The overall conclusion of these studies is that while "We cannot be conclusive about the cause and effect relationships between oil development and herd population dynamics," there are no adverse population effects associated with proximity to the ANS fields. Caribou populations for these herds have fluctuated in the past (see Barnett, 1983) but generally increased over the years since the early 1970s (Murphy and Lawhead, 2000; Ballard et al., 2000; for more information see Hicks, 1994, 1995b, 1996, 1997, 1998, 1999, 2000). Current population estimates vary by herd; the WAH is the largest, with an estimated population of over 460,000 animals in 1997 (Murphy and Lawhead, 2000; Ballard et al., 2000).

As shown in Table 3, caribou are identified big game prey populations per 05 Alaska Administrative Code (AAC) 92.108, and desired population and harvest target ranges have already been established for the CAH and PCH--estimates are pending for the TCH and WAH.

Table 4 summarizes available harvest data for caribou in GMU 26 as taken from Alaska Wildlife Harvest Summary data for various years. Unlike the case for moose--and surprisingly in view of the importance of caribou--the ADF&G harvest data for caribou in GMU 26 is characterized by gaps, missing data (for one or more subunits), and potentially anomalous observations. Moreover, ADF&G personnel believe (see e.g., Hicks 1995b) that harvest reporting rates by local hunters is often poor and, therefore, that total caribou harvests are understated. These data are not analyzed further, except to note that—given the fact that the hard populations are increasing, overharvest does not appear to be a problem. However, we recommend that the available caribou data collection effort be reviewed and modified to capture relevant and consistent data.

Present state hunting regulations (ADF&G, 2002i) for caribou in GMU 26 vary with subunit and whether or not the hunter is a resident--but allow for a relatively substantial harvest (five to ten caribou in most areas). In GMU 26A, for example, residents are permitted five caribou per day, nonresidents five caribou in total. The DHCMA has bow hunting restrictions and lower allowable bag limits (two caribou for residents and one caribou for nonresidents).

Federal regulations (FSB, 2002) identify the communities for which customary and traditional use determinations have been made as:

-- GMUs 25A and C: Rural residents of GMU 26 and the residents of Anaktuvuk Pass and Point Hope.

-- GMUs 26 B: Rural residents of GMU 26 and the residents of Anaktuvuk Pass, Point Hope, and Wiseman.

The Federal bag limits and seasons are:

-- GMU 26 A: 10 caribou per day; however, cow caribou may not be taken May 16 -- June 30. Federal public lands south of the Colville River and east of the Killik River are closed to the taking of caribou from Aug. 1 -- Sept. 30, except by rural residents of GMU 26, Anaktuvuk Pass, and Point Hope. The season is July 1 -- June 30.

-- GMU 26 B: 10 caribou per day; however, cow caribou may be taken only from Oct.1 -- Apr. 30. The season is from July 1 -- June 30.

These too can be viewed as relatively substantial allowances.

At least from the early 1970s, bag limits for caribou were similar to those above. Indeed, at one time (Barnett, 1983), the state considered permitting commercial harvest as a means for rapidly reducing the size of the WAH. However, the state concluded (Barnett, 1983) that:

"Such a practice would set a questionable precedent and would be widely criticized by the public. Once commercial operations were established, it would be difficult to eliminate them when harvest reduction became necessary. We recommend that the commercial harvest option be considered only as a last resort if it ever becomes clear that a serious density-dependent decline is imminent."

With respect to access-related issues, ADF&G personnel acknowledged that improved access might affect game management policies, but the relative abundance of caribou has not made access or hunting pressure an issue. For example, ADF&G reports on the CAH (see e.g., Barnett, 1983) noted:

"Sport harvest of the CAH is low relative to herd size and productivity. However, harvest is increasing with greater use of the haul road and as more fly-in hunters discover the area. There is currently a surplus of bulls, however, and limiting harvest to bulls should accommodate sport hunters without affecting herd productivity."

A recent estimate for the WAH is several GMUs (Hicks, 1998) is that "subsistence harvests are estimated to take 20,000 caribou within the range of this herd annually, and sport hunters 3,000 caribou."

The relevant conclusions for caribou are:

-- There are no adverse population level effects associated with proximity to ANS oil facilities or TAPS.

-- Caribou have been relatively abundant in GMU 26 and hunting regulations have not been stringent. There is no evidence that competition with sport hunters has adversely impacted subsistence harvests, although this has been a persistent concern.

-- Caribou harvest and hunter participation/effort data are deficient, and the collection program should be restructured to collect relevant and valid data.

There is a recognized need for improvements in subsistence data collection. However, a lot of information is available, which provides greater context for the subsistence discussion. Changes to subsistence over the years relate primarily to the prosperity Alaska has experienced since Statehood - population growth, economic growth and infrastructure growth. The resulting expansion of commercial fisheries, tourism, sports hunters and fishermen, and industry have together changed the context of toady's subsistence activities. Ultimately minimizing impacts to subsistence becomes a decision in resource management and allocation. The state and federal governments continue to have the authority, responsibility, and funding to provide this management.

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Footnotes:

1 -- This is particularly true for subsistence data prior to 1977, when oil first flowed through TAPS.

2 -- Transportation infrastructure growth in Alaska has proven particularly controversial --dating back to the late 1800s. For an interesting summary of conflicts between developers (boosters) and preservationists see Coates (1993) [particularly pp. 51 et seq.]. For example, Donald MacDonald, a locating engineer for the Alaska Road Commission, was one of the leading early proponents of an international highway to Alaska. His vision of a bridge to "a veritable paradise of game" that would provide a primitive abundance of fish and game for settlers foreshadowed later controversy over the construction of the Alaska (also called "Alcan") Highway in the 1940s. Anchorage (Alaska's most populous city) originated in 1915 as a tent city housing construction workers for the Alaska Railroad (Coates, 1993). Bob Marshall, an employee of the U.S. Forest Service, opposed any road construction north of the Yukon and worried that "drifters" and "such people. . . would find somehow or other a broken-down fourth-hand automobile to get to what they would imagine would be this land of plenty" (Coates, 1993).

3 -- The commercial salmon harvest is relevant to subsistence concerns because salmon are commercially harvested and regarded as desirable gamefish by sports anglers. The estimated subsistence consumption of salmon in 1999 was approximately 1 million fish (ADF&G, 2001). The commercial harvest was over 216 million fish in that same year.

4 -- Highways completed in the period from the 1950s to the present include the Denali Highway (completed 1957), George Parks Highway (1971) [see <http://www.icdc.com/~neubauer/denali.htm>], the Taylor Highway (1953), and the Dalton Highway (1974). Additionally, many highways were improved during this period, such as the Richardson Highway (hard surfaced in 1957) and portions of the Steese Highway (44 miles paved in 2001) [Morris Communications Corporation, 2002].

5 -- Construction of what was derisively termed the Hickel Highway and this later decision to open the haul road are discussed in several popular accounts (see e.g., Chasan 1971; Coates, 1993; Hammond, 1994; Haynes and Pedersen, 1989; Roderick, 1997; Roscow, 1977).

6 -- Exxon Valdez Oil Spill Trustee Council 2002. Exxon Valdez Oil Spill Restoration Plan Draft Update on Injured Resources and Services, Anchorage, AK. (August 6, 2002)

7 -- It is interesting to note that the access issue was foreseen in the original EIS for TAPS (Special Interagency Task Force for the Federal Task Force on Alaskan Oil Development, 1972). In assessing fish and wildlife management issues related to the pipeline the EIS (EIS Vol. 1 p 151) noted:

"The second primary group of pipeline-related fish and wildlife management needs would stem from secondary impacts, such as increased public hunting and angling pressure, infractions of fish and game laws, human encroachment on fish and wildlife populations and habitat, and other fish and game impacts which are outside the influence of the pipeline stipulations. The authority for meeting most of this latter groups (sic) of management needs would lie with the Alaska Department of Fish and Game.

Management techniques would have to be carefully tailored to each particular need. The Alaska Department of Fish and Game anticipates that with a few years most areas crossed by the pipeline would be covered by wildlife management plans that would accommodate the increased access and associated harvests."

Elsewhere (p147) the original EIS notes that the region north of the Yukon River would be opened up:

"The principal impact of the proposed development would be the opening of this large, essentially primitive section of Alaska to public access. The effect could be considered beneficial because of the increased public recreation opportunity, but there would be adverse impacts that would be directly related to the amount and kinds of public use. . . "

The Recreation Activity Plan for the Dalton Highway and the Utility Corridor, prepared by BLM Fairbanks District Office in 1982 addressed the Dalton Highway access issue as follows:

"Prior to 1981, the highway was open for public use only to the Yukon Crossing. . . The State of Alaska and BLM are committed to making this scenic splendor available to the public."

Finally, the Dalton Highway Master Plan, prepared by the Dalton Highway Advisory and Planning Board (T. Knowles, Governor) in 1998 acknowledged access-related issues and noted that:

"The Hickel Administration opened the highway to general public travel in 1994. Opening the road has caused additional issues for which the government is responsible."

8-- One popular book (Pedersen, 1998) The Highway Angler describes opportunities for sport fishing Alaska's roadside waters. Chapter 5 of this book covers the Dalton Highway.
9 -- The land area occupied by the TAPS pipeline is approximately 16.3 mi2 (Alyeska, 1999).

While the "No-Action Alternative Analysis" describes in notable detail (i) activities that would likely occur if this alternative were selected and (ii) the potential environmental consequences of those activities, see e.g., DEIS § 4.6, including the description of activities at pp. 4.6-1 to 4.6-1, elsewhere in the document elements of the alternative are described in a manner that suggests that they are so speculative as to prevent reasonable analysis. See, e.g., pp. 4.7-1 ("No action has not received engineering and environmental study and its description remains somewhat speculative.") and 4.2-21 ("No specific approved plans or designs for termination activities currently exist. Such plans and designs would have to be developed before specific action could be taken."); see also pp. ES-2 and 2-5 (citing need for additional NEPA documentation for termination process). It is recommended that: (i) early in the FEIS a more comprehensive description of those activities that would occur if the no-action alternative were selected should be identified and (ii) descriptions of those activities as "speculative" should be deleted. See, e.g., pp. ES-2, 2-5, and 4.7-1.

Comments provided on Appendix E -- ANILCA Section 810 Analysis of Subsistence Impacts, apply here as well. They are:

Appendix E Comment: Appendix E provides the BLM's proposed § 810 ANILCA analysis of subsistence impacts. The proposed analysis finds on page E-5 that "impacts of the proposed action on subsistence would not reach the threshold of 'may significantly restrict' subsistence uses." However, the proposed analysis also finds on page E-10 that "[c]umulative impacts associated with the proposed action on subsistence meets the threshold of "may significantly restrict" subsistence uses. As discussed below: (1) the finding that cumulative impacts "may significantly restrict" subsistence uses is unwarranted and attributable in large measure to misapplication of the term "cumulative impacts;" and alternatively, (2) the record fully supports a determination by the BLM that the criteria specified in ANILCA § 810(a)(3)(A), (B) and (C) are met.

1. The proposed cumulative impacts finding is unwarranted.

Notwithstanding the lesser threshold embodied in § 810 of ANILCA*, the reasonably foreseeable cumulative impacts of the proposed action do not support a finding that the proposed project "may significantly restrict" subsistence access. In large measure, the flaws in BLM's analysis flow from application of incorrect legal standards in the analysis of cumulative impacts in the DEIS.
NEPA requires not only analysis of the potential effects associated with the proposed action and alternatives, but also consideration of other activities that may affect the area of potential impact that have occurred, are occurring, and will occur. See, e.g., 40 C.F.R. §§ 1508.7 and 1508.25(a)(2). Future activities that need be considered are not all that may occur -- only "reasonably foreseeable" activities need be addressed. See, e.g., 40 C.F.R.. §§ 1508.7 and 1508.8. As the DEIS properly recognizes, "reasonably foreseeable" activities (i) are those with "firm near-term plans," such as "[p]roposals for which NEPA documents are in preparation or finalized," "[p]roposals in a detailed design phase," "[p]roposals listed in formal Notices of Intent published in the Federal Register or state publications," "[p]roposals that are funded," "[p]roposals for which enabling legislation has been passed," and "[p]roposals that have been submitted to federal and state regulators to begin the permitting process," and (ii) do not include "uncertain or speculative actions." See, e.g., DEIS at p. 4.7-13 (emphasis added). Those conclusions square with controlling case law. See, e.g., Kleppe v. Sierra Club, 427 U.S. 390, n.20 (1976) (rejecting argument that NEPA requires "a comprehensive impact statement covering contemplated projects in the region as well as those that have already been proposed," as the term "proposed" is construed under NEPA) (emphasis added); Presidio Golf Club v. National Park Service, 155 F.3d 1153, 1163 (9th Cir. 1998) ("Agencies must consider only those indirect effects that are 'reasonably foreseeable.' They need not consider potential effects that are highly speculative or indefinite.").

Although the DEIS recognizes these settled limitations, the analysis of cumulative effects it employs is inconsistent with them. For instance, the DEIS considers the cumulative effects arising from oil and gas activities in over two dozen undeveloped areas that in all cases do not satisfy the limitations identified above. Compare, for instance, Tables 4.7-2 and 4.7-3, as well as "human habitation and development" in northern and central Alaska projected to occur over the next 30 years. See also p. 4.7-36 ("This DEIS assumes that it is reasonably foreseeable that sometime in the next thirty years natural gas will be transported from the North Slope to market in Canada and the United States") (emphasis added). Moreover, the analysis should recognize that, through processes such as Resource Management Plans and actions taken by Congress, TAPS ROW uses have priority and ROW lands will not be granted for other purposes, the paradigm case where cumulative effects must be considered. See, e.g., Council On Environmental Quality's Considering Cumulative Effects Under The National Environmental Policy Act at p. 19 ("To include all proposals ever considered as other actions would most likely overestimate the future effects of cumulative effects on the resources, ecosystems, and human communities; therefore, the analysts should develop guidelines as to what constitutes 'reasonably foreseeable future actions' based on the planning process within each agency") (emphasis added). The result is a cumulative effects analysis that overstates cumulative impacts associated with the proposed action and alternatives, such as those addressing subsistence. See, e.g., pp. E-8, E-10, E-12, and E-13.

A second important flaw in the analysis flows from BLM's community subsistence analysis. Based on 25 years of on-the-ground experience (including observed subsistence impacts and a five-fold increase in caribou population), the results of studies, and other factors, the DEIS concludes that the potential effects on subsistence uses are minimal and localized. See, e.g., pp. ES-3, 4.3-84, 4.3-86, and 4.7-108. The DEIS then addresses what is known and unknown about subsistence uses in over 20 villages. See, e.g., Appendix D. While the latter information is useful, it is not necessary for purposes of the analysis required by NEPA, ANILCA, and other legal requirements. Indeed, in the current ANILCA analysis, community-based subsistence information from limited areas seems to be the single factor that led to a "may significantly restrict" finding. See p. E-10.

IN SUM, THE FEIS SHOULD: (i) ADDRESS THE CUMULATIVE EFFECTS OF THOSE ACTIVITIES THAT ARE TRULY REASONABLY FORESEEABLE, NOT ALL ACTIVITIES THAT MAY OCCUR WITHIN THE NEXT 30 YEARS; AND (ii) SHOULD ANALYZE IN A GENERAL FASHION POTENTIAL EFFECTS ON SUBSISTENCE, REACH CONCLUSIONS BASED ON THAT ANALYSIS, AND STATE CLEARLY THAT COMMUNITY INFORMATION PROVIDES BACKGROUND INFORMATION THAT IS USEFUL BUT NOT CRITICAL TO THE BROADER CONCLUSIONS REACHED. A REASONED CONCLUSION BASED UPON SUCH AN ANALYSIS SHOULD FIND THAT SUBSISTENCE IMPACTS FROM THE PROPOSED ACTION ARE EVEN LESS THAN THOSE IDENTIFIED IN THE DEIS AND DO NOT EVEN MEET THE LESSER "MAY SIGNIFICANTLY RESTRICT" ANILCA STANDARD.

2. Alternatively, the BLM should determine that the ANILCA § 810(a)(3) criteria are met:

ANILCA § 810(a) provides that no "withdrawal, reservation, lease, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected" until the Federal Agency gives the required notice and holds a hearing in accordance with § 810(a)(1) and (2), and makes the three determinations required by § 810(a)(3)(A), (B) and (C). The BLM's proposed findings in its subsistence evaluation are that all the alternatives (including the no-action alternative) may significantly restrict subsistence uses. As a consequence of this finding (if left unchanged), the BLM should document, in the FEIS, that it undertook the requisite notice and hearing procedures required by ANILCA § 810(a)(1)-(2).

In addition, unless the BLM reconsiders its cumulative impacts findings, it must also make the three determinations required by § 810(a)(3)(A), (B) and (C):

A. that such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands;

B. that the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition; and

C. that reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.

Such determinations are warranted and supported by the record.

As an existing use with a 25-year operational history, TAPS' potential impacts to subsistence resources and uses are well-documented, minimized, and effectively mitigated to the point that adverse impacts attributable to the Preferred Alternative are found to be "extremely small." DEIS at pp. 4.3-84, 4.3-86 and 4.7-108 ("The evaluation of impacts to subsistence under the proposed action concludes that any negative impacts that occurred would be extremely small."). Applicable existing measures and stipulations to pre-empt or mitigate impacts to subsistence resources and uses are detailed in the DEIS in § 4.1, including the general requirements of JPO oversight and its adaptive compliance monitoring system (§ 4.1.1), special buried or elevated pipeline designs for wildlife crossings (§ 4.1.2.10), numerous stipulations mitigating or preempting impacts to biological systems (§ 4.1.3.3 and Table 4.1-2), spill prevention and response requirements (§ 4.1.4), and social, cultural and economic mitigation measures (§ 4.1.5).

These measures, subject to the ongoing adaptive compliance monitoring and mitigation provisions of the Federal Grant, are intended to specifically ensure that subsistence resources and uses are not significantly restricted by the proposed action. Because of the numerous existing restrictions and protections, and their demonstrated effectiveness over the 25-year operational history of TAPS, BLM has found that the Preferred Alternative by itself would not result in significant restrictions of subsistence resources and uses. However, considered together with past, present, and reasonably foreseeable future cumulative effects, the possibility exists that all the activities combined may significantly restrict subsistence uses. This possible restriction on subsistence uses cannot be avoided while accomplishing the purposes and needs identified with respect to TAPS in § 1.1 of this DEIS. Nor can this possible effect be avoided if the BLM were to adopt either the less-than-30-years alternative or the no-action alternative because the cumulative impacts of these alternatives still reach the "may significantly restrict" threshold under ANILCA § 810.

With respect to the amount of public lands involved, the existing nature of TAPS and the functional requirement that TAPS extend the full 800 miles from the North Slope to Valdez, establishes real and certain limitations and requirements. As presently configured, although TAPS extends 800 miles, it encompasses only 16.3 square miles of land (including the privately-owned Valdez Marine Terminal, which is not within the ROW being renewed). See Environmental Report for the Trans-Alaska Pipeline System Right-of-Way Renewal at Table 2.1-1. The typical width of the ROW on federal lands is 54 feet for buried sections and 64 feet for elevated sections. Id. Only 47 percent of the 800-mile ROW is on federal lands. DEIS at p. 3.3-72. Thus, the amount of public lands involved in the Preferred Alternative does represent the minimum necessary to accomplish the needs and purposes of TAPS.

The BLM has considered and balanced all these factors, including, in particular, the existing restrictions, limitations, and mitigation measures applicable to the Preferred Alternative to address subsistence concerns. These measures have provided significant and effective protection for subsistence resources and uses during the 25-year operating history of TAPS. Accordingly, the BLM should determine that the significant restriction that may occur under the Preferred Alternative (or any other of the alternatives analyzed in the DEIS), when considered together with the cumulative impacts resulting from past, present, and reasonably foreseeable future actions: (A) is necessary, consistent with sound management principles for the use of the public lands included within this TAPS ROW renewal; (B) will involve the minimal amount of public lands necessary to accomplish the purposes of the Preferred Alternative; and (C) reasonable steps have been and will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.

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* The BLM has made a valuable observation about differing standards for the NEPA and ANILCA § 810 analysis. As stated at page E-8, it is possible to reach a conclusion under NEPA (or other federal or state statutes and regulations that address subsistence) that direct, indirect, and reasonably foreseeable cumulative impacts are not significant for NEPA purposes, while at the same time finding under ANILCA that the "may significantly restrict" standard embodies a lower threshold and is met. Although the TAPS owners believe that the ANILCA standard has not been met, it is important to emphasize that the BLM's proposed finding is not inconsistent with or directly comparable to other conclusions reached by the BLM regarding subsistence.

00098370

". . .valves (RGVs) [ADD: remote cathodic protection generator installations], and commercially available. . . "

The batteries ARE the power supply for RGVs. They are not used as uninterruptible power supplies. The sentence should read: ". . .and battery power for remote gate valves (RGVs)."

00098371

ADD: Remote cathodic protection installations are also electrically powered by gas fired generators. Where the generator sets were in proximity to the fuel gas line, they are fueled by natural gas (methane). In other areas, buried propane tanks supply the liquefied gas for fuel. Where commercial electricity is available, the local CP system is conventionally powered.

00098372

ADD: ". . . under ground throughout most of its entire length."

Comment: There are a few places where the FGL is above grade and visible by design; i. e. highway bridges, pig traps, and the multiplate-arch road crossings.

00098373

References to the 0.585 million gal of DRA should be removed since the topic of the paragraph is about fuel and the DRA is not burned for fuel. This is a misconception as to the use of DRA.

00098374

The DEIS states in table: "Table 3.1-2 gives the characteristics of the water wells located along the TAPS ROW."

If this table shows the well characteristics on TAPS, then the inactive water wells should be deleted for clarity. Also, the well identifier numbers should be referenced from the source of the info (ADEC) and not from a personal communication.

The table entries should be checked for accuracy. Some examples of errors are: (1) MP 200 and Old Man 2 wells are not active and were abandoned years ago; (2) PS 4 water source was a river not a well; and, (3) geologic/hydrologic terms for aquifers [talik, subpermafrost] are used incorrectly (e.g., PS 3 water source).

00098375

Five Mile airport is closed. It is marked as closed on aviation maps and also by FAA. References to this landing strip should be removed from this paragraph. If you include closed airfields here then you should include all closed airstrips (i.e. Chandalar, Happy Valley).

00098376

"lowland was occupied by Lake [Add: Atna], an ancient glacier-dammed lake. . .." [cited by Hamilton 1994]. Recommend checking this reference to ensure that Atna is quoted correctly and is spelled correctly. The Ahtna Cooperation and people spell their name differently.

00098377

"Permafrost can occur in soils as well as bedrock. Generally, the [Delete "ice" -- Add "moisture"] content in the soil or bedrock is related to porosity. [Delete "and moisture content of the material"] [Add "If the material is perennially frozen, higher ice content is expected in the finer grained soil than in coarser grained soils. However in some areas, the permafrost is naturally devoid of moisture and vis-a-vis ice. Soils typically have more moisture and ice content that fractured bedrock."] Stability of the permafrost can be …"

00098378

". . . and the enlargement of thermokarst lakes in the Chatanika River Valley. . ."

Alyeska is not aware of this enlargement. Aerial photos are not substantial proof of growth---there might have been changes in water level due to rains. But more importantly, the primary features for this mile post are Oxbow lakes and gravel pits whose water levels are tied to the height of the adjacent Chatanika river. Reference needed by Argonne.

00098379

The paragraph should mention that depressurization of the pipeline through the leak was not considered. This assumption leads to considerably high estimates for spill volumes from larger hole sizes.

00098380

The listing of the five "unlikely" scenarios is confusing. Scenario 13 is listed at the start of the paragraph, but it is not mentioned in the list provided in lines 8 -- 13. Please clarify this.

00098381

The concluding sentence of the paragraph states: "The Capstone assessment does not postulate spill volumes." This is an incorrect statement. Since a different approach was used in the Capstone assessment, a spill volume is not directly computed for the seismic scenario; however, spill volumes are postulated for any and all large holes in the pipeline. Please remove this sentence or provide additional text to clarify its meaning.

00098382

The spills section would be from a clear description of the analytical methodology and from the greater use of figures to present results. The linkage between results and conclusions should be clarified.

00098383

An inordinate amount of text is devoted to the Fire Analysis. Much of the text that appears in this section should be relegated to the appendices.

00098384

The pipeline is designed for the largest credible earthquake in each seismic zone it crosses. The return period for the largest credible earthquake is about 500 years. There is no evidence in the literature or analysis in the DEIS that a perceived warming trend increases risk for landslides and liquefaction along TAPS.

Suggestion: Change 1st sentence to: "While it is true that an overall climatic warming trend, or other microclimate effects related to the presence of TAPS, could change existing permafrost and soil conditions (especially in the interior and southern sections of the pipeline) the pipeline was specifically sited and designed to avoid or mitigate areas of potential landslides or liquefaction. In addition, the right-of-way is continuously monitored for early signs of changing conditions. Therefore, the risk of landslides or liquefaction affecting the pipeline is very unlikely." Delete 2nd sentence about the 1964 earthquake.

00098385

Section 4.2.2.4.3 is similar in title and content as section 4.2.2.6.2. Possibly combined or clarify the sections.

00098386

Seismicity: Change "likelihood of happening is unknown" to "happening is very unlikely."

00098387

Cumulative Effects should be summarized in the text at beginning or by use of a summary table.

00098388

This is an incorrect assumption. Absent a transportation link to market for crude and gas liquids, not enough infrastructure would be left to support gas production and gas exploration. Also, a stand-alone gas production operation on the North Slope without crude oil handling capability would not be economic and would not occur.

00098389

This summary is confusing: is it for CE effects of air emissions or for the entire section so far? If it is for air section, put the summary up front and label it as air. If it is for the entire section to this point, put it up front and label it appropriately. There should be a consistent way to show summaries of the chapters and sections the carries throughout the DEIS.

00098390

This summary is confusing. There should be a consistent way to show summaries of the chapters and sections the carries throughout the DEIS.

00098391

Add another sentence after 1st sentence. "Most of the material sites TAPS today uses are joint use with Alaska DOT/PF. TAPS use of these sites is secondary in quantities to highway requirements. Future gas line construction would also use these same sites."

00098392

Alyeska is not aware of any PCBs in any of their components. The original pipeline material was ordered after the ban on the use of PCBs. In 1996, the line-wide ANSC project removed any components that might contain PCBs including florescent light ballasts.

00098393

Line 3: remove "all"

Line 4: delete "in response to a JPO requirement."

Lines: 5-8: delete "and also provide secondary containment for releases that may occur from these valves." Comment: these valve vaults do not have bottoms and this is an irresponsible statement.

Lines 9-13: delete "deepening the pipeline trench. . . to serve as the floor of the vault,". There are no slabs below the later installed vaults.

Last 2 lines: change: . . . the project is expected to be complete in 2002. All but six check valves will have vaults but all valves have been inspected since 1994.

00098394

The Yukon Highway bridge is not a TAPS structure. It is owned by ADOT/PF with a TAPS rights-of-way issued for the existing pipe and one future pipe.

00098395

Removal of pipe under state road crossings would not include removal of bridges or culverts. Recommend stating that workpad and access road culverts would be converted to low water crossings but not state highways.

00098396

Removal of the heat pipes intact as suggested in the last sentence of the footnote its not likely to be practical. More likely would be to assume that the heat pipes will be vented to the air or to a water bath---followed by cutting them one foot below grade.

The water bath approach could have secondary values since the water could be applied to the adjacent soil as a source of nitrogen fertilizer to promote plant growth. Lower 48 agricultural practices actually inject anhydrous ammonia into the soil behind plows as a way fertilizing while tilling farm land after harvesting.

00098397

Alyeska is not aware of any PCBs in any of their components. The original pipeline material was ordered after the ban on the use of PCBs. In 1996, the line-wide ANSC project removed any components that might contain PCBs including florescent light ballasts.

00098398

Delete last sentence. There is no evidence that the pipe will frost heave up. Previously abandoned in-place pipe (i. e. Tolovana R, 1976; Sag R., 1975; Dietrich R., 1985; and the Atigun R., 1992 have never frost heaved. The soil overburdenweight and non-frost susceptible soil around the pipe at the MLR would preclude this heave.

00098399

At an aggressive corrosion rate of 12 mils a year, it would take over 50 years for the pipe to corrode and possibly collapse, so this scenario would not occur in the 30 year study period and should be deleted.

00098400

It is presumptive to state that electrification of the pump stations would eliminate the need to store turbine fuel at the pump stations. At pump stations that are already gas powered, turbine fuel is stored as a back up fuel. At other stations, both commercial power and natural gas are not available, so the need for turbine fuel remains the primary source of power albeit turbine pumps or electric-driven pumps. Recommend deleting this statement.

00098401

Box Entitled -- Impacts of Proposed Action on Soil and Permafrost: Change and add: ". . . the risk of earthquake-triggered liquefaction and landslides [delete "would"] [add "could"] be expected to increase." [Add: However with a continued program of surveillance, monitoring and a reasonable maintenance program, these conditions would be located and mitigated prior to any damage.]

00098402

"Impressed current systems located at PS 1, 2, 3, and 4 [Add: and also at several remote impressed current rectifier sites] provide cathodic protection for. . . "

00098403

There was never any detectable VSM movement (tilting or settlement) as the result of Vanish Creek flooding. If flood damage had been left unrepaired, VSM movement might have occurred.

". . . where high flows in 1999 [delete: resulted in significant VSM vertical movement or tilting, it was necessary to deflect] [add: required deflection of] the flow into its original location." Suggest Argonne provide reference for this event.

00098404

Sacrificial anode does not require excavation for replacement. They are not removed. Merely new ones are installed if low pipe wall cathodic protection is needed.

Typically, anode replacement is not performed. Alyeska recently instituted an impressed current system to provide CP from deep well anodes or distributed ground beds via rectified DC current, which are electrically powered.

Therefore, it can be said that the need to continually dig up the pipe and disturb the ground surface is reduced from what it was previously.

00098405

Box Entitled -- Heat Pipes: The 3rd sentence from the end should read: "However, buildup of hydrogen gas forms a non-condensable blockage in the upper section of fins and ultimately reduces the efficiency of some heat pipes to a degree at which they must be replaced."

00098406

The "Concrete Plug" should be changed to state: "Metal Cap"

Also, the annulus between the VSM wall and the heat pipe pair shows an unidentified material. This material should be labeled as "Sand/Water Slurry". It functions as a heat transfer medium. This sand/water slurry does extend from grade to top of VSM as shown.

The VSM design as drawn in Figure 4.1-4 is not typical. First, the sand/water slurry backfill around the VSM as shown in the figure, continues aboveground on the outside of the VSM to the top of the VSM with no apparent means of support. Second, the typical VSM installation required that the sand/water slurry inside the VSM be filled only up to the original ground surface and not to the top of the VSM as shown. Third, the typical VSM cap is a slotted steel cap that is sealed with silicon, not a concrete plug as shown.

00098407

This particular project was not undertaken "in response to a JPO directive." It was initiated by Alyeska to facilitate continuing inspection of belowground valves. Delete: "In response to a JPO directive"

Six valves (previously inspected) are not scheduled to have vaults installed. Recommend insert: "Alyeska expects to complete the check valve vault program in 2002. All but six belowground valves will have a vault."

00098408

This comment also applies to Figure 4.1-2: The two figures have used the term "Grade" to reference unclassified backfill. Grade refers to final elevation. Recommend deleting term "Grade" from figure.

00098409

". . . previous permafrost has thawed since the pipeline was constructed, forming a flat, swamping area."

This is a misleading statement. This area was a flat swampy area before it thawed. The words: "forming a flat, swamping area." should be deleted.

00098410

Airports belong to the State and are under FAA jurisdiction. No airstrips are owned by TAPS. Alyeska only maintains the airports of Galbraith and Prospect Creek.

Some access roads are public roads -- in place before TAPS.

Most material sites are joint use with ADOT/PF.

00098411

With the shutdown of PS8 and 10 and the pending shutdown of PS12, septic systems might not be required.

Although the leach field at PS 7 is in marginal soils, there has been only one former need to replace the system and at that time there was a higher camp population. After twenty years of operation, PS07 has performed adequately and it is unlikely that another site for a leach field could not be found within the cleared pump station site.

00098412

Need to correct. ". . . continue to reside at BP and ARCO housing facilities. . . "

Currently, personnel from PS1 are housed in BP's Prudhoe Bay housing facility.

00098413

In Footnote 4 -- Need to correct. "Currently personnel from PS1 reside in Deadhorse, Alaska, in facilities owned by BP and ARCO."

This should read: "Currently personnel from PS1 [delete: reside in Deadhorse , Alaska, in facilities owned by BP and ARCO] [add: are housed in BP's Prudhoe Bay housing facility] ."

00098414

Add a last line: "Most of these material sites are joint use sites. The Alaska Department of Transportation/Public Facilities also uses these sites and if a future gasline were built, these same sites would be open for use."

00098415

The original design recognized land slides as a problem. Appendix A-3.1079, Section4.2.4.1 listed 6 six alternatives "to eliminate or to minimize the potential slope stability problems. . ." It is incorrect to say that TAPS merely avoided "previous landslide areas . . .to the extent possible when the pipeline was constructed."

The primary mitigative measures described in the Design Basis and implemented in the Construction phase was to (1) avoid potentially unstable slopes. Where this was not possible -- there were other design alternatives. These were (2) reduce slope angle to a safe one by through-cut or fill; (3) keep the potentially unstable soil frozen by using heat pipes; (4) bury the pipe deep in bedrock such that the slide plane is above the top of pipe; (5) minimize thermal disturbances during construction and used enhanced refrigeration [MLR] to keep ground frozen; and (6) provide continuous field engineering during construction phase to recognize areas that did not meet design assumptions and needed re-engineering.

This last sentence should be edited to read: "The pipeline routing avoided most landslide prone areas. Where it was not possible to avoid, design parameters were used to minimize damage to the pipeline foundation. In some of the design fixes, the reliance on a frozen foundation for the VSMs is required. Engineering is monitoring those slopes that require frozen soil for stability." (See Argonne Document #133: TAPS Design Criteria and Design Basis, Appendix Volume 3, Geotechnical Aspects)

00098416

These two paragraphs appear to be a duplication of each other. Recommend deleting the second paragraph.

00098417

Change the word "would" to "may" in the sentence "The resulting effects would lower mechanical strength of frozen to non frozen soil and promote solifluction, debris flows, rock falls. . ." The soil types will dictate the resulting potential problems if thawed. For buried pipe this would be a non-problem. For the aboveground pipe, the thickness of the poor soil and along with other geologic conditions would have a contributing effect

00098418

It is uncertain as to what lake near MP440 the DEIS is addressing. In the floodplain of the Chatanika R. are oxbow lakes created by migration of the meandering river. Also there is a gravel-mining site. Water in both of these structures are tied to the river's height of water.

Recommend striking reference to growth of thermokarst lakes. If there is other evidence of this process, then cite the document. The photographs are insufficient to support a conclusion that these thermokarst lakes are becoming larger.

00098419

The possibility that the thaw bulb will shrink in buried pipeline areas (due to aggrading permafrost from the base of the thaw bulb or laterally from the sides will depend on the temperature of the pipeline (at low flow rates), the continued thermal impact of the workpad and disturbed construction zone, and the temperature regime of the surrounding permafrost. On the northern end of the pipeline (north of Atigun Pass) the permafrost is cold (mean annual temperature less than -5 degrees C) and it is conceivable that some refreezing of the thaw bulb can take place, even with a warming climate. In the warm permafrost region (south of Atigun Pass) little or no refreezing is expected due to the continued thermal input from the pipeline (even at low flow rates) and solar input through the workpad.

It is also inaccurate to state that: "ground settlement could resume." In the 1980s, ground settlement was an inconvenience when the thaw bulb was growing, however since the mid-1990s it has not been a recognizable problem.

Recommend striking-out most of the latter portion of this paragraph.

00098420

The comment about shrinkage of the thaw bulb around the belowground pipe due low flows leading to frost heave is in error. The author justified the statement with "where fine-grained soil is dominant in the subsurface." However, the pipe is not buried in fine-grained soils [ref. Stip. 3.3.1 (3&4)]---and besides the granular material surrounding the pipe is not subject to frost action by design. The pipe was designed to last as much as two winters without oil prior to start-up and not be frost-jacked.

Recommend striking entirely the sentence: "Ground ice could grow, producing. . . dominant in the subsurface."

00098421

Road Dust: No Action Alternative would result in temporary increase, not reduction, of road dust. Also, the road Fairbanks north to the Yukon River is being paved currently and the Dalton is being chip-sealed from Yukon to Deadhorse, so road dust will decrease in all scenarios in the long term.

00098422

Spills: It is incorrect to conclude that a reduction in spill cleanup and response infrastructure would result in greater impact of spills. The infrastructure would only be reduced in response to reduced risk of spills as industrial facilities are reduced. The actual response capability would be defined by the regulatory approved contingency plans and would most likely not result in increased risk of spills or severity of impact.

00098423

Economics: A natural gas pipeline would not be built absent TAPS and associated oil production infrastructure, so a gas line would not offset the effects of end of TAPS operations. (see 4.8.3, Irreversible commitment of resources, last paragraph).

00098424

The DEIS states: ". . . including 9.3 mi of new construction. The replacement -- result in extensive disturbance to ROW, including existing terrestrial and wetland vegetation."

-- Only two of the 4 pipe replacements in the history of TAPS.

-- Only two of these have required new right-of-way and disturbances.

-- The 9.3 mi Atigun River replacement pipe was installed adjacent to the Atigun River and within its active floodplain. This area was either non-vegetated or sparsely vegetated. Therefore, the project did not result in extensive disturbance to terrestrial and wetland vegetation.

00098425

" . . . presence of the gravel pad may not allow the development of mature natural communities." This is not necessarily true. Reference is needed.

00098426

With the thawing of permafrost from whatever the cause, the result is not ". . . increasing losses of vegetative communities. . .." Changes to the soil only result in establishment of new communities. Fireweed come up in profusion after fires, dandelions and fireweeds are the first to establish communities after glacier retreat.

00098427

In the sentence: " . . . resulted in the elimination of extensive areas of terrestrial and wetland communities (see 3.18)."

The use of "extensive" is unclear. The DEIS should state the area eliminated as a proportion of available wetlands in the region, state, or other relevant basis area. It is important to note that most of the State of Alaska is classified as wetlands, and less than 2 percent of Alaska's wetland area has been developed.

00098428

There seems to be considerable concern about thermokarsting. Thermokarsting is a natural geologic phenomenon.

When oil first entered the pipeline, the ground both above pipe springline and adjacent to pipe centerline settled. It was expected and anticipated. The original design required considerable Thaw Settlement Overfill (TSO) to be added as part of the final regrading. Also the Maintenance standards required for the depressions to be filled which occurred within our right of way.

Impacts to permafrost is allowed for operation of TAPS as long as it does not jeopardize the foundation of the Pipeline and related facilities.

00098429

The flood at MP 752 was the result of ADOT road maintenance which blocked the culvert and was not the result of TAPS operation. The flood would have occurred if TAPS had not been there, and the erosion would have been just as bad.

00098430

Deep pipe burials are specially designed to withstand overburden pressures. On TAPS the overburden maximum depth is 40 ft. See Argonne Document #3357 for Design Basis Update, DB-180, section 2.3.2.3, Table 2.5 for source. The DOT maximum burial limit cited in the DEIS is not applicable to TAPS. The last sentence should be deleted.

00098431

The DEIS states: "If the trends indicated [add: adverse] deterioration in the condition of the pipeline [add: foundation], necessary [delete: precautions] [add: corrective maintenance] would be taken to remedy the situation. [delete: or the pipeline would be shutdown.]"

00098432

Please explain the term "minimum regret". Do you intend to state "minimum regression"?

00098433

The word "radically" in this sentence appears incorrect. Is the intended word "radially"?

00098434

This comment also applies to page 4.7-66, Paragraph 1, Line 1: Talik is zone of thawed ground bounded on top and bottom with frozen ground.

"Since water would be withdrawn from taliks during winter, oxygen demand by sediments and water could reduce the concentration of oxygen in the water needed by overwintering fish."

The fish do no live in the talik--since it is below the ground surface.

00098435

General Comment for entire section.

The DEIS approach of exhaustively analyzing the effects from a set of arbitrarily selected hypothetical spill scenarios (particularly those judged unlikely) is not particularly useful in predicting the effects of right-of-way renewal. A more instructive approach would be to analyze the effect of spills predicted from the 25 years of actual TAPS operating history.

Focusing extensive analysis on "very unlikely" events is misleading (e.g., air craft crash at VMT tank farm with fire). Most of the analysis should focus on the spill frequency, size distribution and source that is predicted based on the last 25 years.

00098436

Regarding road dust, the Dalton highway is being chipped sealed (paved). It is expected to be maintained in this condition for the next 30 years, therefore, there will be less generation of dust than in the past.

00098437

If a gasline were run in close proximity to TAPS, the joint use of facilities would be possible. This would include barrack facilities, communication, and power, water, sewer facilities during construction. After the start of Gasline operations, the TAPS control room and operators may operate both pipelines simultaneously.

00098438

"One possible route would parallel the TAPS until reaches the [delete: Fairbanks] [add: Delta] vicinity, then it would run roughly. . . "

00098439

This section should be revised to ensure consistency with the Biological Evaluation submitted by BLM to USF&WS and the NMFS. This section should note that the FWS and NMFS have concurred with the Biological Evaluation as part of the Endangered Species Act, Section 7 Consultation.

This section of the DEIS should be strengthened. At a minimum it is necessary to include a brief section to summarize the content of this section and distill the key points to remember. For example, a graphic showing the total (or per capita) amount of all subsistence resources harvested by village (for appropriate or typical years) would be preferable to the detailed material presented in Table 3.24-1 or in Appendix D. Several authors (e.g., Wolfe and Walker, 1987; Wolfe, 1996) have developed useful quantitative summaries of subsistence that could be advantageously incorporated into the text. Moreover, these authors have analyzed subsistence data to identify the key determinants of subsistence harvest. This analytic foundation can explain the observed differences in the level of subsistence harvest.

References:

Wolfe, R. J., and Walker, R. J. (1987). Subsistence economies in Alaska: Productivity, geography, and development impacts. Arctic Anthropology. 24(2):56-81.

Wolfe, R. J. (1996). Subsistence Food Harvest in Rural Alaska, and Food Safety Issues. Paper presented to the Institute of Medicine, National Academy of Sciences Committee on Environmental Justice, Spokane, WA. August 13, 1996. Alaska Department of Fish and Game, Division of Subsistence, Juneau, AK.

As noted at several points in the Subsistence sections of the DEIS, there are limited data available to accurately quantify the impacts of oil development on subsistence in Alaska. Accurate and complete subsistence data will always be of use when considering public policy in Alaska in the future. Therefore, it is suggested that the DEIS recommend that a government agency undertake a comprehensive study of subsistence in Alaska to provide a baseline data for future public policy documents and reference. Both the State and Federal government have programs in place, and adequate financial resources in their existing budgets, to study subsistence in Alaska.

The State government has the responsibility and means to conduct such a beneficial study. The Alaska Department of Fish and Game (ADF&G) already has a Subsistence Division which, in conjunction with the Sport Fish and Wildlife Conservation Divisions of the ADF&G, collects and analyzes subsistence data. The Governor's Operating Budget (available online from the State of Alaska) notes that the Subsistence Division is tasked with coping with the dual management (Federal and State) of subsistence resources in Alaska, implementing appropriate subsistence laws and regulations, and gathering subsistence data. The Operating Budget lists, among other things, these key goals for activities and data collection for the subsistence unit in FY2003:

-- The Subsistence Division is expected to gather fisheries harvest data from 95% of the communities in the interior of Alaska and 25% of the communities in the Alaskan Arctic.

-- The Subsistence Division is expected to gather wildlife harvest data from 45% of the communities in the interior of Alaska and 25% of the communities in the Alaskan Arctic.

To fund these and other projects, the Subsistence Division unit will receive approximately 4.4 million dollars in FY 2003 with 51% of the money coming from Federal funds. As noted above, other ADF&G divisions (with their own budgets) will contribute information to augment data collected by the Subsistence Division. In fiscal year 2003, the entire ADF&G is expected to spend 135.7 million dollars.

The Federal Subsistence Management Program should also be involved in the study. The Federal Subsistence Management Program in Alaska is lead by the US Fish and Wildlife Service (USFWS) and four other federal agencies: the National Park Service, the Bureau of Land Management, the Bureau of Indian Affairs and the USDA Forest Service. The lead agency, the United States Fish and Wildlife Service, maintains a headquarters in Anchorage and employs approximately 500 people statewide with hundreds of others who work part-time or volunteer during field seasons. The USFWS has conducted many fishery and wildlife harvest studies in Alaska and spent 9 million dollars for Sport Fish restoration programs and 5.5 million dollars for wildlife restoration during fiscal year 2001. It is clear that adequate resources have been budgeted for these agencies to collect and analyze subsistence harvest data. It is not appropriate to stipulate requirements for TAPS in relation to this work.

00098442

During the public hearing held in Barrow, Alaska, an oral comment was made to the effect that the North Slope Borough was incurring undue financial burden by providing search and rescue services to respond to emergencies on the Dalton Highway. It was claimed that the Barrow Search and Rescue team (funded by the North Slope Borough) was expending resources to find and rescue lost or sick travelers and respond to tourists with car troubles.

In fact, the Barrow Search and Rescue team has only responded to three emergencies on the Dalton Highway within the North Slope Borough since January 1995. A review of the publicly available database and search-and-rescue flight logs lists the following three events:

-- On August 14, 1995, Barrow Search and Rescue personnel responded when a hunting guide and his passenger were killed in an airplane crash near the Dalton Highway south of Galbraith Lake.

-- On May 4, 1996, state troopers requested the aid of Barrow Search and Rescue personnel to remove human remains from a car near Galbraith Lake.

-- On August 11, 2002, Barrow Search and Rescue personnel responded to a pair of hunters in distress five miles away from their car. One of the hunters was a North Slope Borough resident and had obtained a personal locator beacon from the Barrow Search and Rescue team prior to going afield.

These data were compiled by identifying helicopter search-and-rescue flights within a few miles on either side of the Dalton Highway in the North Slope Borough. Additionally, conversations with Barrow Search and Rescue personnel suggest that search and rescue teams are very rarely dispatched to the Dalton Highway area.

By comparison, over the same time period, Alyeska responded to 44 incidents along the Dalton Highway within the North Slope Borough. Their response included: aiding disoriented drivers, rescuing lost and injured hunters, and providing medical attention and medivac services at vehicular accidents.

00098443

ANILCA is unique legislation. Congress took advantage of hind sight elsewhere in the country and put a large quantity of Alaska land into various conservation units both to preserve it for future generations and to allow future economic development, such as those actions on the North Slope and being considered as part of this cumulative effects section. Section 101(d) is worth highlighting in that it clearly captures the intent of ANILCA to provide "sufficient protection for the national interest in the scenic, natural, cultural and environmental values" to allow the "satisfaction of economic and social needs".

This section of the DEIS identifies certain “agency consultations” conducted in conjunction with the NEPA process. One of the identified consultations discussed is the BLM’s § 7 ESA consultations with NMFS and FWS. This discussion in the DEIS should be updated in the FEIS to describe the now-completed process and results, which are identified below. In addition, this section should identify and discuss the current consultation process by the BLM under § 305(b) of the Magnuson-Stevens Act regarding essential fish habitat (“EFH”). The status of the BLM’s EFH consultation is also com on below.

-- ESA Consultation

Section 7 of the ESA requires federal agencies, including BLM, to ensure that their actions avoid jeopardizing listed species or adversely modifying designated critical habitat. In accordance with these requirements, BLM fonnulated a biological evaluation (“BE”) analyzing the effects of the ROW renewal on listed species occurring within the action area. On May 7, 2002, BLM submitted the BE to NMFS and to the FWS, thus initiating consultation with the Services. On June 18, 2002, FWS issued a letter concuning that the proposed action is not likely to adversely affect listed species under its jurisdiction. On July 1, 2002, NMFS likewise issued a letter concurring with the findings contained in the BE that the proposed action is not likely to adversely affect listed species or designated critical habitat under its jurisdiction. Copies of the BE and associated concurrence letters are attached for inclusion in the record as Appendix A.

As the enclosed BE indicates, BLM concluded that the proposed action is not likely to adversely affect either the spectacled eider, Steiler’s eider, humpback whale, fin whale, or Steller sea lion. Because no critical habitat for these species exists within the action area, BLM also concluded that the proposed action is not likely to adversely affect critical habitat. Among other evidence, these conclusions are supported by the fact that TAPS has not had direct, indirect, or cumulative adverse affects on these species during its 25 years of operation.

-- EFH Consultation

Section 305(b) of the Magnuson-Stevens Act requires federal agencies, including BLM, to consult with NMFS if their actions may adversely affect designated essential fish habitat During an EFH consultation, NMFS may recommend conservation measures that minimize the effects of the proposed action on EFH. In the present case, BLM has prepared an EFH assessment, and has determined that ROW renewal may result in short-term adverse effects to EFH under certain circumstances. Consequently, BLM is presently engaging in EFH consultation with NMFS to ensure its proposed action adequately minimizes the potential effects of ROW renewal and associated pipeline operations on designated freshwater and marine EFH. A copy of the EFH assessment is attached for inclusion in the record as Appendix B.

As discussed in the enclosed EFH assessment, in freshwater areas, adverse effects may result from existing facilities (e.g., disturbance of runoff patterns); normal operations (e.g., water withdrawals or discharges); routine maintenance (e.g., road maintenance); and repair activities (e.g., ground-disturbing activities). In addition, river and low-water crossings involve potential disturbance of EFH through channel alteration, water quality changes, blockage to migration, and sediment runoff, which can affect both physical EFH habitat and salmon or their prey. In estuarmne or marine areas, EFH may be affected by surface runoff from facilities and permitted discharges.

Based on past operations of TAPS, accidental oil spills are anticipated or likely to occur in freshwater, estuarine, or marine waters where EFH is present. Most of the effects of these spills are expected to be short-lived, with anticipated recovery following cleanup. Further, oil spill modeling results and historical operations indicate that the magnitude of predicted spill events into marine and fresh waters will be such that no significant adverse effects will occur.

Best management practices, regulatory compliance, surveillance, and specific plans (e.g., oil spill prevention, erosion, and sedimentation) have been established to avoid, minimize, and mitigate potential adverse effects of the continued operation of TAPS on EFH. Pipeline operations have also incorporated design features (e.g., shut-off valves) and monitoring systems to detect problems that might occur. In addition, there is extensive Federal and State oversight (e.g., oversight through the JPO) and enforcement of the statutes and regulations governing the ROW. With these measures, it is anticipated that any potential adverse effects of TAPS and the associated ROW on designated EFH would be short-term in duration, and would not be significant in nature.

In summary, based on the past experience with TAPS, as well as available modeling and other information, BLM has determined that the proposed action may result in short-term adverse effects on designated EFH. However, these effects are expected to be adequately minimized and mitigated by existing conservation measures associated with the proposed action. In accordance with applicable EFH regulations, BLM has requested that NMFS engage in abbreviated EFH consultation, and confirm that existinc mitiaation and minimization measures adeouatelv urotect desirnated EFH.

--NHPA Consultation

This section currently contains a brief sdiscussion of NHPA consultation processes engaged in by BLM. The FEIS should more explicitly link the tribal consultations that have occurred to the satisfaction of all NHPA consultation requirements. See DEIS pp. 3.26-7 and 4.3-91.

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The DEIS evaluates three alternatives for Grant renewal (including non-renewal) and concludes 30-year renewal is the preferred alternative: The TAPS owners concur in this finding and strongly recommend that it be retained as the preferred alternative in the Final EIS. Thirty-year renewal is both appropriate and necessary given the economic importance of TAPS to the country in general and the State of Alaska in

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. TAPS was created as the sole means of bringing North Slope oil to market and all the best information available indicates there is at least. another 30 years of commercially producible reserves on Alaska's North Slope. TAPS has safely and reliably served this purpose for 25 years and is prepared to do so for the next 30.

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Maintaining the proper focus for the Grant renewal EIS is also an important aspect of this process. While TAPS is an essential piece of infrastructure and Grant renewal is required for its continuation, renewal is only one piece of many processes that affect the continued operation of TAPS. The DEIS appropriately evaluates a wide variety of issues related to TAPS but eliminates others from detailed analysis. These issues are mentioned but not pursued because they generally are the subject of processes that are separate from and independent of the straightforward land use decision that underlies the renewal question. Section 2.5 of the DEIS properly identifies items raised during scoping - such as the Exxon Valdez litigation, Dalton Highway status, and DR&R tariff issues - as out of scope.

Among the items raised and considered but elinated from detailed analysis in the DEIS is the concept of adding an advisory committee or citizen oversight function for TAPS. During the course of the public hearings on the Draft EIS a number of commentors spoke either in favor of or opposed to this concept and we believe, therefore, that some additional comment on this issue is appropriate.

First, we refer you to that portion of our scoping comments that addresses this point, a copy of which is enclosed and hereby incorporated into our formal DEIS comments. As our scoping comments note, Federal law does not favor the creation of formal citizen advisory functions. The Federal Advisory Committee Act (FACA) and the Congressional intent language creating this act make it clear that a genuine purpose and need for an advisory function must be established and an approval process completed before creation of the function is permitted. This rationale stems basically from the fact that public oversight, is the responsibility of the government. The authority does not exist within the context of the right of way renewal process to establish such an advisory group nor to compel the TAPS owners to provide .funding. It has, therefore, correctly been addressed as outside the scope of this decision process.

But, even if it were not, the rationale for creating an oversight function does not exist. In the case of TAPS, the Joint Pipeline Office, a consortium of state and federal agencies, has already been established to carry out TAPS oversight. Numerous opportunities for formal and informal public participation exist within the authorities included in the JPO as well as oversight provided by other state and federal agencies exercising jurisdiction over TAPS. In fact, many of the areas of concern commented on during the DEIS hearings, such as oil spill response plans, are the subject of other public processes. Finally, information about TAPS is widely and publicly available.

Responses for Document 00098

00098-001: A parenthetical statement that defines “nonlocal hunters” has been added to Section 3.21.1.2.

00098-002: The sentence in Section 3.21.1.7 has been modified as suggested.

00098-003: The error in Section 3.21.1.9 has been corrected.

00098-004: The paragraph in Section 3.21.2 has been reorganized as suggested.

00098-005: The discussion in Section 3.21.2 on moose population trends in the North Slope has been modified based on information provided by Carol (2002).

00098-006: Only information on the Porcupine caribou herd was provided in the paragraph because information on the other three North Slope herds was previously discussed (because the ROW crosses through the range of those herds). Also, a callout to the table that presented this information was provided in the paragraph. Information on the growth of the four North Slope caribou herds since the 1970s has been added to Section 3.21.2.

00098-007: The first two sentences were intended to be strongly interrelated. The “potential” alteration of animal habitats and migration patterns, if it were to materialize, would result in subsequent impacts to subsistence, commercial, and sport hunting and fishing. That this inference was not apparent suggests that a change to the text is appropriate. A change has been made to strengthen the interconnection between impacts to animal habitats and migration patterns and impacts to subsistence, commercial, and sport hunting and fishing.

00098-008: Thank you for your comment.

00098-009: The sentence and references in Section 4.3.17.2 have been changed as suggested.

00098-010: The Shideler and Hechtel (2000) citation has been incorporated in Section 4.3.17.2.

00098-011: The sentence in Section 4.3.17.2 has been modified as suggested.

00098-012: The sentence in Section 4.3.17.2 has been replaced with the one suggested in the comment.

00098-013: The text in Section 3.3.3 has been corrected.

00098-014: Spill debris and contaminated media that exhibit characteristics of hazardous waste are also adequately provided for by provisions in any ADEC-approved remediation plan and by existing hazardous waste management procedures. Changes have been made to the text in Section C.3 of Appendix C to clarify this.

00098-015: The text in Section C.6.12 of Appendix C has been corrected.

00098-016: The previous paragraph introduces the event-specific ADEC-approved remediation and restoration plans. However, the commentor points out that this introduction does not necessarily indicate that such ADEC-approved plans extend to final disposition of the spill debris and contaminated media. Clarifying language has been added to Section C.6.12 of Appendix C to clearly indicate that the ADEC-approved plans address the entire management of spill debris and contaminated media, including ultimate disposition. Similar clarifications are provided in Section 3.16-4.

00098-017: A summary of cumulative impacts has been added to the Executive Summary of the EIS.

00098-018: The text in Section 3.23.2.2 of the EIS has been changed to reflect information provided in the comment.

00098-019: The text in Section 3.23.3.5.1 of the EIS has been changed to reflect information provided in the comment.

00098-020: The text in Section 3.23.3.5.3 of the EIS has been changed to reflect information provided in the comment.

00098-021: The anticipated effects of TAPS ROW renewal on sociocultural systems are discussed in Section 4.3.21. The cumulative effects of TAPS renewal in the context of other sociocultural factors and anticipated actions along the right-of-way are discussed in Section 4.7.8.2. Both of these sections have been expanded to clarify the context of development associated with the TAPS.

The purpose of discussing suicides, substance abuse, and other problems is not to provide a full accounting of the many things that can affect and be affected by sociocultural change. Rather, it was to provide particularly striking evidence that Alaska Native sociocultural systems in a sense are out of balance and hence likely to be particularly sensitive to impacts. As continuation of the TAPS would continue some of the changes (influence of modern American society, need to participate in a cash economy) that have been linked to these problems, it seemed useful to note these particular concerns. That stated, the referenced section identified several positive effects of modernization in Alaska on Alaska Natives.

00098-022: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-023: The text in Section 3.23.2.2 of the EIS has been changed to reflect information provided in the comment.

00098-024: The text in Section 4.3.19.2.5 of the EIS has been changed to reflect information provided in the comment.

00098-025: Section 3.12.7.2.4, page 3.12-13, parg. 2, line 18

The phrase “resulting in a swampy area” will be deleted. However, it is not substituted by “possibly due to construction impacts” because the construction on the surface is unlikely to cause deep-seated warming. The reference “Keyes 2002” is replaced by “Michael Baker, Jr., Inc. 2001.”

00098-026: The text was changed to reflect the substance of the comment.

00098-027: While we recognize that the PWS RCAC has recommended that NPDES permit levels for the BWTF be reduced, the EIS correctly identifies that BWTF discharges are below current NPDES permit limits and that concentrations of total PAHs in sediments are below the sediment quality guidelines for marine sediments. While the future NPDES permit may include more strict limits on BTEX, the document correctly notes that historic operations have been within regulatory guidelines.

00098-028: The graph in Section 3.11.1.1 has been changed. The permit boxes have been removed and the legend has been fixed.

00098-029: The text in Section 4.3.8 has been revised.

00098-030: The sentence in Section 3.3 has been changed to "A thawed, loose granular soil deposit located below a groundwater table may become ..."

00098-031: The USGS reported by R.L. Wesson et al. chose two recurrence intervals: 500 years (non-exceedance of 10% in 50 years) and 2,500 years (non-exceedance of 2% in 50 years) in their analyses. A recurrence interval of 500 - 1000 years was used by the TAPS. The Wesson's results of peak ground acceleration (PGA) for the 2,500 years recurrence interval is used here for comparison because it would provide a more conservative estimate. Actually, the designed PGA used by the TAPS meets or exceeds the PGA found in the USGS report.

As the USGS's PGA is used for comparison, the effect of energy dissipation caused by soil and structures has been considered. The PGA value is divided by a factor of 2 before being compared with the design ground acceleration used by the TAPS. The results support the conclusion that the originally specified TAPS seismic design criteria met the seismic zoning criteria proposed by the USGS.

The text in Section 3.4 has been modified accordingly.

00098-032: Section 4.1.3.2.1 has been revised to incorporate that the automatic shut-down feature is intended to function in those instances when the operator is incapacitated.

00098-033: The text in Section 3.7.2.5 was revised per the comment.

00098-034: The text in Section 3.7.2.5 was revised to state that 3.8 million gallons of water were released in 1991. Reference to a maximum volume of release water was deleted.

00098-035: The text in Section 3.8 was revised per the comment.

00098-036: Sections 3.24, 4.3.20, 4.7.8.1, and other portions of the FEIS have been revised to discuss dual state and federal management of subsistence, and the various sources of impacts on subsistence in greater detail. Some of these changes are consistent with points in the comment.

00098-037: Text to resolve the confusion over Arctic char and Dolly Varden was added to Section 3.19.1 of the FEIS.

00098-038: Although it is important to discuss how security programs can enhance TAPS oil spill prevention and response strategies, for obvious reasons, a detailed discussion of all of the features that constitute the TAPS security program is not warranted. The text of the EIS (Section 4.1.4.2) mentions those aspects of the security program that are not covert and already obvious to anyone. Additional details of aspects of the security program that are not readily apparent do not need to be included to show the interface between security and spill prevention and response.

Nevertheless, a nonspecific statement has been added to the text to clearly indicate that additional security measures beyond those mentioned are, indeed, in place. As to the comment regarding the pump stations, the commentor is correct. The EIS fails to specifically mention security regarding either the pump stations or the pipeline itself. However, in the discussion in Section 4.1.4, security is alluded to as necessary elements to Part 2 of the oil discharge prevention and contingency plan required by Alaska regulation. Specifically, the text notes that Part 2 of the plan must provide a description of the schedule of inspection of the facility or operation as well as the existing and proposed means for detecting discharges, including surveillance schedules. However, in response to the comment, additional bullets have been added to Section 4.1.4.1 in the discussion regarding the four distinct phases of oil spill control. These bullets provide the interface between existing security programs and oil spill detection and response. As per the argument above, security measures are alluded to in a generic manner.

00098-039: The suggested correction has been made to Section 4.1.4.2.

00098-040: The text in Section 3.8 was revised as suggested by the comment.

00098-041: Section 3.10 discusses the current environment of Port Valdez and was organized in this manner to aid in a later discussion of potential impacts. No change was made.

00098-042: Section 3.11 is organized in this manner to aid in impact discussion later in the document. This section discusses the current environment of Port Valdez. No change was made to Section 3.11 in response to the comment.

00098-043: These are the units used in the original reference document. No change was made to the text in Section 3.10.

00098-044: Figure 3.11-1 has been corrected.

00098-045: The VMT NPDES permit was issued by US EPA but only after review and concurrence by ADEC. See also Section C.5. The reference to 705,399 refers only to sanitary waste treatment plant discharges. Appropriate changes have been made to the text in 3.16.

00098-046: The text in Section 3.16.4 has been revised appropriately.

00098-047: The text in Section 4.6.2.8.1 has been revised as suggested.

00098-048: The text in Section 3.8 was modified to indicate that the water withdrawn at Fairbanks is from an independent aquifer and is only used as a comparison of the total amount of water withdrawn. A similar change was made in the cumulative analysis (Section 4.7).

00098-049: The change was made in Section 3.13.1, as suggested.

00098-050: The change was made in Section 3.13.1, as suggested.

00098-051: The text in Section 3.13.1 has been revised.

00098-052: The change was made in Section 3.13.1.1, as suggested.

00098-053: We concur with the interpretation made in the comment with respect to the term “potential maximum emission levels” used in Section 4.3.9.1.

00098-054: The change was made in Section 4.3.9.1, as suggested.

00098-055: Revisions have been made to Section 4.4.4.6 as appropriate.

00098-056: The text in Section 4.3.19.3.1 of the EIS has been changed to reflect information provided in the comment.

00098-057: Text has been added to Sections 4.3.19 and 4.6.2.19 of the EIS to describe the impact of the two alternatives, especially during the early part of the renewal and non-renewal periods.

00098-058: The text in Section 4.3.19.3.2 of the EIS has been changed to reflect information provided in the comment.

00098-059: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-060: Forecasts for unemployment over the renewal period are estimated by the MAP Model and result from the determination of population and employment levels during the renewal period. The model also estimates migration levels in response to changes in relative incomes in the state compared to the nation as a whole. Structural changes that occur in the Alaskan economy are included in the forecasts made by the model for the other basic (non-petroleum) sectors in the economy of the state. These are reflected in the impacts on population, migration, employment and unemployment provided in the EIS.

00098-061: The text in Sections 4.3.19.1.2 and 4.6.2.19.1 of the EIS has been changed to reflect information provided in this comment.

00098-062: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-063: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-064: The text in Section 4.3.19.4.1 of the EIS has been changed to indicate the assumptions made in the analysis.

00098-065: The text in Section 4.3.19.4.2 of the EIS has been changed to indicate the assumptions made in the analysis.

00098-066: The primary purpose of Section 4.1.4 is to provide an overview of the strategy in place for response to accidental releases (of crude oil as well as other hazardous substances) and not to specifically discuss the regulatory drivers for that strategy. The Oil Pollution Act of 1990 (OPA) deserves a brief mention because of its unique influence on TAPS contingency planning. Specifically, the OPA dictates: specific elements to be included in federal contingency plans (see 40 CFR 300.210) and response plans for certain facilities and vessels (see 40 CFR 300.211), specific contingency plans for on-shore oil pipelines (see 49 CFR 194), and periodic contingency plan drills (see 40 CFR 300.212). Beside contingency planning and response strategies, the OPA also dictates the use of double-hulled tanker vessels in Prince William Sound. The impacts of double-hulled tankers are many and varied and extend well beyond issues relating to accidental release of crude oil. A brief paragraph introducing the changes brought about by the OPA has been added to Section 4.1.4. Double-hulled tankers are discussed in numerous sections in the EIS.

00098-067: Thank you for your comment. The symbol problem has been corrected in the referenced map in Section 4.1.4.1.

00098-068: An error occurred in the presentation of the data on net migration included in Table 4.3-17. The text and table in the EIS have been changed to correct this error.

00098-069: An error occurred in the presentation of the data on net migration included in Table 4.3-17. The text and table in the EIS have been changed to correct this error.

00098-070: An error occurred in the presentation of the data on net migration included in Table 4.3-17. The text and table in the EIS have been changed to correct this error.

00098-071: The text in Section 4.3.19.5 of the EIS has been changed to reflect information provided in the comment.

00098-072: An error occurred in the presentation of the data on net migration included in Table 4.3-17. The text and table in the EIS have been changed to correct this error.

00098-073: The text in Section 4.3.19.6 of the EIS has been changed to reflect information provided in the comment.

00098-074: Thank you for your comment.

00098-075: Section 4.3.19.7 has been revised to identify anticipated growth in personal income. However, it is important to note that impacts under the proposed action may be different from impacts under cumulative impacts, the latter also considering past, present, and reasonably foreseeable actions in addition to the proposed action.

00098-076: Section 4.3.19.7 has been revised to correct an erroneous statement about the decline in income.

00098-077: Access, land use, and trespass issues related to Native lands are addressed in the EIS in Section 4.3.23.1, “Land Use.” The BLM recognizes the concerns of Tribal governments and Native allottees related to land use issues adjacent to TAPS. Although these concerns do not directly affect renewal of the Federal Grant of Right-of-Way, the BLM will continue to work with these groups on these issues, as it has in the past.

00098-078: The text in Sections 4.3.19.1.2 and 4.6.2.19.1 and in Sections 4.3.24.1 and 4.6.2.24.1 has been modified to clarify the potential impacts on state recreation facilities.

00098-079: This comment refers to the summary table, Table 4.3-23, which has been deleted from the FEIS.

00098-080: Section 4.4.4.6.2 has been revised as appropriate.

00098-081: Section 4.4.4.6.2 has been revised as appropriate.

00098-082: Section 4.4.4.6.2 has been revised as appropriate.

00098-083: Permafrost aggradation will be much greater on the northern part of the pipeline. A sentence has been added to Section 4.6.2.2 to reflect that condition.

00098-084: The text "if necessary" has been added to Section 4.6.2.2.

00098-085: Because heavy equipment will be needed and brought into areas for removing all aboveground pipeline and mechanical refrigeration systems, transporting and moving the heavy equipment would likely destroy the vegetation covers that have grown near most of the workpads. Soil compaction is likely, and the permafrost is likely to be disturbed.

00098-086: The sentence mentioned in the comment refers to general compaction caused by moving heavy equipment and does not refer to slope stability.

00098-087: With the recent continuous warming trend in Alaska, previously frozen soils become loose and cycles of freeze and thaw increase. The processes of mass wasting would continue and expand. No change has been made to the text.

00098-088: Section 3.3 has been corrected, as appropriate.

The permafrost at MP735-736 has thawed over the last 25 years. Historical temperatures measured at Gulkana showed mean annual air temperature increased in the last 50 years. Temperature profiles measured at a depth of 50 ft showed a warming trend over a period from 1992 to 1995 (see Michael Baker Jr., Inc., 2001, MP735 Aboveground Pipeline Assessment) at two locations near MP 735, one near the VSM and one away from the VSM. If the warming resulted from the surface disturbance at the VSM, such warming would be less or none at the other location. On the contrary, larger warming was observed at the location away from the VSM than the one near the VSM in which thermosyphons were installed (see Michael Baker Jr., Inc., 2001, MP735 Aboveground Pipeline Assessment). Therefore, the warming in the subsurface at MP735 reflects the combined effects of surface disturbance in a swampy area subjected to a recent climatic warming trend in Alaska.

00098-089: The description is for the terrain of the area. Outwash fan is a geomorphic feature that is reflected in the area. A glacial till, which is suggested in the comment, is a term describing the nature of the geologic material and is not used in Section 3.2.6. However, in Section 3.3.1.6, a sentence has been modified to address the comment.

00098-090: VSM stability is obviously critical to TAPS integrity. As such, it is the focus of extensive monitoring and surveillance. Please see Section 4.3.2 of the FEIS (Soils and Permafrost) for additional information.

00098-091: The sentences referred to in the comment (Section 3.3.1.1) describe the conditions of the area without referring to any cause of the thawing.

As the area is near the southern end of permafrost, it is very sensitive to both surface disturbance and climatic change. It is questionable if the cleanup activity more than 20 years ago would alone produce the thawing. Given the general warming trend in Alaska (see Section 3.12.7) in the last several decades, it is unlikely that the described area is immune to the impact of the warming.

00098-092: Air temperature is expected to rise with the recent warming trend, resulting in an increase of freezing and thawing cycles. In cold regions, the number of freezing and thawing cycles is closely related to mass-wasting geologic processes; therefore, it is justified to use "would" in the sentence in Section 4.5.2.1.

00098-093: Changed the "would" to "may" in Section 4.3.1. No additional text has been changed because there is no foreseeable reason to assume that the warming trend in Alaska will stop or reverse.

00098-094: The appropriate change has been made to the text in Section 4.1.3.2.1.

00098-095: The suggested changes in Section 3.3.2.1 have not been made. The comment has not provided evidences that fire and mining activities have contributed to the degradation of permafrost of the cited sites. Nor has evidence been provided to support the claim that the surface disturbance could result in the deep-seated thawing of the sites.

The permafrost at MP735-736 has thawed over the last 25 years. Historical temperatures measured at Gulkana showed mean annual air temperature increased in the last 50 years. Temperature profiles measured at a depth of 50 ft showed a warming trend over a period from 1992 to 1995 (see Michael Baker Jr., Inc., 2001, MP735 Aboveground Pipeline Assessment) at two locations near MP 735, one near the VSM and one away from the VSM. If the warming resulted from the surface disturbance at the VSM, such warming would be less or none at the other location. On the contrary, larger warming was observed at the location away from the VSM than the one near the VSM in which thermosyphons were installed (see Michael Baker Jr., Inc., 2001, MP735 Aboveground Pipeline Assessment). Therefore, the warming in the subsurface at MP735 reflects the combined effects of surface disturbance in a swampy area subjected to a recent climatic warming trend in Alaska.

00098-096: After 25 years of the operation of the TAPS, creeping on some slopes has not stopped or stabilized. Deep-seat thawing has been observed on a few slopes (e.g., Treasure Creek Hill and Squirrel Creek Hill Slope). These are evidence that either the ongoing maintenance activities could not stop the degradation of the permafrost caused by the ground surface disturbance or factors, such as the warming trend in Alaska, may have contributed to the deep-seat thawing of the permafrost and creep. The warming trend in Alaska over several decades could have a deep, penetrating, warming effect on the permafrost and should not be ignored.

The text in Section 3.3 has been revised as appropriate.

The soil creep used here is referring to slow movement of geologic material on a slope without specifying the mechanisms of such movement. It is true the most common visible cause of soil creep on an undisturbed slope in cold regions was due to freezing and thawing, such as solifluction. Actually, creeping can occur in both cold and non-cold regions. Gravity force on a steep slope can cause creeping in weathered bedrocks or soils as soon as the down slope driving force is greater than the resistant force of the geologic material.

On the Treasure Creek slope, insulation material has been placed on the ground surface such that the soil creep caused by the freeze and thaw cycles of the active layers was greatly reduced. Because the soil creep continued for more than 25 years and deep-seated thawing was detected, the cause of the creep on the slope is unlikely to be the result of solifluction alone. On the other hand, degradation of permafrost can result in producing water and raising the temperature of the frozen soil. Both can reduce the mechanical strength of the soil and promote the soil creep movement under gravity force.

00098-097: The suggested change has been made to Section 4.2.2.6.4.

00098-098: The point intended to be made here is that slope deterioration can also result in VSM movement or destabilization. If that were to occur, VSM repair or replacements may be necessary. If so, impacts from related construction (i.e. stabilization or removal/replacement of a VSM) may have impacts of even greater magnitude than the impact associated with slope repair alone. The language suggested in this comment is consistent with this point. An appropriate change has been made to the text in Section 4.2.2.4.1.

00098-099: The word "temporarily" has been added at the end of the sentence.

00098-100: It is a general statement referring to the thawing effect on permafrost. The effect can be found near workpads, access roads, thaw bulbs, etc. An example of settlement caused by the thaw bulb is at the Atigun Pass near MP 166. The photos referenced were used for workpads and not for aboveground or buried pipe. The sentence in Section 3.3.2.2, "The thawing can induce both subsidence of the ground surface ..." has been changed to "Thawing of the permafrost can induce both subsidence ..."

00098-101: The typographical error in Section 3.2.10 has been corrected.

00098-102: The text in section 3.2.9 has been revised.

00098-103: The text in Section 1.3 has been changed from "spruce-fir" to "spruce-birch."

00098-104: The discussion in Section 4.3.17.2 does relate specifically to caribou, and states that the avoidance of roads and facilities during the calving period applies only to some caribou. No population-level impacts due to avoidance occur, especially since the area is too wet to be a calving area.

00098-105: The text in Section 3.11.3.1 states that PWS was "generally characterized as 'pristine," and the text has not been changed.

00098-106: The color coding in Map 3.18-1 has been changed to better differentiate Coastal Forest and Boreal Forest.

00098-107: Figure 3.18-2 has been deleted.

00098-108: The reference changes have been made in Section 3.21.2 as suggested.

00098-109: Reference citation changes have been made as suggested (see Section 3.21.2).

00098-110: The reference change has been made as suggested (see Section 3.21.2).

00098-111: The reference call-out in Section 3.21.2 has been changed as suggested.

00098-112: The Garshelis and Johnson reference cited in Section 3.22.3.5 has been updated in the FEIS.

00098-113: A change in the reference citation in Section 4.3.17.2 has been made as suggested.

00098-114: Information from Wiens et al. 1996 (and Ford et al. 1996) has been added to the discussion on the Exxon Valdez oil spill (EVOS) on birds. It was not feasible to cite all the reports that have been prepared on the impacts of the EVOS, or oil spills in general, on birds. The references used in the EIS are sufficient to support the assessments of the immediate and long-lasting impacts of oil spills to ecological resources presented in Sections 4.4.4.9 thru 4.4.4.12.0

00098-115: Information from Wiens et al. 1996 (and Ford et al. 1996) has been added to the discussion on the Exxon Valdez oil spill (EVOS) on birds. It was not feasible to cite all the reports that have been prepared on the impacts of the EVOS, or oil spills in general, on birds. The references used in the EIS are sufficient to support the assessments of the immediate and long-lasting impacts of oil spills to ecological resources presented in Sections 4.4.4.9 thru 4.4.4.12.

00098-116: The new reference by Cronin et al. (in press) provides further evidence that the caribou herds represent a single interbreeding population. However, because this publication is in press, and is not readily available to readers of the EIS, it has not been cited in the EIS. The EIS already states that the herds are not totally independent or reproductively isolated.

00098-117: The text in Section 3.21.1.7 has been revised as suggested.

00098-118: The Section 3.21.2 discussion on moose in the North Slope has been modified to include information from Carol (2002) that the population is now increasing in size.

00098-119: The statement in Section 3.21.2 has been modified as suggested.

00098-120: Text has been added to Section 3.22.2.1 that includes this reference.

00098-121: The text in Section 3.22.1.2 has been changed as suggested.

00098-122: Section 3.22.3.5 text has been modified to describe the current status of the sea otter population.

00098-123: Section 4.7.8.1 has been revised to discuss subsistence impacts of the Exxon Valdez oil spill in greater detail. The key issue seems to be persisting effects of the spill, regardless of the ultimate reasons. Despite pronouncements of food safety, perceived problems with subsistence resources continued several years after the spill.

00098-124: Section 4.7.8.1 has been revised to discuss subsistence impacts of the Exxon Valdez oil spill in greater detail. The main issue seems to be impacts on subsistence behavior, regardless of the ultimate causes or reasons. Available data indicate that shifts in subsistence behavior continued into the late 1990s based on perceived damage to subsistence resources.

00098-125: The 1994-1995 estimates of 7,500 to 10,000 wolves has been added to the text. Harvest summaries were provided to give the reader a general indication of harvests that occur in the GMUs crossed by the ROW compared to state-wide harvest totals. Thus, it was decided that presenting the recent harvest statistics would be sufficient. It should be mentioned that Tables 3.21-2 and 3.21-3 have been updated to provide 2000-2001 harvest data rather than the 1999-2000 data presented in the DEIS.

00098-126: The 1994-1995 estimates of 7,500 to 10,000 wolves has been added to the text. Harvest summaries were provided to give the reader a general indication of harvests that occur in the GMUs crossed by the ROW compared to state-wide harvest totals. Thus, it was decided that presenting the recent harvest statistics would be sufficient. It should be mentioned that Tables 3.21-2 and 3.21-3 have been updated to provide 2000-2001 harvest data rather than the 1999-2000 data presented in the DEIS.

00098-127: The text in Section 4.4.4.3.2 has been corrected per the comment.

00098-128: Text has been added to Section 4.4.4.3.2 to state that the response times are “average” values.

00098-129: Where possible, tables have been used in the EIS to facilitate readability. When information needed for a section appeared in a previous table in another section of the report, the table was not repeated to avoid redundancy.

00098-130: The text in Section 4.4.4.3.2 was corrected to call out Table 4.4-19.

00098-131: Callout to Table 4.4-20 added per comment.

00098-132: Table 4.4-22 lists the segments of the pipeline that are below the ground. MP 736-800 is one of those segments. The text correctly references the Chugach Range as occurring from MP 720-800. The maximum release volume for the entire Chugach Range would occur at MP 741. No change in the text is required.

00098-133: Where possible, tables have been used to facilitate readability, particularly when many parameters are discussed. However, a summary table is not required for these two paragraphs in Section 4.4.4.5.

00098-134: The text in Section 4.4.4.5.4 has been changed to address this comment.

00098-135: The text in Section 4.4.4.6.2 has been revised to define hazardous air pollutants. The term is also defined in the Glossary.

00098-136: A footnote has been added where the term “meteorological conditions” appears in Section 4.4.4.6.3.

00098-137: Thank you for your comments. The suggested updates provided in subsequent comments are being considered for inclusion into Section 4.1.4.3.

00098-138: Appropriate changes have been made to the text in Section 4.1.4.3.

00098-139: Appropriate changes have been made to the text in Section 4.1.4.3.

00098-140: Thank you for your comment.

00098-141: The common names used for birds in the EIS are those accepted by the American Ornithologists' Union. Thus, the authors of the EIS did not believe the use of scientific names was necessary. A parenthetical statement has been added to the first call-out of the long-tailed duck (Section 3.20.1.1) to inform the readers that it was previously known as the oldsquaw.

Information on peregrine falcon zones of restricted activity (ZRAs) that occur near the ROW has been added to Section 3.20.1.2.

00098-142: The text in Section 3.21.1.1 has been revised as suggested.

00098-143: The TAPS Owners 2001a citation concerning the DHCMA in Section 3.21.1.1 has been replaced with ADF&G (2002).

00098-144: A footnote has been added to Tables 3.21-2 and 3.21-3 explaining what the harvest numbers entail. Also, the information in the tables has been updated for harvest year 2000-2001. The footnote for the tables provides the harvest year.

00098-145: The definition of caribou herd has been moved from the footnote to the main text of Section 3.21.1.2.

00098-146: A citation for the seven phases of caribou activities has been added to Section 3.21.1.2.

00098-147: The editorial change to Section 3.21.1.2 has been made as suggested.

00098-148: The caribou herd size estimates were obtained from the ADF&G caribou herd map that also listed the herd sizes as of the year 2000. This information was assumed to be sufficient for the relative comparison of herds that are crossed by the ROW. A footnote has been added to Table 3.21-3 explaining what the harvest numbers include. It should be noted that the table has been updated with harvest year 2000-2001 data replacing the harvest year 1999-2000 data.

00098-149: A change has been made to the text in Section 4.2.2.5.1.

00098-150: Instrument pig runs will gather data that can support decisions to repair pipeline segments. However, the data may also identify situations where corrosion has not advanced to a point where repair or replacement is required, but rather, where the addition of corrosion control systems, or adjustments to existing systems, is warranted. Therefore, the text in Section 4.1.3.2.1 has not been changed not to replace “also need corrosion control” with “also need repair and or corrosion

00098-151: The complex environmental interrelationships associated with the proposed renewal of the TAPS right-of-way coupled with the diversity of reader interests and needs require the assembly of large amounts of information in the EIS. Cross-referencing is a useful tool to avoid duplication while enabling readers with diverse needs to access sections of interest to them.

00098-152: The information in this paragraph is actually already summarized in the tables in Section 4.4.1. A reference to the appropriate tables has been added to the paragraph.

00098-153: This paragraph gives information on an unlikely category spill of 450 bbl at the Valdez Marine Terminal. The volume of this spill is much lower than that for the 4,900 bbl spill in the likely category, and the impacts are much lower (which is stated in the text). Therefore, it was considered to be unnecessary to include the data for this spill in Table 4.4-30.

00098-154: Text has been added to Section 4.4.4.9.

00098-155: Text has been added to Section 4.4.4.9 to define AO and SPC. These terms are also defined in Acronyms and Abbreviations.

00098-156: Spill response activities, including the intentional hazing of wildlife, would temporarily disturb and displace wildlife. It can be inferred from the discussion in Section 4.4.4.11 that individuals displaced from the spill area would not be killed from oiling. With decreased human activity following the initial spill response, wildlife would be able to traverse freely through or occupy the spill area.

00098-157: A footnote has been added to the table in Section 4.4.4.12 providing a key to terms.

00098-158: The Section 4.4.4.12 text has been changed as suggested.

00098-159: The text in Section 4.4.4.13.3 of the EIS has been changed to reflect information provided in the comment.

00098-160: Acronyms and Abbreviations, including ACEC, Areas of Critical Environmental Concern, are defined in a list of Notations at the beginning of the EIS. In this way, they are readily available for reference, regardless of where the reader may encounter them.

00098-161: The number of rivers and streams crossed by TAPS is appropriately mentioned in Section 3.7, which describes the affected environment for surface water resources.

00098-162: The text in Section 4.7.4.1.2 has been corrected.

00098-163: The acronym has been spelled out in the FEIS in Section 4.7.4.7.2. It is also defined in Acronyms and Abbreviations.

00098-164: The word "proposed" has been deleted in Table 4.7-4 and on page 4.7-51 of the FEIS.

00098-165: The footnote in Table 4.7-7 has been changed to refer to Table 4.7-2.

00098-166: In Section 4.7.6.7 the text has been revised to define AQRV. This acronym is also defined in Acronyms and Abbreviations.

00098-167: The acronym has been defined in the Section 4.7.6.10.1. It is also defined in Acronyms and Abbreviations.

00098-168: The acronym has been defined in Section 4.7.6.10.1.

00098-169: The acronym has been defined in Section 4.7.6.10.3. It is also defined in Acronyms and Abbreviations.

00098-170: The units uR/h stand for microrem per hour, which was added to the text in Section 4.7.6.11.1. Units are also defined in Acronyms and Abbreviations.

00098-171: As stated in the Glossary and in Acronyms and Abbreviations, FTE stands for full-time equivalent. The text in Section 4.7.6.11.1 has been revised to also define the acronym.

00098-172: The term in Section 4.7.6.11.2 has been corrected.

00098-173: The text in Section 4.7.7.3.1 has been corrected.

00098-174: The insert has been added to Section 4.7.7.3.5 as suggested.

00098-175: A reference has been provided for the statement (Section 4.7.7.3.5), and the statement has been modified as suggested.

00098-176: The sentence has been revised in Section 4.7.7.3.5 as suggested.

00098-177: The text in Section 4.7.7.4 has been modified as suggested.

00098-178: The text in Section 4.7.7.4 has been modified as suggested.

00098-179: The text in Section 4.7.7.4 has been modified as suggested.

00098-180: The referenced text in Section 4.7.7.4 has not been changed. The text accurately depicts what was expressed in the literature citation and the suggested modification would not alter the conclusions.

00098-181: The purpose of the EIS is to analyze and present the impacts associated with the proposed action and its alternatives. Benchmarking and comparisons with other pipelines, although useful, do not provide an accurate representation of the impacts associated with TAPS ROW renewal. The approach taken in the EIS has been to compare the impacts with applicable standards and regulations, which more accurately places the estimated impacts in the context for the decision-maker.

00098-182: The text in Section 4.4.1.1.1 and Map 4.4-1 have been modified to account for the two greater than 10,000 barrels.

00098-183: Text has been added to Section 4.7.8.3 of the FEIS providing additional sources of information about the impact of the Exxon Valdez oil spill (EVOS) on communities, including intangible impacts, such as psychological stress, and in the fisheries, recreation, and tourism industries in the Prince William Sound area. In addition, compressed overviews of selected impacts of the EVOS have been added to Sections 4.7.8.1 and 4.7.8.2.

00098-184: Additional text has been added to Section 4.4.4.13.1 to clarify the issue. Captions in Table 4.4-38 have been simplified, and the reference to footnote ‘c’ has been deleted.

00098-185: Additional text has been added to Section 4.4.4.13.1 to clarify the issue. Captions in Table 4.4-38 have been simplified, and the reference to footnote ‘c’ has been deleted.

00098-186: The text in Section 4.4.4.13.2 of the EIS has been changed to reflect information provided in the comment.

00098-187: The text in Section 4.4.4.13.2 of the EIS has been changed to reflect information provided in the comment.

00098-188: The text in Section 4.5.2.19 of the EIS has been changed to reflect information provided in the comment.

00098-189: The text in the EIS has been changed to reflect information provided in the comment.

00098-190: The text in Section 4.6.2.19.1 of the EIS has been changed to reflect information provided in the comment.

00098-191: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-192: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-193: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-194: The text in the EIS has been changed to reflect information provided in the comment. See Sections 4.3.19.3.2 and 4.6.2.19.3 and Tables 4.3-8 and 4.6-13.

00098-195: Section 4.6.2.19.3 and Table 4.6-16 of the EIS have been changed to reflect information provided in the comment.

00098-196: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-197: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-198: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-199: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-200: The text in Section 4.6.2.19.4 of the EIS has been changed to reflect information provided in the comment.

00098-201: Text has been added to Sections 4.3 and 4.6 of the EIS to describe the impact of the two alternatives, especially during the early part of the renewal and non-renewal periods.

00098-202: The text in Section 4.6.2.19.4 of the EIS has been changed to reflect information provided in the comment.

00098-203: The text in Section 4.6.2.19.4 of the EIS has been changed to reflect information provided in the comment.

00098-204: Text has been added to Sections 4.3 and 4.6 of the EIS to describe the impact of the two alternatives, especially during the early part of the renewal and non-renewal periods.

00098-205: Text has been added to Sections 4.3 and 4.6 of the EIS to describe the impact of the two alternatives, especially during the early part of the renewal and non-renewal periods.

00098-206: Text has been added to Sections 4.3 and 4.6 of the EIS to describe the impact of the two alternatives, especially during the early part of the renewal and non-renewal periods.

00098-207: Text has been added to the EIS in Sections 4.3.19.1.2 and 4.6.2.19.1 providing additional information on the assumptions used for the analysis of state and local government finances.

00098-208: Thank you for your comment. A continuation of fiscal problems in Alaska likely would create a decision making environment where expenditures would have to be reviewed carefully. Without the North Slope oil fields, maintenance of the Dalton Highway could well become a lessened priority.

00098-209: Sections 4.6.2.20 and 4.6.2.21 both have been modified, in part in response to changes in the economic analysis under no action to maintain consistency with that section.

00098-210: Table 4.6-24 has been revised to more accurately reflect the findings of the economic analysis under the no-action alternative.

00098-211: Section 4.6.2.21 notes likely reductions in state expenditures on various public programs under the no-action alternative. Among the programs that may suffer is education, although how more limited revenues would be distributed is uncertain.

00098-212: Section 4.6.2.21 notes that reduced revenues under the no-action alternative likely would jeopardize certain state-funded programs. Education would be among the programs at risk, though available information does not provide clear indications of the degree to which it would be adversely affected.

00098-213: Section 4.6.2.20 has been revised to make it consistent with the revised economic analysis in Section 4.6.2.19.

00098-214: Section 4.7.8.2 has been revised to clarify the discussion of infant mortality and to correct the percentage of high school graduation in the North Slope Borough. The suicide rates reported in the document cited in the EIS and the document shown on the graph cited by the comment use different base years for age-adjustments (1940 for the former, 2000 for the latter). Section 4.7.8.2 has been revised to note this discrepancy.

Since the context discussed here is oil development and the TAPS using a baseline of 1940 or 1950 health statistics would probably be going too far back for a construction project dating from 1974 to 1977.

Section 4.7.8.2 discussed cumulative effects and places the projected consequences of TAPS ROW renewal in context. It is appropriate to point out the benefits in public health that petroleum development has engendered as well as negative consequences to traditional lifeways. It is up to the affected populations and government decision makers, not the authors of the EIS, to decide whether benefits outweigh costs.

00098-215: The text regarding the no action alternative in Section 4.7.8.2 has been revised to give additional emphasis to the negative economic consequences of no action.

00098-216: The text in Section 4.7.8.3 has been changed to reflect information provided in the comment.

00098-217: Additional text has been added to Section 4.7.8.3 describing in more detail the impact of the No-Action alternative.

00098-218: A buried pipeline, while not at the surface, still has visual impact, primarily from the effects of vegetation removal from construction and ongoing maintenance.

00098-219: A natural gas pipeline could operate independently of the TAPS if economic conditions favored natural gas production on the North Slope. While natural gas is a by-product of petroleum production, petroleum production was not viewed as necessary for exploitation of the North Slope's natural gas reserves. For this reason, a natural gas pipeline was included in the list of other actions for the no-action (no TAPS renewal) alternative (see Section 4.7.8.6.3).

00098-220: Section 4.6.2.25 has been revised to provide a more thorough evaluation of the no-action cumulative case for environmental justice.

00098-221: The summary has been revised to more fully present the cumulative impacts analysis. Alaska contains substantial reserves of natural gas, and there are numerous proposals to develop those reserves. It is potentially possible, depending on economics, to produce natural gas without the operation of the TAPS. A natural gas pipeline is a separate proposal and would occupy a parallel, but separate, right-of-way from TAPS. For this reason, the analysis of the cumulative impacts of no action (not to renew TAPS) includes a natural gas pipeline (Section 4.7.9).

00098-222: The referenced table has been revised to more clearly identify cumulative impacts.

00098-223: The referenced text in Section 3.1.2.2.2 has been changed as suggested.

00098-224: This exploration well has been added to the appropriate maps for Map 4.7-5.

00098-225: The referenced text in Section 4.7.6.11.2 has been revised.

00098-226: The referenced text in Section 4.7.6.11.3 has been revised.

00098-227: The references and wording in Section 4.7.7.3.2 have been changed as suggested.

00098-228: Text has been added to Section 4.7.7.2.3 to indicate that the Alaska Department of Public Safety (State Fish and Wildlife Protection) also enforces fish and game regulations.

00098-229: The numbers of caribou in the Central Arctic herd have been updated in Section 4.7.7.3.4 based on the suggested references.

00098-230: Due to the uncertainty concerning how many terrestrial mammals may have died due to the Exxon Valdez oil spill, the MMS (1998) predictions have been deleted from Section 4.7.7.3.5. References for the loss estimates for seabirds and eagles have been added.

00098-231: The text in Section 4.7.7.4 has been modified to include: (1) a baseline ranking definition for species listed as depleted under the MMPA; (2) explanation that existing baseline conditions could be result from both TAPS and non-TAPS activities; (3) the existing baseline condition for the Pacific walrus was changed from minor to negligible based on existing population information; (4) the existing baseline condition for the sea otter was changed from moderate to minor because of its lack of listing as either depleted or threatened; and (5) the footnote identifying the stock of beluga whales was corrected.

No changes were made to the ranking definitions for the effects of future actions and existing baseline conditions, because the same definitions apply to both.

00098-232: The referenced text in Section 3.1.2.1.1 has been changed as suggested.

00098-233: The referenced text in Section 3.1.2.1.1 has been corrected.

00098-234: The referenced text in Section 3.1.2.1.2 has been corrected.

00098-235: The referenced text in Section 3.1.2.2.1 has been revised to clarify that the SERVS is responsible for safe transit of tankers from VMT to 17 miles outside of the Hinchinbrook Entrance.

00098-236: The Prince William Sound Oil Discharge Prevention and Contingency Plan incorporates the delineation of three "zones" with PWS as defined by the Alaska Regional Response Team (ARRT) (see SID #1, Section 7.4.1). Under provisions of that plan (Section 5.3), the Incident Commander is authorized to make the decision regarding the use of dispersants; however, depending on the zone that is impacted, formal notice must be given to both the Federal and State On-Scene Coordinators of the intention to use dispersants. When the spill impacts Zone 1, the Federal On-Scene Coordinator (FOSC) is unilaterally authorized to approve the use of dispersants. However, when the spill threatens Zones 2 or 3, the FOSC must receive approval from the EPA representative to the ARRT and the Alaska Department of Environmental Conservation (ADEC) (see SID #1, Section 7.4.1) before granting such approval. The suggested change has been made to the text in Section 4.1.4.2. Also, we note that the subsequent section discusses contingency plans for releases of oil to Prince William Sound as a result of tanker accidents, but does not indicate the role of the FOSC regarding the use of dispersants; the text has been modified accordingly.

00098-237: Although flare stacks exist at the pump stations, there is no flare stack at the VMT. The sentence should have referred to the "waste gas incinerator," rather than to a flare stack. A correction to Section 4.2.2.2 has been made.

00098-238: No text change has been made as no hanging or incomplete sentences were found in Section 4.2.2.6.3.

00098-239: The information in Table 4.2-1 was taken directly from the reference, "Environmental Report for Trans-Alaska Pipeline System Right-of-Way Renewal, Potential TAPS Upgrades" (May 2002). The new pump modules referred to in this comment are represented as Planned Upgrades in Table 4.2-1. "New electric switchgear" is represented in the "To Be Added" column. No changes are being made to the text or the table.

00098-240: The terms "transfer legs" and "transfer arms" are both in common use. However, we have no objections to making the requested change. Also, the comment correctly states that Berth 3 does not have a vapor control system. Appropriate changes have been made to the text in Section 4.2.2.6.3.

00098-241: Additional clarification regarding the fate of the fiber optic cable has been added to the text in Section 4.2.4.2.

00098-242: The text in Section 4.4.4 has been changed to reflect the reviewer's suggested revision.

00098-243: The text in Section 4.4.3 has been modified by replacing "Freon" with "Halon."

00098-244: The text has been modified to read: "Wall thickness is graduated from 1 1/8 in. around the steel bottom ring, decreasing to ½ in. at the top ring." These dimensions are reported as Pipeline Facts at http://www.alyeska-pipe.com/Pipelinefacts/MarineTerminals.html.

00098-245: The text in Section 4.4.4.4.2 was revised as per the comment..

00098-246: The text was revised to indicate that there have been some minor noncompliances that were self-reported by APSC.

00098-247: The text in Section 3.8 was revised per the comment.

00098-248: We disagree with the comment's contention that modifications to the line-wide NPDES permit would not occur simply on the basis of an increase in the volume of hydrostatic test waters. Under Section VI, General Requirements, Subsection C, Planned Changes, the current line-wide NPDES permit requires APSC to provide "...notice to the Director (of EPA) and ADEC as soon as possible of any planned physical alterations or additions to the permitted activities in this permit. Notice is required only when:

1) The alteration or addition to a permitted activity may meet one of the criteria for determining whether the activity is a new source as determined in 40 CFR 122.29(b); or

2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Part VI.A.1." (It is clear from the permit's construction that this should read Part II.A.1)

The activities under consideration here are not substantively different from current activities addressed under the existing permit, and it is therefore unlikely that the permitting authority would construe the changes to hydrostatic test water volumes to constitute a new source as defined in 40 CFR 122.29(b) and that condition 1) above would have little effect. If APSC can successfully demonstrate in such a notice that no new pollutants would be introduced or that quantities of pollutants released would not increase, then no modifications would likely occur to the existing permit. However, condition VI C of the current permit preserves the opportunity for regulatory authorities to review planned actions in detail for their potential impacts before making decisions regarding the permit. The possible outcomes of such a review include: (1) no change to the existing permit; (2) a possible amendment to the existing permit by the addition of conditions and limitations that would apply to the management of hydrostatic test waters related to upgrade activities; or (3) a requirement for APSC to apply for a new permit that would be subject to public review and comment.

Appropriate language has been added to the text of Section 4.2.2.6.3 and also to Section C.5 to discuss an ADEC-issued general permit that would apply to discharge of hydrostatic test waters not specifically governed by the APSC individual NPDES permit (Wastewater General Permit No. 9940-DB003).

00098-249: The text in Section 4.3.6.1 was reworded as requested in the comment.

00098-250: The text in Section 4.3.6.1 has been modified.

00098-251: The text in Section 4.3.6.1 has been revised per the comment.

00098-252: "Surface water regime" was changed to "surface water quality" in Section 3.7 per the comment.

00098-253: The text in Section 3.7.1.3 has been revised to state that the pipeline has both elevated and buried crossings in this region.

00098-254: The text in Section 3.7.2.1 has been revised.

00098-255: Thank you for your comment.

00098-256: The text in Section 3.7.2.1 has been revised, as suggested in the comment.

00098-257: The text in Section 3.7.2.1 has bee revised to address part of the comment. Because impacts produced by construction and the first couple of years of operation contributed to the historical impacts of the pipeline, the statement is retained.

00098-258: The text in Section 3.7.2.2 has been revised per the comment.

00098-259: Local ponding of water can be considered a form of flooding. Therefore, it was discussed in Section 3.7.2.2. No text change is needed.

00098-260: Thank you for the clarification. Appropriate changes have been made to the text in Section 4.1.2.5.

00098-261: The phrase "affects the hydraulic regimens of river basins" was used by Slaughter to describe the collective effects of aufeis formation. In his monograph, Slaughter describes the research experiences of others who observed that aufeis essentially represents water in solid state storage. As such, this volume of water is no longer contributing to stream flows and is otherwise diverted from its normal movement in surficial materials. Aufeis water, then, is effectively subtracted from down-gradient water transport. Further, accumulation of aufeis will alter runoff patterns during spring melts. Thus it can be argued that the hydraulic characteristics of river basins within which aufeis formation occurs are changed down-gradient of such formations. Nevertheless, the text in Section 4.1.3.2.1 has been changed to provide clarification.

00098-262: A reference for the Rosgen technique has been added to Section 4.1.3.2.1. One notable characteristic of this technique is that it requires in-stream activities. Language to that effect has been added to the text.

00098-263: The text in Section 4.3.6.2 has been revised for clarity, stressing a continued need for surveillance and maintenance, as required. The reference to new work done in response to flooding was deleted.

00098-264: The referenced text in Section 4.3.6.2 has been deleted per the comment.

00098-265: Text has been added in Section 4.4.4.3 to state that ice also confounds spill response and effectiveness. Although Gulkana bridge structure might protect the pipeline, a guillotine break is conservatively assumed for the calculations. No additional change of text is required.

00098-266: The text in Section 4.5.2.6 has been deleted per the comment.

00098-267: Section 3.13.1.1 has been revised per the comment.

00098-268: The emissions data listed in Table 3.13-5 were estimated on the basis of (1) vehicle-miles-traveled (VMT) data provided by APSC for various types of vehicles assigned to a specific TAPS facility (or city) or to operate between two specific TAPS facilities, a TAPS facility and a city, or two cities; and (2) EPA emission factors for mobile sources (Hardesty 2001—see reference in Section 3.30 of the FEIS).

00098-269: The text in Section 3.13.1.2 has been revised.

00098-270: The citation in Section 3.13.2.1 has been corrected.

00098-271: Section 3.13.2.1 has been modified.

00098-272: As their name implies, “overpressure vents” are not expected to be continuous sources of VOC release, but are necessary safety devices that may occasionally open to release VOCs. The existence or absence of ambient monitoring data is irrelevant to the statement that the overpressure vents have the potential to release VOCs; however, such monitoring data (or alternative data on actual measurement of releases from each vent) would be required to quantify the impacts of such VOC releases. Since Section 4.2.2.1 is providing only a qualitative discussion of impacts, no changes to the text have been made in response to this portion of the comment.

00098-273: We cannot support the apparent contention in this comment that air quality impacts do not exist if they are not measurable beyond the TAPS ROW. The TAPS ROW is a part of the affected environment. The facts are irrefutable: pollutants (by-products of fossil fuel combustion as well as particulates) are released to the air as a result of this anthropogenic activity (valve vaulting). However, we are willing to entertain the possibility that this comment attempts to make a deeper point but in doing so fails to recognize the distinction between an impacting factor and the subsequent environmental impact or consequence. In response to that presumption, we point out that the purpose of Section 4.2.2.6.2 is to introduce the impacting factors associated with readily anticipated activities that constitute routine TAPS operations and with credible off-normal events. These impacting factors form the basis for environmental consequence analyses appearing later in the EIS.

00098-274: The text in Section 4.2.3 has been revised. However, although carbon dioxide is not a regulated pollutant, it clearly meets the definition of pollutant, and other portions of the EIS discuss its role in climate change mechanisms (See Section 3.13.1.3).

00098-275: A sentence has been added to Section 4.7.6.11.2 stating that 10% of the ambient VOC level in the city of Valdez was attributable to the Valdez Marine Terminal. However, this section on cumulative impacts is intended to address impacts from important TAPS-associated contaminants overall, including other possible exposure sources. A very important additional source of benzene exposures is from motorized vehicle exhaust. The text indicates that these exhausts contribute about 82% of all benzene emissions, and that the population of Valdez is projected to increase 60% over the current level over the next 30 years. Some additional information has been added to indicate that the ambient benzene level in Valdez was somewhat high in 1991 at the time of the Valdez Air Health Study, and that if automobile traffic increases markedly over the next 30 years, additional emissions controls on mobile and/or point sources might be needed.

00098-276: The 15-minute TEEL values have been labeled in the tables; footnote e explains that these are for comparison with 15-minute average values and therefore may be underprotective for comparison with modeled 1-hour ambient concentrations.

The referenced EPA document was reviewed, and no mention of impact scaling factors was found in that document. However, it is unlikely that ambient guidelines for PSD would be applicable to the short-term air concentrations estimated in association with an oil or hazardous substance spill. The pollutant concentrations would dissipate quickly (within 24 hours or less, depending on the spill duration) after a spill, so potential adverse health impacts from short-term inhalation exposures are being assessed. The Emergency Response Planning Guidelines were expressly developed to aid in assessment of short-term accidental exposures, and are appropriate for the accident impact assessment for human health and safety.

For chemicals without ERPG values, the use of TEELs as comparison values is also useful, because TEELs were developed for essentially the same reason as the ERPGs, but using somewhat less rigorous review requirements. This has allowed the development of about 2000

TEEL values using best available toxicity data, as opposed to only about 100 ERPGs developed to date. To roughly account for the difference in exposure time assumption between TEELs (derived for comparison with 15 minute time weighted averages) and the modeled 1-hour maximum ambient concentration, the TEEL values can be divided by 4. However, this adjustment of the TEEL values increases the uncertainty in the assessment, and may result in overestimates of the impact distances. A discussion of the change in the maximum impact distance after adjusting the TEEL values down by a factor of 4 has been added to the text (e.g., the impact distance could increase from 4 to 13 km), along with a statement that the larger

00098-277: The alternative to not renew the federal grant of right-of-way receives extensive analysis in the EIS. For example, please see Section 4.6, No-Action Alternative Analysis. A description of the termination activities that would be required and a general description of what would be involved in implementing a decision to not renew the federal grant are used for the purpose of the analysis in this EIS. However, if the grant is not renewed a more specific and detailed proposal for dismantling, removal, and restoration of the TAPS would have to be submitted by the TAPS owners and that would become the subject of a separate EIS. Until that happens, it remains necessary to acknowledge speculation regarding the details of the termination activities.

00098-278: The list of Acronyms and Abbreviations at page xxix correctly defines AO as the Authorized Officer of the Joint Pipeline Office. The role of the JPO is to oversee the operations of TAPS (See Section 4.1.1, "JPO Oversight.") As stated in Section 1.1, "Purpose and Need," the application to renew the federal grant of right-of-way was received by the Bureau of Land Management, U.S. Department of the Interior. The same section goes on to point out that the Secretary of the Interior or agency head is authorized to renew the federal grant.

00098-279: Indeed, the primary purpose of this stipulation is to provide adequate protection for pipeline structural members. A change has been made in Section 4.1.6 to exactly incorporate language from Stipulation 3.6.1.1.1.4.

00098-280: The referenced EPA document was reviewed, and no mention of impact scaling factors was found in that document. However, it is unlikely that ambient guidelines for PSD would be applicable to the short-term air concentrations estimated in association with an oil or hazardous substance spill. The pollutant concentrations would dissipate quickly (within 24 hours or less, depending on the spill duration) after a spill, so potential adverse health impacts from short-term inhalation exposures are being assessed.

The different comparison levels are appropriate because the fire durations (roughly corresponding to potential exposure durations) are different. Potential for health impacts from inhalation of contaminants from the 30-minute pipeline fire can be assessed by comparison with the short-term ERPG or TEEL values. However, it is more appropriate to compare the 8-hr average exposures from a Valdez Marine Terminal fire with the 8 to 24 hr NAAQS or with TLVs, which are much lower guideline values. In Table 4.4-33, (Near-Field Impacts), the concentrations associated with a VMT fire are now compared with NAAQS and TLVs. Information has been also been added to the text and the table footnotes to explain the rationale for use of differing comparison levels.

00098-281: The Denali Fault branches into two strands near MP 589: the Hines Creek Strand (the Hines Creek Fault) and McKinley Strand (or the Denali Fault) (see TAPS Owners 2001a, Map Appendix, and Noklebery et al. 1994). Some literature sources use McGinnis Glacier Faults (e.g., Plafker et al. 1994b—see references in Section 3.30 of the FEIS), which include a group of faults and are better developed west of this area, for the Hines Creek Fault also. In the text of Section 3.2.7, the "Hines Creek Fault" has been changed to "McGinnis Glacier Faults."

00098-282: The text in Section 3.3.2.1 has been revised.

00098-283: The sentence describes the effect of permafrost degradation, including potential soil liquefaction at MP 735-736. As presented in the sentence, no claim is made that the soil liquefaction potential at MP 735-736 would fail the pipeline if a major earthquake occurs. Instead, the sentence claims that frozen soil has thawed at MP 735-736. The site has soil liquefaction potential in case a major earthquake occurs. The sentence is used to show an example that liquefiable soils formed from thawed soil can exist along the TAPS. No text change has been made to Section 3.3.2.2. (See also the response for Comment 00098-384.)

00098-284: Changes have been made to the text in Section 3.4.2 as appropriate.

00098-285: The EIS does not ignore the fact that liquefaction can occur only under very specific geologic, seismic, and hydrologic conditions. These conditions are water saturated, non-cohesive sandy soils under an active seismic environment. Unfortunately, non-cohesive, sandy sediments of fluvial, glaciofluvial, and lacustrine (lake) origins are very common along the TAPS. Groundwater tables are generally shallow, either because the TAPS was located along major valleys or the presence of permafrost creates an impermeable barrier for the groundwater to drain. Earthquakes are active, especially near the southern part of Alaska. With these conditions present, liquefaction potential cannot be ignored.

Permafrost can occur in any kind of geologic material in cold regions, and it is not commonly limited to geologic material with high silt or clay content.

The text in Section 4.3.2 has been revised as appropriate.

00098-286: Information on the Atigun spill of June 1979 has been added to the text. In this spill, oil entered the Atigun River and produced an oil slick that traveled 25 miles downstream. The Behr-Andes et al. reference (Tundra Spill Cleanup and Remediation Tactics: A Study of Historical Spills and Literature 2002) has been added to the reference list in Section 3.30 of the FEIS.

00098-287: Information on the Atigun spill of June 1979 has been added to the text. In this spill, oil entered the Atigun River and produced an oil slick that traveled 25 miles downstream. The Behr-Andes et al. reference (Tundra Spill Cleanup and Remediation Tactics: A Study of Historical Spills and Literature 2002) has been added to the reference list in Section 3.30 of the FEIS.

00098-288: Updated information on the MP 400 spill has been added to the text. See the text box in Section 4.1.1.8.

00098-289: The text in Section 3.11.1.1 has been revised as suggested.

00098-290: Data provided by APSC shows the maximum design capacity of each of the stack injection systems is 10,000 gallons per day. These data were correctly applied in Appendix C (see Table C-9). The appropriate text change in Section 3.16.4 has been made.

00098-291: Soil stockpiling at the VMT is authorized for periods up to four years. The expanded discussion of contaminated soil management appearing in Section C.6.12 is correct. Appropriate changes have been made to the text in Section 3.16.4.

00098-292: The complex environmental interrelationships associated with the proposed renewal of the TAPS right-of-way coupled with the diversity of reader interests and needs require the assembly of large amounts of information in the EIS. Cross-referencing is a useful tool to avoid duplication while enabling readers with diverse needs to access sections of interest to them.

00098-293: The FEIS in Section 2 contains a full description of the array of renewal rights.

00098-294: The paragraph in Section 3.21.2 on moose in the North Slope has been rewritten to clarify the apparently contradictory sentences in the DEIS. This includes the addition of information from Carol (2002).

00098-295: The Environmental Atlas contains valuable information on important fish and wildlife resources. The Environmental Atlas will be added to the list of manuals that reflect APSC guidance regarding environmental considerations. We note, however, that information in the Atlas is somewhat dated (although not necessarily incorrect), having been last published in 1993.

00098-296: The VMT has been added to the list of places having a septic system.

00098-297: Text regarding Dalton Highway upgrades has been added to the Section 4.3.15.2 text box as well as to Section 4.7.7.1.

00098-298: Table 4.3-23 has been deleted from the FEIS.

00098-299: The text has been revised throughout the EIS to reflect “APSC-operated landfills.”

00098-300: The text in Section 4.6.2.13.2 has been corrected.

00098-301: The analyses of landslides and liquefaction along the TAPS are provided in the design document (APSC 1974, Appendix Volume 3, Geotechnical Aspects, Section 4). Reference to this document has been added to Section 4.9 of the FEIS.

In sloped areas, one of several protective measures to reduce the liquefaction threat was to bury the pipeline below a liquefiable soil layer. It is generally accepted that frozen soil is nonliquefiable. However, a previously frozen soil may thaw because of the affects of the continuous warming trend in Alaska. Under certain geologic and hydrologic conditions, the previously nonliquefiable soil may become liquefied. Without a detailed study, it is difficult to quantify the extent of the impact of the regional warming on the liquefaction potential. Therefore, a qualitative conclusion stating that "With a continuation of the current warming trend in Alaska, the risk of earthquake-triggered liquefaction and landslides is expected to increase" was made.

00098-302: The sentence describes the general effect of the pipeline on the thermal regime of the permafrost and is correct.

The comment does not provide enough data to justify the conclusion that the warming trend in Alaska may have a minor effect on the permafrost. Physically, a warming over a period of several decades would have a deeper penetrating effect on the thermal regime of the permafrost than the seasonal change of temperature on the ground surface.

The original assumption used to calculate the thermal impact due to the warming oil was over a 30-year time span. Along the TAPS, the effect of the thermal disturbance continues, as demonstrated in several locations. It is uncertain whether the effects of thermal disturbance have approached equilibrium.

The permafrost at MP735-736 has thawed over the last 25 years. Historical temperatures measured at Gulkana showed mean annual air temperature increased in the last 50 years. Temperature profiles measured at a depth of 50 ft showed a warming trend over a period from 1992 to 1995 (see Michael Baker Jr., Inc., 2001, MP735 Aboveground Pipeline Assessment) at two locations near MP 735, one near the VSM and one away from the VSM. If the warming resulted from the surface disturbance at the VSM, such warming would be less or none at the other location. On the contrary, larger warming was observed at the location away from the VSM than the one near the VSM in which thermosyphons were installed (see Michael Baker Jr., Inc., 2001, MP735 Aboveground Pipeline Assessment). Therefore, the warming in the subsurface at MP735 reflects the combined effects of surface disturbance in a swampy area subjected to a recent climatic warming trend in Alaska. If the warming in Alaska continues over the next 30 years, the discontinuous permafrost near the southern end of the pipeline (Copper River Lowland and Chugach Mountains) would continue to degrade.

00098-303: The sentence in Section 3.3.2.2 has been modified,

00098-304: Section 3.3.2.2 has been modified as appropriate. Frost heave and subsidence have historically occurred throughout Alaska. It is technically correct that "if a subsidence problem is not corrected, it can cause integrity problems ...." Otherwise, no routine monitoring and maintenance for subsidence are needed for the VSMs. (Also see the response for Comment 00098-384.)

00098-305: The referenced text in Section 4.5.1 has been reworded to clarify the assumption being made.

00098-306: The analyses of landslides and liquefaction along the TAPS right-of-way are provided in the design document (APSC 1974, Appendix Volume 3, Geotechnical Aspects, Section 4). Reference to this document has been added to the FEIS (see Section 4.9).

With the warming trends in the last several decades in Alaska, permafrost, in general, is expected to degrade. During the design of the TAPS, APSC conducted detailed analyses of all pipeline slopes and assessed the slope stability and liquefaction potential of all slopes. In the analyses, the effect of the warming trends along the TAPS was not explicitly considered. The thawing due to heat transfer from the pipeline and the ground surface disturbance was calculated with the assumption of a 30-year time span. With the operation life of the pipeline extended for another 30 years, additional thawing of the permafrost, especially in the southern portion of the TAPS, is likely to occur. On slopes with fine-grained geologic material, soil water generated from the thawing may not be able to drain fast enough such that the pore pressure could increase. Also, new critical surfaces for sliding might emerge. These two factors can potentially cause a previously stable slope to become unstable, especially on slopes that have been assigned a design safety factor of 1 or close to 1 under dynamic loading conditions. Further, if a major earthquake occurs near these areas at a time when the water content of the soil is high, the probability of a landslide can't be ignored. When a landslide occurs, its failure plane or planes can be below the elevations of the pipeline. Under such conditions, the pipe can be carried down the slope with the slide. Therefore, it is concluded that the risk for landslides along the TAPS can increase in the next 30 years.

For the liquefaction issue, liquefaction can occur both on slopes (greater than 2 degrees) and in flat areas (less than 2 degrees) in saturated, loose non-cohesive soils (sands) under intensive shaking (a major earthquake). On sloping ground, liquefied soils tend to move down slope. In flat areas, liquefied soils result in a loss of strength. Structures that use the soils for support may fail.

In the design of the pipeline (APSC 1974, Appendix Volume 3, Geotechnical Aspects, Section 4), the areas of potential liquefied soils for the flat ground areas are estimated to be local and limited. The impact on buried pipe was considered to be less severe than that of equivalent seismic fault movement that was established to be safe. However, it is uncertain if the local and limited estimation is still valid without a detailed analysis. The original assumption of thawing due to the heat transfer from the pipeline and the ground surface disturbance was for a 30-year time period. Regional warming in Alaska was not explicitly included in the evaluation. The original design met criteria for a liquefiable body of small or large size. Sand bodies of various sizes are common because of the abundance of fluvial and lake deposits along the TAPS (e.g., the Copper River Basin and various basins within U-shaped glacial valleys). If liquefaction occurs in a sand body of intermediate dimensions, local overstressing can develop and threaten the integrity of the pipeline (APSC 2001e, Design Basis Update DB-180, 3rd ed., Rev. 3; reference in Section 4.9 of the FEIS).

In sloped areas, one of several protective measures to reduce the liquefaction threat was to bury the pipeline below a liquefiable soil layer. It is generally accepted that frozen soil is non-liquefiable. However, a previously frozen soil may thaw because of the affects of the continuous warming trend in Alaska. Under certain geologic and hydrologic conditions, the previously non-liquefiable soil may become liquefied. Without a detailed study, it is difficult to quantify the extent of the impact of the regional warming on the liquefaction potential. Therefore, a qualitative conclusion stating that "With a continuation of the current warming trend in Alaska, the risk of earthquake-triggered liquefaction and landslides is expected to increase" was made.

00098-307: The Fairbanks area has been extensively disturbed by historical gold mining activities. The permafrost in Fairbanks area is likely to have been degraded because of the mining activities.

Figure 3.12-1 shows the trend in annual mean air temperature at Fairbanks for the 27-year period since the start of TAPS operation. However, a longer-period record shows that mean annual air temperatures for the 20-year period after 1976 increased by 1.5°C over the prior 20-year period (Osterkamp and Romanovsky 1999—see reference in Section 3.30 of the FEIS).

00098-308: Available empirical evidence supports the statement that the warm-oil pipeline has, indeed, induced thaw in permafrost soils in some locations, despite the mitigative design features of TAPS. Section 4.1.2.2 of the EIS refers to the pipeline's "potential" to induce thawing to demonstrate how this anticipated impact was addressed in the original stipulations, specifically Stipulation 3.3.1. The comment points out, further, that subsidence of the ground surface as well as other impacts have resulted from thawing of permafrost. In context, Section 4.1.2.2 adequately recognizes the potential impacts of permafrost thawing. The actual occurrence of such changes and the subsequent consequences are more properly discussed in the "Environmental Consequences" portion of the EIS. See Sections 4.3.2, 4.5.2.2, 4.6.2.2, and 4.7.6.1 for more detail.

00098-309: In context, the discussion makes a clear distinction between "thaw stable" and "thaw unstable" soils. The comment also notes that consequences of thawing of permafrost have been recognized in Alaska for some time. Indeed, Stipulation 3.3.1 in the Federal Grant clearly anticipates that. The comment further contends that, after 25 years of TAPS operations, the effects of thermal disturbance are approaching equilibrium. This would undoubtedly be the case if the system were not dynamic over that time period. Changes in oil throughput and temperature (e.g., introducing oil with higher temperature recovered from newly developed fields), potential increases of air temperature due to the warming trend in Alaska, as well as local ground disturbances (e.g., excavations) for the purposes of maintenance or upgrade of pipeline segments may all serve to redefine the thermal equilibrium points at some locations along the pipeline. Such activities can also be anticipated throughout future pipeline operations. However, these changes are likely to be less dramatic at lower throughputs of initially cooler crude oil that can be anticipated. The majority of thermal equilibration has already occurred. Consequently, the thermal equilibrium point at any location along the pipeline can be expected to change in response to any such activities or other changes to ambient conditions and the entire system will re-equilibrate.

00098-310: The size of the thaw bulb depends on the balance of the heat flux in the subsurface. The heat flux primarily comes from the pipeline and solar insolation. As these two variables changed with time, it is not justified to claim "the TAPS buried pipeline is approaching equilibrium after 25 years of operation."

The throughput of the pipeline is likely to decline with time in the next 30 years, and the climate in Alaska is becoming warmer. Therefore, the balance of the heat flux in the subsurface continues to change. Without a detailed analysis and a reasonable estimate of the warming, it is not difficult to generally conclude that "On the northern end of the pipeline (north of Atigun Pass) the permafrost is cold (mean annual temperature less than -5 degree C) and it is conceivable that some refreezing of the thaw bulb can take place, even with a warming climate. In the warm permafrost region (south of Atigun Pass) little or no refreezing is expected due to the continued thermal input from the pipeline ..."

A detailed study of soil conditions is in progress and results may shed more light on this issue.

No change is made to the text.

00098-311: We believe that APSC and continued stability of the TAPS will benefit from comparing the conditions of the thaw bulb with the original estimate when the TAPS was built.

00098-312: At the time the analysis was performed, APSC's safety performance data were not available for the second half of 2001 or any of 2002. Therefore, safety data for the most recent full year for which reporting data were available (2000) was used to calculate the total APSC and contractor recordable injuries incidence rates. However, these data, i.e., 64 recordable and 20 lost workday injuries, are generally comparable to the more recent safety data cited in the comment.

00098-313: The referenced text on in Section 3.1.2.1.6 has been corrected.

00098-314: The sentence in Section 3.17.1 has been changed to reflect the information in the comment.

00098-315: OSHA injury incidence rates are normally expressed as cases or days per 100 full-time employees using 200,000 employee hours as the equivalent. The Bureau of Labor Statistics reports deaths per 100,000 workers. The National Safety Council has also adopted these units in their database of unintentional injuries. To avoid confusion, it is necessary to maintain consistency with these data sources by applying standard units in the EIS.

00098-316: In attempting to estimate the inhalation risk posed by operation of the VMT, the assessment was hampered by the fact that ambient air concentrations of benzene at the fenceline and in the city of Valdez were only available from the year 1991. As stated in the comment, since that time vapor emissions from the VMT have been decreased by a factor of more than 10 by the installation of a vapor control system in 1998. However, this was not critically important in estimating the risk in Valdez, because the VMT was shown to contribute only about 10% of the ambient VOC level in Valdez (e.g., 10% of the 5 mg/m3 benzene concentration). Therefore, only 10% of the ambient level was scaled with projected future throughputs. Although the VOC level may have decreased in the city of Valdez due to decreased emissions from other sources, the 1991 level was used for the risk estimation due to a lack of more recent data.

For the fenceline risk level, the option of decreasing the estimated concentration by a factor of 10 to account for the emission controls was considered. For benzene, this would have decreased the input concentration from about 22 to 2.2 mg/m3. However, this correction would have decreased the benzene concentration to a level lower than the ambient level in most U.S. cities, which was also considered to be non-realistic. Therefore, the measured 1991 VOC levels were used in the risk calculations, with the caveat that the risk was likely overestimated because of emission reductions. It is recommended that current ambient VOC levels at the fenceline and in the city of Valdez be measured to allow for an accurate, updated evaluation of risk levels. However, even assuming the 1991 VOC levels, the cancer risks estimated at the fenceline and in Valdez were within the level generally not requiring mitigating actions under U.S. EPA policy (EPA 1990).

00098-317: Table 3.14-1 has been revised.

00098-318: Table 4.3-23 has been deleted from the FEIS.

00098-319: Changes have been made to the map.

00098-320: A footnote has been added to the text in Section 1.3 as suggested.

00098-321: Thank you for your comment; however, the suggested text change to Section 1.4 has not been made

00098-322: Figure 1-4 in the DEIS is presented as an example of a pump station and not as a typical station. To speak to the features of all the pump stations, a figure of the most complex site was needed. No changes have been made to the figure or text (the figure is Map 1-4 in the FEIS).

00098-323: The paragraph should follow the first paragraph under the Technical heading in Section 2.2.2. The text has been changed accordingly in the FEIS.

00098-324: Thank you for your comment.

00098-325: The referenced text in Section 3.1.2.2.2 has been changed to clarify the description of the North Slope. With the exception of the suggested change in the last paragraph of the comment, the referenced text has also been changed to clarify the description of the infrastructure at the North Slope. The changes suggested in the last paragraph of the comment were not made because the opinions expressed by the commentor may not be supported by facts.

00098-326: Figure 3.1-6 of the DEIS has been revised and is Map 3.1-3 in the FEIS.

The community of Umiat is included as a positional guide for the small location map, and remains in the FEIS.

The areas proposed-for-leasing areas change with time and as such can be considered to be speculative, and were not included in Figure 3.1-6 in the DEIS (Map 3.1-3 in the FEIS).

00098-327: Text has been added to Section 4.7.8.3 which describes the referenced impact of the no-action alternative in the cumulative analysis in more detail.

00098-328: A natural gas pipeline could operate independently of the TAPS if economic conditions favored natural gas production on the North Slope. While natural gas is a by-product of petroleum production, petroleum production was not viewed as necessary for exploitation of the North Slope's natural gas reserves. For this reason, a natural gas pipeline was included in the list of other actions for the no-action (no TAPS renewal) alternative.

00098-329: At the level of analysis included in the cumulative analysis, which was based on overall level of North Slope activities, such detail is not required to understand the cumulative impact conclusions.

00098-330: A reference to the BP Alaska website describing North Slope operations ("Arctic Energy") has been added to Section 4.7.4.1.2 of the EIS. This site provides much more informative than it is possible to provide in this section of the EIS.

00098-331: It is unclear at the present time when a natural gas pipeline would be built, and the probability of such an occurrence changes daily with economic and political conditions. No changes were made to the text in Section 4.7.4.4.2.

00098-332: The EIS has been revised to include flooded gravel mine sites as a source of water in Section 4.7.6.4.

00098-333: A natural gas pipeline could operate independently of the TAPS if economic conditions favored natural gas production on the North Slope. While natural gas is a by-product of petroleum production, petroleum production was not viewed as necessary for exploitation of the North Slope's natural gas reserves. For this reason, a natural gas pipeline was included in the list of other actions for the no-action (no TAPS renewal) alternative.

00098-334: For this EIS, water occurring beneath the ground surface is considered to be groundwater. Its depth or quality is not considered in the definition. By historical practice, groundwater in this region is further classified as *suprapermafrost* and *subpermafrost* according to its location relative to permafrost.

00098-335: The observation expressed by this comment is consistent with Section 4.8.3 of the EIS, which states that under the no-action alternative, the ability to use North Slope oil resources would cease until an alternative means of transportation was developed.

00098-336: Injection wells used for disposal of oil production-related water or production wastes are categorized as Class II wells. The text has been changed in Section 4.7.6.10.1 to reflect this fact.

00098-337: The analysis of the cumulative impacts of TAPS includes an assessment of the impacts of a natural gas pipeline project on the economy of the state. As a gas pipeline would be a separate action under NEPA, the analysis assumed that a gas pipeline project would be independent of TAPS, with the inclusion of any impacts of a shorter TAPS renewal period on a natural gas pipeline being inappropriate.

Additional text has been added to Section 4.7.8.3 describing in more detail the impact of the No Action alternative.

00098-338: Section 2.2 of the FEIS has been revised.

00098-339: Sections 4.3.23.2 and 4.5.2.23.2 have been revised to state that the Alaska Division of Governmental Coordination determined on 9/10/02 that the TAPS Owner's application for renewal of the Federal Grant of Right-of-Way for TAPS was consistent with applicable Coastal Management Programs. In addition, the BLM notified the TAPS Owners on 10/17/02 that the consistency requirement had been satisfied by the state determination.

00098-340: Section 3.19 identifies that designated essential fish habitat (EFH) is present along the TAPS ROW and in Prince William Sound. Sections 4.3.16.1 and 4.4.4.10 have been modified to identify that EFH consultation with NMFS was completed and to summarize the conclusions of the EFH assessment. Section 4.3.18 has been modified to include a description of the Biological Evaluation and Section 7 consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service

00098-341: Sections 4.3.16 and 4.4.4.10 have been modified to identify that essential fish habitat (EFH) consultation with NMFS has been completed, and to summarize the conclusions of the EFH assessment with respect to oil spills.

00098-342: Table 4.3-23 has been deleted from the FEIS.

00098-343: Thank you for your comment.

00098-344: Sections 4.3.23.2 and 4.5.2.23.2 have been revised to state that the Alaska Division of Governmental Coordination determined on 9/10/02 that the TAPS Owner's application for renewal of the Federal Grant of Right-of-Way for TAPS was consistent with applicable Coastal Management Programs. In addition, the BLM notified the TAPS Owners on 10/17/02 that the consistency requirement had been satisfied by the state determination.

00098-345: Table 4.7-12 has been modified to be consistent with Section 4.7.7.4. The range of impacts to threatened and endangered species is now presented as "none to negligible."

00098-346: Section 3.19 identifies that designated EFH habitat is present along the TAPS ROW and in Prince William Sound. Sections 4.3.16.1 (proposed action) and 4.4.4.10 (oil spill analysis) have been modified to identify that EFH consultation with NMFS has been completed and to summarize the conclusions of the EFH assessment. See also Section 5.6, Agency Consultation.

00098-347: Section 4.3.16.1 has been modified to identify that EFH consultation with NMFS was completed and to summarize the conclusions of the EFH assessment. Section 4.3.18 has been modified to include a description of the Biological Evaluation and Section 7 consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

00098-348: Sections 4.3.23.2 and 4.5.2.23.2 have been revised to state that the Alaska Division of Governmental Coordination determined on 9/10/02 that the TAPS Owner's application for renewal of the Federal Grant of Right-of-Way for TAPS was consistent with applicable Coastal Management Programs. In addition, the BLM notified the TAPS Owners on 10/17/02 that the consistency requirement had been satisfied by the state determination.

00098-349: Appendix E has been revised, in part to provide a more sound basis for the evaluation of impacts under the ANILCA and in part to discuss the basis for these impacts more thoroughly. That stated, the conclusions have not been changed. The major concern is impacts of the TAPS (stated as small) in conjunction with current and continuing North Slope oil exploration and development, which meet criteria for past, present, and reasonably foreseeable activities. Oil-related activities have been identified as areas of concern in three separate studies, referenced in the revised version of Appendix E, particularly in their displacement of subsistence users from key areas of their subsistence use areas.

00098-350: The text in Section 3.23.5 of the EIS has been changed to reflect information provided in the comment.

00098-351: Section 3.24.1 has been substantially revised, and now includes a more detailed discussion of the competing definitions of subsistence in Alaska.

00098-352: Thank you for the considerable effort in assembling recommended text insertions. Section 3.24 of the EIS (subsistence affected environment), as well as sections that deal with impacts to subsistence (e.g., 4.3.20), have been revised to identify sources of impacts more clearly. In the case of sport hunting and fishing, the issue is more one of competing harvests, both by recreational users and (in the case of fishing) from commercial harvests. The FEIS presents data on harvest competition through approximating sport vs. subsistence harvests for game, and through presenting additional data on subsistence fisheries, both analyses tied explicitly to the communities of interest in the EIS (see Section 3.24.4).

00098-353: Section 3.24.4 (new section number in the FEIS) has been revised to present additional data, including an approximation of the distinction between subsistence and sport harvests. That stated, the statement referred to in the comment is indeed accurate regarding the formal distinction between sport and subsistence harvests.

00098-354: Section 3.24.3 has been revised, including minor changes to the text accompanying the referenced figure. The FEIS does not include recommended changes to log or semi-log plots, in part because many of the readers likely would not understand such a transformation. Similarly, it does not include the results of statistical analyses where so little variability can be explained by simple linear models. The point in the comment concerning variability over time is consistent with the position in the FEIS.

00098-355: Section 4.3.20 has been revised to present potential impacts in greater detail, and to place them in clearer perspective with regard to their likely magnitude vis a vis other potential sources of impact. Access road use by sport hunters and anglers has been noted by both rural Alaskans in the vicinity of the pipeline and by non-local hunters in the area, and although not the result of published research the preparers of the EIS felt it was worth noting in the interest of identifying all possible TAPS-related sources of impact.

00098-356: Section 3.24.1, in particular, has been expanded to discuss both the dual state-federal definition of subsistence and the management of subsistence in greater detail.

00098-357: Sections 3.24.2 (community subsistence patterns) and 4.3.20 have been revised to consider additional sources of pressure on subsistence.

00098-358: Constraints on subsistence activities in national parks are another cumulative impact—one of the past, present, and reasonably foreseeable actions, which together represent such impacts. Section 4.7.8.1 has been expanded to discuss such impacts, and concern with their aggregated effect, more clearly.

00098-359: Section 4.3.20.1 has been expanded to discuss results of the Wolfe and Walker paper, referenced in the comment, in greater detail.

00098-360: The alternative to not renew the federal grant of right-of-way receives extensive analysis in the EIS. For example, please see Section 4.6, No-Action Alternative Analysis. A description of the termination activities that would be required and a general description of what would be involved in implementing a decision to not renew the federal grant are used for the purpose of the analysis in this EIS. However, if the grant is not renewed a more specific and detailed proposal for dismantling, removal, and restoration of the TAPS would have to be submitted by the TAPS owners and that would become the subject of a separate EIS. Until that happens, it remains necessary to acknowledge speculation regarding the details of the termination activities.

00098-361: Thank you for your comment.

00098-362: Table 3.1-1 has been corrected to include 284 secondary roads.

00098-363: In the absence of eligibility determinations, for the purposes of an effect determination, the sites are considered eligible until documentation proves otherwise. Therefore, such a lack of National Register determinations does not preclude an analysis of possible effects on cultural resources.

00098-364: The alternative to not renew the federal grant of right-of-way receives extensive analysis in the EIS. For example, please see Section 4.6, No-Action Alternative Analysis. A description of the termination activities that would be required and a general description of what would be involved in implementing a decision to not renew the federal grant are used for the purpose of the analysis in this EIS. However, if the grant is not renewed a more specific and detailed proposal for dismantling, removal, and restoration of the TAPS would have to be submitted by the TAPS owners and that would become the subject of a separate EIS. Until that happens, it remains necessary to acknowledge speculation regarding the details of the termination activities.

00098-365: The impacts of petroleum transport beyond Prince William Sound have been added to Section 4.7, “Cumulative Impacts.”

00098-366: Appropriate changes have been made to the glossary.

00098-367: Sections 3.24, 4.3.20, 4.4.4.14, and 4.7.8.1, in particular, have been revised and include much of the information (and several of the references) included in the comment.

00098-368: The sentence in Section 4.7 has been removed from the text.

00098-369: Both the logic and conclusions underlying the ANILCA analysis were revisited following the receipt of this and other comments on the DEIS. The conclusion remains the same for the cumulative-proposed action case. The cumulative actions of particular concern are North Slope oil development in the Nuiqsut subsistence use area. Concerns for subsistence impacts, due largely to restrictions from large portions of the subsistence use area, have already been expressed by previously conducted studies on the North Slope, as noted in the revised version of Appendix E.

Appendix E has also been expanded to include evaluations required under ANILCA § 810(a)(3)(A), (B) and (C), which was purposefully left out of the DEIS pending comments on the conclusions reached in the first stage of the impact analysis.

00098-370: The referenced text in Section 3.1.2 has been corrected.

00098-371: The referenced text in Section 3.1.2.1.1 has been changed to clarify the discussion and to correct an apparent discrepancy in the document.

00098-372: The referenced text in Section 3.1.2.1.2 has been corrected.

00098-373: The referenced text in Section 3.1.2.1.2 has been changed to clarify the discussion and to correct an apparent discrepancy in the document.

00098-374: The referenced table identifies both active and inactive wells. The information in the table is the most recent and complete information available on water wells along the TAPS ROW.

00098-375: As pointed out by the commentor and confirmed by checking the website http://www.gcr1.com/5010web/main.cfm?Site=FVM, the referenced text in Section 3.1.2.1.7 has been corrected.

00098-376: The reference has been checked and the original text in Section 3.2.9 is correct.

00098-377: The referenced sentence in Section 3.3 has been modified.

00098-378: The referenced sentence in Section 3.3 has been deleted.

00098-379: Spill volume estimates for scenarios involving small, moderate, and large crude oil leaks were made in a manner consistent with the most recent pipeline risk assessment conducted for the TAPS (Capstone, 2001). Both the DEIS and the Capstone assessment accounted for both dynamic and static pipeline pressure effects in estimating pipeline spill or leak volumes. We believe that these estimates are made only slightly conservative by assuming no depressurization. The dynamic effects on the spill "drain-down" rate occur prior to leak detection when pumps are running and isolation valves are open. The static effects are primarily gravitationally driven and occur after the OCC detects the leak, shuts down the pumps, and closes the valves. During the dynamic spill phase, the dynamic line pressure controls the leak rate through the hole in the pipeline. A constant dynamic pressure is assumed until the pumps are stopped. "Blowdown" caused by depressurization effects from the hole in the pipe are assumed to not appreciably affect the estimated dynamic spill volume. For small to moderate leaks, the pumps will increase output and offset much of the pressure drop cause by the leak and therefore should have minor effect on the dynamic spill rate. Since the leak detection time is shorter for large leaks, the effects on the estimated spill volumes should be small.

00098-380: The text in Section 4.4.1.1.1 has been modified with insertion of leaks caused by washout events.

00098-381: The text has been modified with the added phrase "seismically induced."

00098-382: Methodology for spills analysis and for other technical disciplines covered in the EIS are given in Appendix A of the EIS. The spill scenarios and impacts associated with the spills along the pipeline and at the VMT are given in Section 4.4 of the EIS. Similarly spill scenarios and impacts associated with transportation of oil from the VMT and with production and exploration activities on the North Slope are provided in Section 4.7 of the EIS. Cross-references and tables/figures are provided as appropriate in the above sections in the EIS.

00098-383: The reviewers comment is noted.

00098-384: The analyses of landslides and liquefaction along the TAPS right-of-way are provided in the design document (APSC 1974, Appendix Volume 3, Geotechnical Aspects, Section 4). Reference to this document has been added to the FEIS (see Section 4.9).

With the warming trends in the last several decades in Alaska, permafrost, in general, is expected to degrade. During the design of the TAPS, APSC conducted detailed analyses of all pipeline slopes and assessed the slope stability and liquefaction potential of all slopes. In the analyses, the effect of the warming trends along the TAPS was not explicitly considered. The thawing due to heat transfer from the pipeline and the ground surface disturbance was calculated with the assumption of a 30-year time span. With the operation life of the pipeline extended for another 30 years, additional thawing of the permafrost, especially in the southern portion of the TAPS, is likely to occur. On slopes with fine-grained geologic material, soil water generated from the thawing may not be able to drain fast enough such that the pore pressure could increase. Also, new critical surfaces for sliding might emerge. These two factors can potentially cause a previously stable slope to become unstable, especially on slopes that have been assigned a design safety factor of 1 or close to 1 under dynamic loading conditions. Further, if a major earthquake occurs near these areas at a time when the water content of the soil is high, the probability of a landslide can't be ignored. When a landslide occurs, its failure plane or planes can be below the elevations of the pipeline. Under such conditions, the pipe can be carried down the slope with the slide. Therefore, it is concluded that the risk for landslides along the TAPS can increase in the next 30 years.

For the liquefaction issue, liquefaction can occur both on slopes (greater than 2 degrees) and in flat areas (less than 2 degrees) in saturated, loose non-cohesive soils (sands) under intensive shaking (a major earthquake). On sloping ground, liquefied soils tend to move down slope. In flat areas, liquefied soils result in a loss of strength. Structures that use the soils for support may fail.

In the design of the pipeline (APSC 1974, Appendix Volume 3, Geotechnical Aspects, Section 4), the areas of potential liquefied soils for the flat ground areas are estimated to be local and limited. The impact on buried pipe was considered to be less severe than that of equivalent seismic fault movement that was established to be safe. However, it is uncertain if the local and limited estimation is still valid without a detailed analysis. The original assumption of thawing due to the heat transfer from the pipeline and the ground surface disturbance was for a 30-year time period. Regional warming in Alaska was not explicitly included in the evaluation. The original design met criteria for a liquefiable body of small or large size. Sand bodies of various sizes are common because of the abundance of fluvial and lake deposits along the TAPS (e.g., the Copper River Basin and various basins within U-shaped glacial valleys). If liquefaction occurs in a sand body of intermediate dimensions, local overstressing can develop and threaten the integrity of the pipeline (APSC 2001e, Design Basis Update DB-180, 3rd ed., Rev. 3; reference in Section 4.9 of the FEIS).

In sloped areas, one of several protective measures to reduce the liquefaction threat was to bury the pipeline below a liquefiable soil layer. It is generally accepted that frozen soil is non-liquefiable. However, a previously frozen soil may thaw because of the affects of the continuous warming trend in Alaska. Under certain geologic and hydrologic conditions, the previously non-liquefiable soil may become liquefied. Without a detailed study, it is difficult to quantify the extent of the impact of the regional warming on the liquefaction potential. Therefore, a qualitative conclusion stating that "With a continuation of the current warming trend in Alaska, the risk of earthquake-triggered liquefaction and landslides is expected to increase" was made.

00098-385: We believe that the comment meant to compare Sections 4.2.2.4.2 (not 4.2.2.4.3) and 4.2.2.6.2. The two sections are indeed similar, however, they serve separate purposes. Section 4.2.2.4.2 establishes that mainline valves, as well as other pipeline components require periodic maintenance and repair, but also introduces the fact that improvements (i.e. vaulting) are also underway. Section 4.2.2.6.2 is a subsection of 4.2.2.6, "Planned Upgrades and Repairs," one such upgrade being valve vaulting. We believe that it is important to distinguish activities done for maintenance or repair reasons from those done for purpose of upgrade. We also understand that there is a practical relationship between the two activities with respect to buried valves in that maintenance is also performed on the valves that have been excavated for the purpose of vaulting. The text in Section 4.2.4.2 indicates that relationship and refers the reader to Section 4.2.2.6.2 for additional discussions regarding vaulting. Although the two sections deserve to remain, we have decided to change the title of Section 4.2.2.4.2 to "Valve Maintenance and Repair" to clarify the distinction between the two sections.

00098-386: Table 4.3-23 has been deleted from the FEIS.

00098-387: The summary of the EIS has been revised to more thoroughly discuss cumulative impacts. For Chapter 4.7, the summary of the chapter remains at the end after the reader has been provided with the analysis for each technical topic.

00098-388: A natural gas pipeline could operate independently of the TAPS if economic conditions favored natural gas production on the North Slope. While natural gas is a by-product of petroleum production, petroleum production was not viewed as necessary for exploitation of the North Slope's natural gas reserves. For this reason, a natural gas pipeline was included in the list of other actions for the no-action (no TAPS renewal) alternative. However, the words "likely to occur" has been changed to "potentially occurring."

00098-389: This comment refers to the Summary of cumulative human health impacts to workers and the general public provided in Section 4.7.6.11.3. The word "health" has been added to the introductory paragraph to clarify that the summary is for health impacts from all sources, not just air. This is consistent with the summarization of cumulative impacts for all resources evaluated in Section 4.7.6.

00098-390: The summary of the EIS has been revised to more consistently portray the text of the EIS.

00098-391: There is no need to add the suggested sentence to Section 4.2.2.6.4. The footnote to the preceding paragraph already established the fact that many of the material sites are in joint use with the Alaska DOT.

00098-392: Data regarding the presence of PCB-containing equipment in TAPS infrastructure was obtained from APSC's own infrastructure inventories, the most recent of which that we are aware of was completed in 1995. No other more recent studies or data were made available by APSC. Refer to Section C.6.1 and the references therein. This comment does not introduced any new citable data that refutes the circumstances reported on in the cited APSC studies. There is, therefore, no basis for change to the text.

00098-393: Thank you for the clarification. JPO confirms that APSC initiated the valve vaulting program. However, JPO also indicates that it now has directed APSC to complete the program and extend it to all the valves. All of the suggested changes have been made to Section 4.2.2.6.2, except for the change that indicates six valves will remain unvaulted.

00098-394: The parenthetical note regarding the Yukon River Highway bridge has been removed from Section 4.2.4.1.

00098-395: Modifications have been made to the text in Section 4.2.4.2 and a new footnote has been added to capture the fact that state highway culverts would remain unchanged.

00098-396: The referenced footnote in Section 4.2.4.2 has been removed.

00098-397: The data provided in the DEIS regarding the presence of PCBs in TAPS infrastructure was derived from APSC's 1995 inventory verification effort. To our knowledge, no more recent inventory exists. This comment does not provide new data that would indicate a change in the circumstances reported on in the 1995 study. In the absence of citable new data, no change to the text is warranted.

00098-398: This comment provided four examples of buried pipeline segments that were abandoned in place as long ago as 1975 with no apparent evidence of frost heave. Unfortunately, the comment did not also provide the geologic and hydrologic details of these abandonments or specify the evidence (beyond obvious visual evidence) by which it can be concluded that these segments have not moved from their original positions since abandonment or identified the manner by which the abandoned segments were monitored for movement. These experiences would have relevance only if the abandoned pipeline segments were in thaw-unstable soil (i.e. silty soils rather than gravel). The bedding and backfill (gravelly material) used in original installation would help the pipe withstand freeze pressures and resist heaving forces. For segments abandoned in thaw-stable soils or in permafrost below the active layer and under no large groundwater hydrostatic pressures, frost-heaving or jacking is not likely to occur. The text clearly indicates that frost-heaving is only a concern for segments abandoned in thaw-unstable permafrost. As we understand, it was concern for the development of a thaw bulb that resulted in the original design calling for refrigeration of the soil surrounding the buried pipeline in thaw-unstable regions. Although an abandoned pipeline segment no longer represents a heat source (i.e. the crude oil), freeze-thaw cycles will nevertheless continue through natural process in thaw-unstable regions and an empty and unanchored pipeline segment may exhibit sufficient buoyancy during thaw cycles to make movement possible. No change has been made to the text.

00098-399: The text in Section 4.6.2.2 has been modified.

00098-400: Good engineering practice would still provide for fuel contingencies in the event electric power is interrupted. In fact, data provided by APSC indicates as much (see Table 4.2-1). Consequently, storage of turbine fuel will be completely eliminated only at those pump stations that are completely removed, but will continue to occur (probably at reduced volumes) at the stations where the pumps are converted to electric motor-driven units. Appropriate changes have been made to the text in Section 4.2.5.3.

00098-401: Earthquake-triggered liquefaction and landslides are very difficult to predict and accurately locate. The locations of areas susceptible to liquefaction and landslides may change with subsurface geotechnical conditions. Because the existing program of surveillance, monitoring, and maintenance would not be able to predict an earthquake, it is unlikely that mitigation prior to any damage can be effectively made at a reasonable cost. No change is made to the text in Section 4.3.2.

00098-402: An appropriate change has been made to the text in Section 4.2.2.5.4.

00098-403: Although the potential for VSM movement due to high water flows is acknowledged, the suggested change has been made to the text in Section 4.2.2.5.3.

00098-404: The magnesium anode will have disintegrated to a large degree to magnesium oxide and that the remnants of the anode need not be retrieved. However, some excavation is still required to locate the bonding wire that connected the anode to the pipeline so that it can be attached to the new anode, which, for maximum performance, would need to be installed at or near the elevation of the bottom of the adjacent pipeline. Nevertheless, a change has been made to the text to accommodate the comment. Regarding cathodic protection systems utilizing deep well anodes or ground beds, maintenance of such systems over time will be less intrusive. However, the possibility still exists that such systems will still need periodic replacement. As noted, the TAPS owners estimated that approximately six to eight such replacements are expected over the period 2004 through 2034. Beside information provided in the comment itself, no additional data have been presented to overturn that original estimation. No additional changes to the text are warranted.

00098-405: The text box in Section 4.1.2.2.5 has been revised.

00098-406: Figure 04.01-04 has been corrected.

00098-407: APSC initiated the project, and JPO has since directed that all valves will receive a vault. The text has been modified accordingly in Sections 4.2.2.4.2 and 4.2.2.6.2.

00098-408: Figures 4.1-1 and 4.1-2 have been corrected.

00098-409: In Section 3.3, the referenced phrase has been deleted.

00098-410: The text of Section 4.3.14 has not been changed. Facilities associated with TAPS do include airports, access roads, and material sites. The text does not say that all such facilities are owned by APSC.

00098-411: The statements in the EIS reflect the only documented status of the septic systems (Mikkelsen 1997—see Section 3.30 for the reference). The commentor has not provided independent data or a citable reference that would support a change to the text. However, additional language has been included in the text to reflect the potential impact on septic systems from proposed pump station upgrades.

00098-412: The text has been changed accordingly.

00098-413: The text of the footnote has been modified accordingly.

00098-414: The joint uses of OMS sites are described in Section 3.5 (Sand, Gravel, and Quarry Resources) and are considered to be background information on the affected environment. They are not presented in the Environmental Consequences section. No change is made in the text.

00098-415: Modifications have been made to Section 4.3.3, as appropriate.

A current soils geohazard study is in progress. This study will result in identification of areas most likely subject to slope instability.

00098-416: The text in Section 4.3.2 has been revised as suggested.

00098-417: The text in Section 4.3.2 has been changed in response to this comment.

00098-418: The reference to the thermokarst lakes has been deleted from Section 4.3.2.

00098-419: The size of the thaw bulb depends on the balance of the heat flux in the subsurface. The heat flux primarily comes from the pipeline and solar insolation. As these two variables changed with time, it is not justified to claim "the TAPS buried pipeline is approaching equilibrium after 25 years of operation."

The throughput of the pipeline is likely to decline with time in the next 30 years, and the climate in Alaska is becoming warmer. Therefore, the balance of the heat flux in the subsurface continues to change. Without a detailed analysis and a reasonable estimate of the warming, it is not difficult to generally conclude that "On the northern end of the pipeline (north of Atigun Pass) the permafrost is cold (mean annual temperature less than -5 degree C) and it is conceivable that some refreezing of the thaw bulb can take place, even with a warming climate. In the warm permafrost region (south of Atigun Pass) little or no refreezing is expected due to the continued thermal input from the pipeline ..."

A detailed study of soil conditions is in progress and results may shed more light on this issue.

The statement "and ground settlement could resume" has been deleted.

00098-420: The size of the thaw bulb depends on the balance of the heat flux in the subsurface. The heat flux primarily comes from the pipeline and solar insolation. As these two variables changed with time, it is not justified to claim "the TAPS buried pipeline is approaching equilibrium after 25 years of operation."

The throughput of the pipeline is likely to decline with time in the next 30 years, and the climate in Alaska is becoming warmer. Therefore, the balance of the heat flux in the subsurface continues to change. Without a detailed analysis and a reasonable estimate of the warming, it is not difficult to generally conclude that "On the northern end of the pipeline (north of Atigun Pass) the permafrost is cold (mean annual temperature less than -5 degree C) and it is conceivable that some refreezing of the thaw bulb can take place, even with a warming climate. In the warm permafrost region (south of Atigun Pass) little or no refreezing is expected due to the continued thermal input from the pipeline ..."

A detailed study of soil conditions is in progress and results may shed more light on this issue.

The design criteria "to last as much as two winters without oil prior to start-up and not be frost-jacked" is more related to the seasonal frost action over a period of two years. The evaluation here is related to a long-term effect of a declining flow rate of warm oil in the pipeline and the aggradation of permafrost proceeding from below the ground surface.

No change has been made in the text.

00098-421: The text has been revised to indicate that generation of chips from traffic will be reduced after the Dalton Highway is chip-sealed or paved. In the long term, the no-action alternative will result in a reduction of traffic on the Dalton Highway.

00098-422: It is possible that under the No Action alternative, at some point in the future, oil would no longer be transported through the Prince William Sound, and as a result, most of the emergency response measures currently in place would be phased out. When that happens, the risk (which is defined as the product of the probability of a spill multiplied by the consequence if the spill occurred) could increase because of (1) the reductions in oil spill prevention and response equipment; (2) reductions in personnel; and (3) continued or increased presence of commercial or pleasure boating in the Sound.

00098-423: A natural gas pipeline could operate independently of the TAPS if economic conditions favored natural gas production on the North Slope. While natural gas is a by-product of petroleum production, petroleum production was not viewed as necessary for exploitation of the North Slope's natural gas reserves. For this reason, a natural gas pipeline was included in the list of other actions for the no-action (no TAPS renewal) alternative.

00098-424: The text of Section 4.3.15.2 has been modified.

00098-425: Sections 3.18 and 4.3.15.1 discuss the differences that exist, and that are expected to continue to exist, between the vegetation communities within the ROW and those in adjacent undisturbed areas.

In part, these differences result from the variations in organic mat thickness, moisture levels, nutrients, organic material, and gravel content between the ROW and adjacent areas. This information is based on studies by McKendrick (2002) that are cited in Sections 3.18 and 4.3.15.1. A referral to these sections has been added to 4.3.15.2.

00098-426: Sections 3.18 and 4.3.15.1 discuss the differences that exist, and that are expected to continue to exist, between the vegetation communities within the ROW and those in adjacent undisturbed areas.

In part, these differences result from the variations in organic mat thickness, moisture levels, nutrients, organic material, and gravel content between the ROW and adjacent areas. This information is based on studies by McKendrick (2002) that are cited ins Sections 3.18 and 4.3.15.1. A referral to these sections has been added to 4.3.15.2.

00098-427: Text in Section 4.3.15.1 has been modified to eliminate use of the word “extensive.”

00098-428: Although the occurrence thermokarst may be a natural phenomenon, when it occurs as a result of pipeline operations and causes changes in biotic communities, it must be identified as an impact of the proposed action.

00098-429: Discussion of the flood at MP 752 has been deleted from Section 4.3.15.1.

00098-430: The last sentence has been deleted as suggested.

00098-431: The referenced text in Section 4.5.1.2.1 has been changed to clarify the meaning of the word “precautions,” but the clause at the end of the sentence has not been deleted. Depending on the severity of the deterioration, the pipeline could be shut down either temporarily to correct the situation or permanently if it is not economical to remedy it.

00098-432: Minimum regret is a term used when any possible outcome is undesirable. What is wanted is the least undesirable outcome. This is a standard term established by the NOAA model, GNOME (NOAA 2000—see Section 4.9 of the FEIS for the reference), used for this study.

00098-433: The typographical error in Section 4.7.6-6 has been corrected.

00098-434: The EIS has been revised in Section 4.7.6.4 to indicate that taliks are unfrozen layers of ground located on top, underneath, or within masses of permafrost, often beneath deep pools below the surface of lakes and rivers. Removal of water from these taliks would reduce the volume of overlying free water in which fish live, thereby affecting oxygen demand and overwintering fish.

00098-435: The historical spill data have been considered in the development of spill scenarios for the EIS. In particular, the historical spill information was used in the derivation of spill frequencies and sizes for scenarios in the anticipated and likely frequency categories (see Section 4.4.1). As is the general practice for NEPA analysis, the EIS discusses impacts associated with a spectrum of spill events ranging from the high frequency/low consequence events to low frequency/high consequence occurrences. Since the risk associated with an accidental occurrence is the product of the probability of the event and the consequence that would result if the event took place, consideration of the entire spectrum of potential occurrences in the EIS ensures that the public is provided with a complete picture of potential impacts.

00098-436: Section 4.7.6.1 has been revised in response to the comment.

00098-437: For the analysis of cumulative impacts (Section 4.7), a natural gas pipeline was assumed to operate independently of the TAPS.

00098-438: The sentence in Section 4.7.4.4.2 has been revised as suggested, including an addition indicating that Delta is southeast of Fairbanks.

00098-439: Section 4.3.18 has been modified for consistency with the Biological Evaluation prepared to support Section 7 consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service. The revised section also identifies the status of the consultation process.

00098-440: Section 3.24.2 has been revised and includes a number of graphic representations of subsistence practices, by region and individual village (with change over time, if possible). Section 4.3.20 has been expanded and includes a synopsis of the Wolfe and Walker article referenced in the comment.

00098-441: As noted at several points in the Subsistence sections of the DEIS, there are limited data available to accurately quantify the impacts of oil development on subsistence in Alaska. Accurate and complete subsistence data will always be of use when considering public policy in Alaska in the future. Therefore, it is suggested that the DEIS recommend that a government agency undertake a comprehensive study of subsistence in Alaska to provide a baseline data for future public policy documents and reference. Both the State and Federal government have programs in place, and adequate financial resources in their existing budgets, to study subsistence in Alaska.

The State government has the responsibility and means to conduct such a beneficial study. The Alaska Department of Fish and Game (ADF&G) already has a Subsistence Division which, in conjunction with the Sport Fish and Wildlife Conservation Divisions of the ADF&G, collects and analyzes subsistence data. The Governor's Operating Budget (available online from the State of Alaska) notes that the Subsistence Division is tasked with coping with the dual management (Federal and State) of subsistence resources in Alaska, implementing appropriate subsistence laws and regulations, and gathering subsistence data. The Operating Budged lists, among other things, these key goals for activities and data collection for the subsistence unit in FY 2003:

- The Subsistence Division is expected to gather fisheries harvest data from 95% of the communities in the interior of Alaska and 25% of the communities in the Alaskan Arctic.

- The Subsistence Division is expected to gather wildlife harvest data from 45% of the communities in the interior of Alaska and 25% of the communities in the Alaskan Arctic.

To fund these and other projects, the Subsistence Division unit will receive approximately 4.4 million dollars in fiscal year 2003 with 51% of the money coming from Federal funds. As noted above, other ADF&G divisions (with their own budgets) will contribute information to augment data collected by the Subsistence Division. In fiscal year 2003, the entire ADF&G is expected to spend 135.7 million dollars.

The Federal Subsistence Management Program should also be involved in the study. The Federal Subsistence Management Program in Alaska is led by the U.S. Fish and Wildlife Service (USFWS) and four other federal agencies: the National Park Service, the Bureau of Land Management, the Bureau of Indian Affairs and the USDA Forest Service. The lead agency, the U.S. Fish and Wildlife Service, maintains a headquarters in Anchorage and employs approximately 500 people statewide with hundreds of others who work part-time or volunteer during field seasons. The USFWS has conducted many fishery and wildlife harvest studies in Alaska and spent 9 million dollars for Sport Fish restoration programs and 5.5 million dollars for wildlife restoration during fiscal year 2001. It is clear that adequate resources have been budgeted for these agencies to collect and analyze subsistence harvest data. It is not appropriate to stipulate requirements for TAPS in relation to this work.

Following comments in the DEIS, the sections in the document dealing with subsistence were carefully reviewed (Sections 3.24, 4.3.20, 4.4.4.14, 4.5.2.20, 4.6.2.20, and 4.7.8.1, and Appendices D and E). In the process of preparing the FEIS, data on subsistence and related topics (e.g., biological resources, sociocultural systems) were reexamined. Although it is almost always desirable to have better data, for the purposes of the analyses of subsistence impacts conducted in this FEIS available data are adequate to arrive at and support the conclusions presented.

Section 3.24.1 has been expanded to discuss dual management of subsistence in greater detail, including responsibilities of the state and federal agencies involved.

00098-442: Thank you for your comment.

00098-443: Thank you for your comment.

00098-444: A paragraph describing the biological evaluation and Endangered Species Act consultation with the U.S. Fish and Wildlife Service and National Marine Fisheries Service has been added to Section 4.3.18 of the EIS.

Section 3.19 identifies that designated essential fish habitat is present along the TAPS ROW and in Prince William Sound. Sections 4.3.16.1 (proposed action) and 4.4.4.10 (oil spill analysis) have been modified to identify that EFH consultation with the National Marine Fisheries Service has been completed and to summarize the conclusions of the EFH assessment.

Text has been added to Section 5.6 regarding consultation that has taken place with the State Historic Preservation Officer and the 21 federally recognized Tribes to satisfy the requirements of the National Environmental Policy Act and the National Historic Preservation Act.

00098-445: Thank you for your comment.

00098-446: Thank you for your comment.

00098-447: Thank you for your comment.

00098-448: The reader is referred to Section 2.5 of the FEIS, “Alternatives and Issues Considered but Eliminated from Detailed Analysis.”