

APPENDIX S

Fugitive Dust Control Plan

- Page Intentionally Left Blank -



ALASKA STAND ALONE PIPELINE/*ASAP* PROJECT

Fugitive Dust Control Plan

ASAP-22-PLN-HSE-DOC-00003
October 12, 2017

ASAP	FUGITIVE DUST CONTROL PLAN	AGDC-22-PLN-HSE-DOC-00003 Oct 12, 2017 REVISION: 0
		PAGE 2

NOTICE

THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND SHALL NOT BE DUPLICATED, DISTRIBUTED, DISCLOSED, SHARED OR USED FOR ANY PURPOSE EXCEPT AS MAY BE AUTHORIZED BY AGDC IN WRITING.

©2017 Alaska Gasline Development Corporation. All rights reserved.

Alaska Gasline Development Corporation
3201 C Street, Suite 200
Anchorage, AK 99503
www.agdc.us
907-330-6300

NOTICE – THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND SHALL NOT BE DUPLICATED, DISTRIBUTED, DISCLOSED, SHARED OR USED FOR ANY PURPOSE EXCEPT AS MAY BE AUTHORIZED BY AGDC IN WRITING.

THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED. THIS COPY VALID ONLY AT THE TIME OF PRINTING

ASAP	FUGITIVE DUST CONTROL PLAN	AGDC-22-PLN-HSE-DOC-00003 Oct 12, 2017 REVISION: 0
		PAGE 3

REVISION HISTORY

REV. NO.	APPROVED DATE	REVISION DESCRIPTION	REVIEW & APPROVALS		
			PROJECT CONTROL LEAD	QUALITY ASSURANCE LEAD	FUNCTIONAL OR PROJECT MANAGER
0	10/12/2017	Issued for Use			

NOTICE – THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND SHALL NOT BE DUPLICATED, DISTRIBUTED, DISCLOSED, SHARED OR USED FOR ANY PURPOSE EXCEPT AS MAY BE AUTHORIZED BY AGDC IN WRITING.

THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED. THIS COPY VALID ONLY AT THE TIME OF PRINTING

ASAP	FUGITIVE DUST CONTROL PLAN	AGDC-22-PLN-HSE-DOC-00003 Oct 12, 2017 REVISION: 0
		PAGE 4

ACRONYMS AND ABBREVIATIONS

ADEC	Alaska Department of Environmental Conservation
AGDC	Alaska Gasline Development Corporation
ASAP	Alaska Stand Alone Pipeline
GCF	Gas Conditioning Facility
ROW	Right-of-Way
PM	particulate matter

NOTICE – THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND SHALL NOT BE DUPLICATED, DISTRIBUTED, DISCLOSED, SHARED OR USED FOR ANY PURPOSE EXCEPT AS MAY BE AUTHORIZED BY AGDC IN WRITING.

THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED. THIS COPY VALID ONLY AT THE TIME OF PRINTING

ASAP	FUGITIVE DUST CONTROL PLAN	AGDC-22-PLN-HSE-DOC-00003 Oct 12, 2017 REVISION: 0
		PAGE 5

TABLE OF CONTENTS

Notice	ii
Revision History	iii
Acronyms and Abbreviations	iv
1. Plan Status	6
2. Introduction	6
2.1 Regulatory Requirements	6
3. Fugitive Dust Sources	7
4. Fugitive Dust Abatement	7
5. Fugitive Dust Control Measures	8
5.1 Responsibilities	9
5.1.1 Inspection, Monitoring, and Recordkeeping	9
6. REFERENCES	10

NOTICE – THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND SHALL NOT BE DUPLICATED, DISTRIBUTED, DISCLOSED, SHARED OR USED FOR ANY PURPOSE EXCEPT AS MAY BE AUTHORIZED BY AGDC IN WRITING.

THIS DOCUMENT IS UNCONTROLLED WHEN PRINTED. THIS COPY VALID ONLY AT THE TIME OF PRINTING

ASAP	FUGITIVE DUST CONTROL PLAN	AGDC-22-PLN-HSE-DOC-00003 OCT 12, 2017 REVISION: 0
		PAGE 6

1. PLAN STATUS

Site-specific and activity-specific plans will not be able to be developed until construction contractors are appointed. This *Fugitive Dust Control Plan* (Plan) would be used by each construction contractor to develop a more specific plan for their respective construction spread(s).

2. INTRODUCTION

This *Fugitive Dust Control Plan* (Plan) provides procedures to minimize fugitive dust during construction. The dust control methods described herein would be applied as frequently as necessary in response to landowner or other affected stakeholder requests, safety concerns, and/or permit requirements.

2.1 REGULATORY REQUIREMENTS

Fugitive dust consists of small airborne particles called particulate matter (PM). The U.S. Environmental Protection Agency and the Alaska Department of Environmental Conservation (ADEC) define fugitive dust as "particulate matter that is generated or emitted from open air operations (emissions that do not pass through a stack or a vent)." The most common forms of PM are known as PM₁₀ (particulate matter with a diameter of 10 microns or less) and PM_{2.5} (particulate matter with a diameter of 2.5 microns or less).

Alaska's current regulations that address fugitive dust include:

- 18 AAC 50.045(d): A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project, shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.
- 18 AAC 50.110: No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

Currently, ADEC applies its regulatory authority under 18 AAC 50.045(d) to request fugitive dust sources apply "reasonable precautions" to reduce emissions.

ASAP	FUGITIVE DUST CONTROL PLAN	AGDC-22-PLN-HSE-DOC-00003 Oct 12, 2017 REVISION: 0
		PAGE 7

3. FUGITIVE DUST SOURCES

Fugitive dust could be generated directly from pipeline installation and aboveground facility construction. The following construction activities have been identified as having the potential for generating fugitive dust:

- Movement of vehicles and motorized equipment on paved and unpaved roads.
- Clearing, including vegetation removal.
- Bulldozing, scraping, and grading.
- Excavation and filling.
- Blasting.
- Material movement, including loading and unloading.
- Hauling of loose materials.
- Use of parking, staging, and storage areas.

It is the responsibility of the Project Construction Contractor(s) (Contractor) and the Project entity's inspectors to ensure all sources of dust generation are identified.

4. FUGITIVE DUST ABATEMENT

The Project area would be monitored for fugitive dust generation during construction. Abatement of fugitive dust would be required on the construction areas associated with the Gas Conditioning Facility (GCF) and the pipeline right-of-way (ROW) or on access roads when a visible plume of dust with an estimated opacity exceeding 20 percent (objects partially obscured) extends more than 300 feet from the source. Project contractors would be responsible for controlling dust using measures such as applying dust suppressants (e.g., water), and in some cases, reducing vehicle speeds. A listing of fugitive dust control measures that may be used during Project construction is included in Section 5.0 of this Plan.

ASAP	FUGITIVE DUST CONTROL PLAN	AGDC-22-PLN-HSE-DOC-00003 Oct 12, 2017 REVISION: 0
		PAGE 8

5. FUGITIVE DUST CONTROL MEASURES

The generation of fugitive dust during construction would be reduced through the application of appropriate control measures. Abatement measures would be used as needed and as appropriate to a particular situation. Based on typical practices for similar construction projects and best management practices in Alaska (Alaska Department of Transportation and Public Facilities Dust Control Field Guides for Gravel Driving Surfaces), the following specific control measures would be used as needed to control fugitive dust emissions from the Project:

- Use only Project approved roads for access. Paved access roads would be kept free of mud and soil that may track onto the road surface from the construction ROW through the use of gravel access pads and/or equivalent. If soil is transported onto a public road surface or other paved area, including parking lots, by construction equipment and vehicles, it would be removed as soon as practical from the road by shoveling or sweeping, and would be transported back to a designated sediment control disposal area within the construction ROW. Road washing, if necessary, would only be allowed after the soil has been scraped from the paved road surface.
- Where needed, Reduce vehicle speeds on unpaved roads; speed limits may be set on unpaved roads.
- Clean up track-out and/or carry-out areas at paved road access points.
- Ensure that all haul truck cargo compartments are maintained so as to minimize spills and loss of materials. Cover haul loads of open body trucks where applicable.
- Apply water to affected unpaved roads, unpaved haul/access roads, and staging areas when in use and when appropriate. Water for fugitive dust control purposes would be obtained as necessary through permits or purchase contracts with owners of valid existing water rights. These approvals would be acquired prior to construction.
- When appropriate and as needed, apply approved dust suppressant such as a water / magnesium chloride mixture or calcium chloride. The use of magnesium chloride would be restricted in sensitive vegetative areas, where only water or alternative dust suppressants would be considered.
- Apply water to active construction areas as needed. Areas should be pre-watered and soils maintained in a stabilized condition where support equipment and vehicles would operate. Water-disturbed soils would form a crust, reducing the potential for dust creation.
- Control water spray so that over-spraying and pooling would be avoided to the extent possible.
- Where roads are paved, no dust mitigation may be necessary.

In addition, dust control measures would also be implemented, as appropriate, in response to any landowner concerns that may arise as well as the construction schedule (i.e., winter versus summer construction spreads). Fugitive dust is not anticipated to be an issue during winter construction seasons.

ASAP	FUGITIVE DUST CONTROL PLAN	AGDC-22-PLN-HSE-DOC-00003 Oct 12, 2017 REVISION: 0
		PAGE 9

5.1 RESPONSIBILITIES

The Project and its designated Contractors would be responsible for all dust control in the Project area during the construction phase of the Project (seven days a week, including weekends and holidays). Each Contractor supervisor would have a copy of their respective Plan available on site at all times. Problem areas, or potential problem areas observed via site monitoring during construction, must be controlled as soon as possible after being brought to the attention of the Contractor.

Prior to construction, affected landowners would be provided with the local construction office phone number to facilitate communication with the Project entity's construction management and environmental inspection teams. A landowner complaint resolution process would be used to quickly and effectively remedy any dust-related issues that may arise.

5.1.1 Inspection, Monitoring, and Recordkeeping

This Plan will form part of the Contractor tender package to ensure the proposals are appropriately resourced and to assist with contract evaluations. The Contractors chosen for the Project would implement the dust control measures specified in this Plan, while the Project inspectors would be primarily responsible for monitoring and enforcing the implementation of needed dust control measures, as well as ensuring that dust control is effective and proper documentation is maintained. All appropriate construction site personnel would be trained on the measures outlined in this Plan.

Field inspection for dust control would occur daily throughout the construction and reclamation phases of the Project. The Project contractors and inspectors would be responsible for recording the following information on a daily basis for the purpose of fugitive dust monitoring and control:

- Weather conditions (temperature, wind speed, and direction).
- Number of water trucks in use.
- Instances where fugitive dust was of such a concentration that abatement measures were implemented.
- Condition of Project soils (crusted, damp, or unstable).
- Presence of tracked-out fugitive dust and when it was cleaned.
- Overall status of dust control compliance.

The inspector's daily report would include this information and would be made available for review by interested local agency representatives upon request.

ASAP	FUGITIVE DUST CONTROL PLAN	AGDC-22-PLN-HSE-DOC-00003 Oct 12, 2017 REVISION: 0
		PAGE 10

6. REFERENCES

ADEC 2011, Fugitive Dust Facts: Frequently Asked Questions,
<https://dec.alaska.gov/air/ap/docs/Fugitive%20Dust%20FAQs%203-31-11.pdf>

ADEC Division of Air Quality, 2015, State of Alaska Air Regulations,
<http://dec.alaska.gov/air/ap/regulati.htm>

ADOT Research, Development, and Technology Transfer, 2015, Dust Control Field
Guide for Gravel Driving Surfaces