


ALASKA LNG PROJECT	DOCKET No. CP17-__-000 RESOURCE REPORT No. 9 APPENDIX I – CONSTRUCTION EMISSIONS CONTROL PLAN	Doc No: USAI-PE-SRREG-00- 000009-000 DATE: APRIL 14, 2017 REVISION: 0
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APPENDIX I CONSTRUCTION EMISSIONS CONTROL PLAN



CONSTRUCTION EMISSIONS CONTROL PLAN

USAI-P2-SPZZZ-00-000008-000

	APPENDIX I – CONSTRUCTION EMISSIONS CONTROL PLAN	USAI-P2-SPZZZ-00-000008-000 APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 2 OF 9

Plan Status

The intent of the Alaska LNG Project (Project) *Construction Emissions Control Plan* (Plan) is to identify the anticipated sources of emissions from construction equipment (e.g., excavators, generators), activities (e.g., open burning), and camps, as well as provide general mitigation measures (e.g., fuel type, engineering design). The following Plan outlines the general sections that will be required. Site/activity-specific plans won't be able to be developed until construction contractors are appointed.



	APPENDIX I – CONSTRUCTION EMISSIONS CONTROL PLAN	USAI-P2-SPZZZ-00-000008-000 APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 3 OF 9

TABLE OF CONTENTS

1.0	INTRODUCTION.....	4
1.1	REGULATORY REQUIREMENTS	4
2.0	CONSTRUCTION EMISSIONS CONTROL MEASURES.....	5
2.1	LIQUEFACTION FACILITY CONSTRUCTION.....	5
2.2	LIQUEFACTION FACILITY CONSTRUCTION CAMP	5
2.3	MARINE TERMINAL CONSTRUCTION.....	5
2.4	MAINLINE CONSTRUCTION – CIVIL WORK	5
2.5	MAINLINE CONSTRUCTION – PIPELINE CONSTRUCTION.....	5
2.6	MAINLINE COMPRESSOR/HEATER STATIONS.....	5
2.7	MAINLINE OFFSHORE PIPELINE	5
2.8	POINT THOMSON GAS TRANSMISSION LINE (PTTL)	6
2.9	MAINLINE PIPELINE CONSTRUCTION CAMPS	6
2.10	MAINLINE PIPELINE LOGISTICS	6
2.11	GAS TREATMENT PLANT (GTP) FACILITY CONSTRUCTION.....	6
2.12	GTP CONSTRUCTION CAMP.....	6
2.13	PRUDHOE BAY UNIT (PBU) TRANSMISSION PIPELINE CONSTRUCTION	6
2.14	GTP QUARRY	6
2.15	GTP LOGISTICS	7
2.16	CONTROL MEASURES.....	7
3.0	SUPERVISION AND COORDINATION	8
3.1	RESPONSIBILITIES	8
3.1.1	Company.....	8
3.1.2	Contractor	8
4.0	REFERENCES.....	9


	APPENDIX I – CONSTRUCTION EMISSIONS CONTROL PLAN	USAI-P2-SPZZZ-00-000008-000 APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 4 OF 9

1.0 INTRODUCTION

The purpose of this Plan is to manage construction emissions sources to ensure compliance with applicable regulations and to minimize impacts on environmental receptors. Of note, fugitive dust and open burning are addressed in additional, separate plans.

1.1 REGULATORY REQUIREMENTS

Regulatory requirements are provided in Section 9.2.4 of Resource Report No. 9.

	APPENDIX I – CONSTRUCTION EMISSIONS CONTROL PLAN	USAI-P2-SPZZZ-00-000008-000 APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 5 OF 9

2.0 CONSTRUCTION EMISSIONS CONTROL MEASURES

Sources of construction emissions and estimates of those emissions are provided in Resource Report No. 9, Appendix C. Based on work completed to date, construction emission sources include the following:

2.1 LIQUEFACTION FACILITY CONSTRUCTION

- On-road Vehicles: Including heavy heavy-duty trucks, work trucks (1-ton), pickup trucks (1/2-ton), and passenger vehicles.
- Non-road Equipment: Ranging from aerial lifts to welders.

2.2 LIQUEFACTION FACILITY CONSTRUCTION CAMP

- On-road Vehicles: Urban buses.
- Stationary Sources:
 - Electrical generators.
 - Waste incinerators.

2.3 MARINE TERMINAL CONSTRUCTION

- On-road Vehicles: Including heavy heavy-duty trucks, and pickup trucks (1/2-ton).
- Non-road Equipment: Ranging from air compressors to welders.
- Marine Equipment: Including derrick barge cranes and tugs.

2.4 MAINLINE CONSTRUCTION – CIVIL WORK

- On-road Vehicles: Including heavy-duty vehicles, light-duty trucks, and urban buses.
- Non-road Equipment: Ranging from air compressors to trenchers.

2.5 MAINLINE CONSTRUCTION – PIPELINE CONSTRUCTION


- On-road Vehicles: Including heavy-duty vehicles, light-duty trucks, and urban buses.
- Non-road Equipment: Ranging from air compressors to trenchers.

2.6 MAINLINE COMPRESSOR/HEATER STATIONS

- On-road Vehicles: Including heavy-duty vehicles and light-duty trucks.
- Non-road Equipment: Ranging from aerial lifts to trenchers.

2.7 MAINLINE OFFSHORE PIPELINE

- On-road Vehicles: Heavy-duty vehicles
- Non-road Equipment: Ranging from cranes to welders.
- Marine Equipment: Including tugs, supply boats, barges, dredges, and survey vessels.

	APPENDIX I – CONSTRUCTION EMISSIONS CONTROL PLAN	USAI-P2-SPZZZ-00-000008-000 APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 6 OF 9

2.8 POINT THOMSON GAS TRANSMISSION LINE (PTTL)

- On-road Vehicles: Including heavy-duty vehicles, light-duty trucks, and urban buses.
- Non-road Equipment: Ranging from air compressors to trenchers.

2.9 MAINLINE PIPELINE CONSTRUCTION CAMPS

- Stationary Sources:
 - Electrical generators.
 - Waste incinerators.

2.10 MAINLINE PIPELINE LOGISTICS

- On-road Vehicles: Including heavy heavy-duty trucks, pilot vehicles, and buses.
- Railroad Locomotives.
- Marine Vessels.
- Aircraft.

2.11 GAS TREATMENT PLANT (GTP) FACILITY CONSTRUCTION

- On-road Vehicles: Including heavy heavy-duty trucks, and pickup trucks.
- Non-road Equipment: Ranging from aerial lifts to welders.
- Stationary Sources:
 - Electrical generators.
 - Heaters.

2.12 GTP CONSTRUCTION CAMP


- On-road Vehicles: Including heavy heavy-duty trucks, and urban buses.
- Stationary Sources:
 - Electrical generators.

2.13 PRUDHOE BAY UNIT (PBU) TRANSMISSION PIPELINE CONSTRUCTION

- On-road Vehicles: Including heavy heavy-duty trucks and pickup trucks.
- Non-road Equipment: Ranging from cranes to welders.

2.14 GTP QUARRY

- On-road Vehicles: Pickup trucks
- Non-road Equipment: Ranging from drum compactors to wheel loaders.
- Stationary Sources:
 - Electrical generator.
 - Crusher.

	APPENDIX I – CONSTRUCTION EMISSIONS CONTROL PLAN	USAI-P2-SPZZZ-00-000008-000 APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 7 OF 9

2.15 GTP LOGISTICS


- On-road vehicles: Heavy heavy-duty trucks.
- Marine vessels:
 - Ships.
 - Barge tugs.
 - Harbor assist tug.

2.16 CONTROL MEASURES

The Project construction emission estimates assume implementation of the following controls on construction equipment and stationary sources:

- Gasoline limited to 10 parts per million (ppm) sulfur, and onshore diesel limited to 15 ppm sulfur.
- Electrical generators at construction camps are assumed to comply with the federal New Source Performance Standards for stationary compression ignition internal combustion engines (Code of Federal Regulations {C.F.R.} Title 40 – Protection of the Environment, Part 60 – Standards of Performance for New Stationary Sources, Subpart IIII, at 40 CFR Sec. 60.4200 et seq.). Therefore, construction camp electrical generators are assumed to be powered by Tier 4 diesel-fired engines.
- Non-road equipment emissions assume typical fleet characteristics for each equipment type and size range.

In addition, it is assumed that on-road vehicles would have typical Alaska fleet characteristics for each vehicle type and weight category. In addition, the crusher at the GTP Quarry is anticipated to be equipped with wet dust suppression controls.

	APPENDIX I – CONSTRUCTION EMISSIONS CONTROL PLAN	USAI-P2-SPZZZ-00-000008-000 APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 8 OF 9

3.0 SUPERVISION AND COORDINATION


3.1 RESPONSIBILITIES

3.1.1 Company

The Project entity would be responsible for developing construction emissions control measures ahead of construction. During construction, the Project entity’s Environmental Inspectors would oversee compliance with field emission control measures. These measures would be incorporated into the final version of this Plan issued for construction. In addition to implementation of required and proposed control measures, the Project entity likely would also be required to implement record keeping and periodic reporting to ensure ongoing compliance.

3.1.2 Contractor

The Construction Contractor shall be responsible for implementation of the protocols contained in this Plan.

	APPENDIX I – CONSTRUCTION EMISSIONS CONTROL PLAN	USAI-P2-SPZZZ-00-000008-000 APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 9 OF 9

4.0 REFERENCES

Alaska Department of Environmental Conservation, 2015, AAC 50 – Air Quality Control, As Amended through February 28, 2015

USEPA 2010, Regulatory Announcement – Designation of North American Emission Control Area to Reduce Emissions from Ships, Office of Transportation and Air Quality, EPA-420-F-10-015 <http://www.epa.gov/nonroad/marine/ci/420f10015.pdf>