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**APPENDIX G FIRE PREVENTION AND SUPPRESSION PLAN**






## **FIRE PREVENTION AND SUPPRESSION PLAN**

**USAI-P2-SPZZZ-00-000002-000**

	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 2 OF 11

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>3</b>
1.1	OBJECTIVES.....	3
1.2	RESPONSIBILITIES .....	3
1.2.1	The Project.....	3
1.2.2	The Construction Contractor.....	3
1.2.3	Initial Notification .....	4
1.3	RELATED PLANS AND DRAWINGS .....	4
<b>2.0</b>	<b>FIRE PREVENTION MEASURES .....</b>	<b>5</b>
2.1	TRAINING .....	5
2.2	SMOKING .....	5
2.3	PARKING, VEHICLE OPERATION, AND STORAGE AREAS .....	5
2.4	WORK CAMPS, FIELD OFFICES, AND OTHER PROJECT SITES .....	5
2.5	FIRE-FIGHTING EQUIPMENT AND PERSONNEL .....	5
2.5.1	Hand Tools.....	6
2.5.2	Motorized Vehicle Equipment .....	6
2.5.3	Fire Guard Vehicle and Equipment.....	6
2.6	CONSTRUCTION PROCEDURES.....	7
2.6.1	Blasting .....	7
2.6.2	Welding .....	7
2.6.3	Refueling and Fuel Storage Areas.....	7
2.7	MONITORING.....	7
<b>3.0</b>	<b>FIRE SUPPRESSION .....</b>	<b>8</b>
3.1	MONITORING.....	8
<b>4.0</b>	<b>EMERGENCY CONTACTS.....</b>	<b>9</b>
4.1	NOTIFICATIONS AND REPORTING .....	9
<b>5.0</b>	<b>ACRONYMS AND TERMS.....</b>	<b>10</b>
<b>6.0</b>	<b>REFERENCES.....</b>	<b>11</b>

	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 3 OF 11

## 1.0 INTRODUCTION

This *Fire Prevention and Suppression Plan* (Plan) identifies measures to be taken by the Project entity and its Construction Contractor(s) (Contractor) during construction to ensure that fire prevention and suppression techniques are carried out in accordance with federal, state, and local regulations, as well as landowner requirements pertaining to fire protection. This Plan is applicable for construction activities on land and does not apply to marine vessels or marine construction.

## 1.1 OBJECTIVES

The purpose of this Plan is to provide all Project entity staff and stakeholders with a description of the fire prevention and suppression measures that will be implemented during onshore construction. The risk of fire danger during construction is related to vehicles and other motorized equipment operating off roadways, pipeline welding, and the handling and use of explosive materials and flammable fluids. This Plan establishes standards and practices that would minimize the risk of fire danger and, in case of a fire, provide for immediate response.

## 1.2 RESPONSIBILITIES

### 1.2.1 The Project

The Project entity would be responsible for:


- Providing Safety or Safety, Security, Health, and Environment (SSH&E) and Construction Inspectors to monitor performance and ensure compliance with this Plan.
- Ensuring that all Project personnel are properly trained and that they understand the requirements for fire prevention and suppression as discussed in this Plan.

### 1.2.2 The Construction Contractor

The Contractor would be responsible for:

- Contacting all fire protection agencies and establishing communication before starting construction.
- Obtaining necessary permits, and operating in accordance with federal, state, and local regulations related to open burning and fire prevention.
- Informing the appropriate agencies of all planned fires and blasting operations.
- Providing all necessary first-response fire-fighting equipment on the job site and operating under the requirements of this Plan.
- Immediately reporting all wildfires to the appropriate jurisdictional fire authority or authorities.
- Ensuring Project activities do not interfere with other non-Project active response activities.
- Initiating timely action to suppress fires caused by the Project (without undue risk to personnel) until either the fire is extinguished, or until relieved by authorized fire-fighting agencies.
- Ensuring that all employees are aware of the fire prevention and suppression measures stated in this Plan.

The Contractor would be responsible for finalizing any site-specific fire prevention and suppression plans (if requested or required) in consultation with the appropriate state or local fire protection agencies, which are part of the Alaska Interagency Coordination Center (AICC), immediately prior to construction.

	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 4 OF 11

On each spread and other Project sites where there is risk of wildfire, the Contractor would designate a Fire Guard. The Fire Guard, who may also have other duties, and the Project's Safety or SSH&E Inspectors would make regular inspections for compliance with all federal, state, and local laws and regulations pertaining to fire, flammable fuels, and explosives used on this Project. The Fire Guard would inform the Construction Inspectors and the Contractor of the fire danger rating each day.


### 1.2.3 Initial Notification

The Contractor would contact the appropriate fire protection and law enforcement agencies to establish communication, obtain necessary permits, and/or fulfill other obligations as directed by the fire control authorities. In addition, the Contractor would contact the appropriate fire protection and law enforcement agencies to coordinate emergency access and provide a schedule of any road closures due to construction.

## 1.3 RELATED PLANS AND DRAWINGS

The following are documents that could include additional requirements related to fire prevention and suppression:

- *Transportation Management Plan.*
- *Construction Safety Manual.*
- *Blasting Plan.*

	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 5 OF 11

## 2.0 FIRE PREVENTION MEASURES

The following sections address methods and procedures that would be implemented prior to and during construction in order to minimize the risk of fire. These methods and procedures would be adjusted depending on the season and location of the work, and the probability of fires starting at that location or time. Key areas of concern relate to equipment, personnel, training, and construction procedures.

### 2.1 TRAINING

As part of the Project’s safety training program, all Project entity construction personnel would be instructed on the measures to take in the event of a fire. The Contractor would also inform each construction crew member of fire dangers, locations of extinguishers and equipment, and individual responsibilities for fire prevention and suppression during regular safety briefings.

Fire prevention would also be discussed during safety trainings and daily crew meetings.

### 2.2 SMOKING

Smoking would only be allowed on the graded right-of-way (ROW) or within enclosed cabs or vehicles. All burning tobacco and matches would be extinguished before being disposed of properly. Other smoking-related materials (i.e., cigarette butts) would also be disposed of properly.

### 2.3 PARKING, VEHICLE OPERATION, AND STORAGE AREAS

In no case would motorized equipment, including worker transportation vehicles, be driven or parked outside of the designated and approved work limits. Equipment parking areas, staging areas, designated vehicle-parking areas, and small stationary engine sites, where permitted, would be graded to bare soil or covered with gravel and cleared of all flammable material.


All idling vehicles would avoid parking over dry grass and brush to prevent contact with hot catalytic converters.

### 2.4 WORK CAMPS, FIELD OFFICES, AND OTHER PROJECT SITES

All construction-phase temporary installations, where there may be open combustion or fuel storage, would be equipped with the appropriate fire safety notifications and fire prevention/suppression supplies. Occupied structures would be built and operated in accordance with necessary permits and may be inspected by federal, state, or local agencies with jurisdiction over fire and life safety. Open fires are prohibited unless permitted along the ROW.

### 2.5 FIRE-FIGHTING EQUIPMENT AND PERSONNEL

On each crew, the Contractor would maintain a list, to be available to local fire protection agencies, of all equipment either specifically designed for, or capable of being adapted to, fighting fires. The Contractor would provide basic fire-fighting equipment, including fire extinguishers, backpack water can pumps, shovels, axes, and other tools in sufficient number so that employees could assist in the event of a fire-fighting operation. In addition, the Contractor would provide each crew the equipment described in the following section. These tools would typically be located at a minimum in each foreman’s field vehicle.

	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 6 OF 11

### 2.5.1 Hand Tools

Tool boxes labeled “For Fire-Fighting Only” would be located with each crew and equipped proportionately to the crew size and Project operation, with a minimum of:

- Two backpack water can pumps that are filled with water.
- Two Pulaskis (3 pounds, 32-inch handles or larger).
- Three adze hoes.
- Three long-handled, round-tip shovels (size 0 or larger).

All equipment would be kept in a serviceable condition and would be readily accessible.

### 2.5.2 Motorized Vehicle Equipment

All motorized vehicles and equipment operated by the Project entity and/or the Contractor on state lands and Bureau of Land Management (BLM)-managed land would be equipped with the following:

- One dry chemical fire extinguisher (10-pound minimum) having an Underwriter Laboratories ABC rating.
- One long-handled, round-tip shovel (size 0 or larger).
- One Pulaski (3 pounds or larger).

In addition to the equipment listed above, all fuel trucks would carry a large fire extinguisher charged with the appropriate chemical to control electrical and gas fires. The extinguisher would have the following:


- A minimum 35-pound capacity size.
- Class B, C, or combined class.
- A capacity rating of 40 or higher.

### 2.5.3 Fire Guard Vehicle and Equipment

On each spread and other Project sites where there is risk of wildfire, the Contractor would designate a Fire Guard(s) who would be physically able, vigilant, and suitably trained to detect fires and use available required fire-fighting equipment in order to initiate action for the efficient suppression of any fire that starts within the Project area. The Fire Guard would be identified by a hard-hat decal or other appropriate designation. The Fire Guard would be responsible for establishing and maintaining contact with fire protection agencies and would be equipped with a radio or cellular telephone to facilitate immediate contact with local fire protection agencies. The Fire Guard would assume supervision of fire suppression activities until officially relieved by authorized fire authorities. An alternate, or backup, Fire Guard would also be designated to take control if the primary Fire Guard is unable to perform his or her duties.

The Fire Guard and the Safety or SSH&E Inspectors would make regular inspections for compliance with all federal, state, and local laws and regulations pertaining to fire, flammable fuels, and explosives used on this Project. The Fire Guard would inform the Construction Inspectors and the Contractor of the fire danger rating each day.



	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 7 OF 11

In addition to the fire-fighting equipment described, the Contractor would provide the Fire Guard with the following:

- Water Tank.
- Pumper and Fire Hoses.
- Trained Support Personnel.

The Contractor would maintain a list of all personnel whose special skills could be used to assist in fire-fighting. At regular intervals, fire prevention and suppression techniques would be discussed and reinforced with workers during tailgate briefings. All employee commute vehicles would be parked and stored in cleared, open lots within the approved work limits. No off-ROW parking would be allowed.

## 2.6 CONSTRUCTION PROCEDURES

The Contractor would restrict operations in accordance with fire precaution levels on federal lands as directed by the AICC. Also, as directed by the State or local authority, the Contractor would notify the Division of Forestry of wildfires, or similar State or local contacts. The Contractor would also clear all flammable material for a minimum of 10 feet around an operation that could generate a spark, fire, or flame.

### 2.6.1 Blasting

During periods of high fire danger, the Contractor would, at a minimum, be required to monitor for signs of fire for at least one hour after blasting is finished. The fire monitor would be equipped with fire suppression tools, including a shovel, a fire extinguisher, a backpack water can pump that is filled with water, contact information, and means to contact authorities (e.g., cellular telephone, radio communication, etc.).

### 2.6.2 Welding


When the fire danger is greater than Moderate as assessed by the Environmental Inspector in coordination with the AICC, all welding and cutting would be done in areas cleared to bare soil for a minimum of 10 feet around the welding area. A minimum of one backpack water can pump that is filled with water, one 5-pound fire extinguisher, a double-bit axe or Pulaski (3 pounds or larger), and a long-handled shovel would be readily available at each welding site. In high fire-danger conditions, the Contractor would inspect the welding or cutting area for embers. All embers would be extinguished before the Contractor leaves the site.

### 2.6.3 Refueling and Fuel Storage Areas

Fuel storage areas would be cleared of all extraneous flammable materials. All discarded oil, oil filters, oily rags, or other potentially flammable wastes would be disposed of in an approved appropriate facility that is authorized to accept such material. Only approved and properly labeled and maintained containers would be used to store or transport flammable liquids.

## 2.7 MONITORING

The Project entity Construction and Safety or SSH&E Inspectors would inspect the job site and the Contractor's operations for compliance with all provisions of this Plan. In addition, federal, state, and local fire protection agencies would have the right to perform inspections.

	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 8 OF 11

### 3.0 FIRE SUPPRESSION

The Project entity would maintain and provide the Contractor with an up-to-date list of landowners/managers and agency contacts at all Project locations.

If a wildland fire were started as a result of Project operations, the nearest fire authority would be immediately notified and the crews on scene would attempt to extinguish it. In the event that a fire spreads beyond the ability of the crews to control it, the crews would immediately relocate to a safe location and notify the nearest fire authority, law enforcement, and/or the AICC, as appropriate, to advise them of the wildfire event.


If required, personnel would leave the ROW boundaries to accomplish fire suppression. Heavy equipment would not leave the ROW to suppress a fire, unless directed by a AICC or fire-fighting authority. It would need to be identified as to whether bulldozers would be allowed to go off-ROW to create fire breaks.

The extinguished fire would be monitored in accordance with the procedures described below.

The Contractor would also report fires that are observed that are started by natural causes (i.e., lightning). When requested by any fire-fighting authority, the Contractor would make equipment and personnel currently at the site temporarily available for fighting the wildfire.

### 3.1 MONITORING

The extinguished fire site would be monitored by the Contractor for a minimum of 24 hours after it is extinguished. Monitoring would include walking the fire site perimeter, as well as crossing through the site. The Fire Guard would maintain a log of all extinguished fire locations for future reference.

	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 9 OF 11


## 4.0 EMERGENCY CONTACTS

Emergency contacts are as follows:

Agency	Emergency Number
Fire and Police Emergency	911
BLM Fire Dispatch	911 or 1-800-237-3633 or 907-356-5600
Alaska State Troopers	911
AICC	1-800-237-3633
Fairbanks Area, State of Alaska, Department of Natural Resources, Division of Forestry	907-451-2600
Kenai Area, State of Alaska, Department of Natural Resources, Division of Forestry	907-260-4200
Matanuska-Susitna Area, State of Alaska, Department of Natural Resources, Division of Forestry	907-761-6300
State of Alaska, Department of Natural Resources, Division of Forestry (Notification of Wildfire on State Land)	911 or 1-800-237-3633
State of Alaska, Department of Natural Resources, Division of Forestry (Aviation Safety-Related – Fairbanks Area Dispatch)	907-451-2623
State of Alaska, Department of Natural Resources, Division of Forestry (Aviation Safety-Related – Fire Management Officer)	907-451-2634


## 4.1 NOTIFICATIONS AND REPORTING

As required by federal, state, and local permits and approvals, notification procedures would be followed. Notifications may be required prior to entering an area while active wildfires are within the district. Also, reports after an event would be submitted as appropriate depending on reporting requirements. All required information would be reported in accordance with required timelines.

	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 10 OF 11

## 5.0 ACRONYMS AND TERMS

Term	Definition
AICC	Alaska Interagency Coordination Center
BLM	Bureau of Land Management
Plan	Fire Prevention and Suppression Plan
ROW	right-of-way
SSH&E	Safety, Security, Health, and Environment

	APPENDIX G – FIRE PREVENTION AND SUPPRESSION PLAN	USAI-P2-SPZZZ-00-000002-000 DATE: APRIL 14, 2017 REVISION: 0
	PUBLIC	PAGE 11 OF 11

## 6.0 REFERENCES

Alaska LNG. 2015. *Blasting Plan*.