# ALASKA PENINSULA AREAWIDE 2017 COMPETITIVE OIL & GAS LEASE SALE

# Mitigation Measures

To ensure that these lease sales are in the state's best interest (AS 38.05.035(e)), operations will be conditioned by mitigation measures which will be attached to any leases issued and are binding on the lessee. These measures were developed to mitigate potential effects of lease-related activities, considering all information made known to the director. Additional measures may be imposed when the lessee submits a proposed plan of operations (11 AAC 83.158(e) and 83.346(e). The director may consult with local government organizations and other agencies in implementing the mitigation measures below. Lessees are subject to applicable local, state, and federal laws and regulations, as amended.

The director may grant exceptions to these mitigation measures. Exceptions will only be granted upon a showing by the lessee that compliance with the mitigation measure is not practicable and that the lessee will undertake an equal or better alternative to satisfy the intent of the mitigation measure. Requests and justifications for exceptions must be included in the plan of operations application as specified by the application instructions, and decisions of whether to grant exceptions will be made during the plan of operations review.

## A. Mitigation Measures

## 1. Facilities and Operations

- a. To ensure system integrity, oil and gas facilities, including pipelines, must be designed using industry-accepted engineering codes and standards. Technical submittals to the Division that reflect the "practice of engineering", as defined by AS 08.48.341, must be sealed by a professional engineer registered in the state of Alaska.
- b. The siting of facilities, other than docks, roads, utility or pipeline corridors, or terminal facilities is prohibited within one-half mile of the coast and 500 feet of all fish bearing waterbodies. Additionally, siting of facilities is prohibited within one-half mile of the banks of Igushik, Naknek, Egegik, King Salmon (tributary to Egegik River), Ugashik, King Salmon (tributary to Ugashik River), Cinder, Meshik, Ilnik, Sandy, Bear, Nelson, Caribou, and Sapsuk rivers, Becharof and Ugashik lakes. Facilities may be sited, on a case-by-case basis, within the one-half mile buffer if the lessee demonstrates that siting of such facilities outside this buffer zone is not feasible or prudent, or that a location within the buffer is environmentally preferable, but in no instance will a facility be located within one-quarter mile of the river bank. ADF&G consultation is required for siting within the one-half mile buffer. Road and pipeline crossings must be aligned perpendicular or near perpendicular to watercourses.
- c. Exploration roads, pads, and airstrips must be temporary unless the Director approves a proposed alternative. Use of gravel roads, pads, and airstrips may be permitted on a case-by-case basis by the director, in consultation with DMLW and ADF&G. Approval for use of existing structures will depend on the extent and method of restoration needed to return these structures to a usable condition.
- d. Pipelines must use existing transportation corridors where conditions permit. In areas with above ground placement, pipelines must be designed, sited, and constructed to allow for the free movement of wildlife. Gravel pads must be designed to facilitate the containment and cleanup of spilled fluids.
- e. Drilling in offshore tracts will only be conducted directionally from onshore locations.
- f. Pipelines that must cross marine waters will be constructed beneath the marine waters using directional drilling techniques. Offshore pipelines must be located and constructed to prevent obstruction to marine navigation and fishing operations.
- g. Exploration activities must utilize existing road systems, where practicable, or vehicles that do not cause significant damage to the ground surface or vegetation. Construction of temporary roads may be allowed on a case-by-case basis.

#### 2. Fish and Wildlife Habitat

- a. The Director, in consultation with ADF&G, will impose seasonal restrictions on activities located in, or requiring travel through or overflight of, important moose and caribou calving and wintering areas during approval of a plan of operations.
- b. To minimize impacts to migrating birds and to important water fowl habitats in Kvichak Bay, Egegik Bay, Ugashik Bay, Cinder River Estuary, Port Heiden, Seal Islands, Lagoon, Port Moller, Herendeen Bay, and Nelson Lagoon, exploration, development, and major maintenance within these areas will only be allowed between November 16 and March 31. Routine maintenance and emergency repairs will be permitted on a year-round basis during the production phase. A detailed plan describing routine maintenance activities between April 1 and November 15 in these areas must be included in the plan of operations.

# 3. Subsistence, Commercial and Sport Harvest Activities

 Lease-related use will be restricted if necessary to prevent unreasonable conflicts with fish and wildlife harvest activities.

#### 4. Fuel and Hazardous Substances

- a. During fuel or hazardous substance transfer, secondary containment or a surface liner must be placed under all container or vehicle fuel tank inlet and outlet points, hose connections, and hose ends. Appropriate spill response equipment, sufficient to respond to a spill of up to five gallons, must be on hand during any transfer or handling of fuel or hazardous substances.
- b. Vehicle refueling will not occur within the annual floodplain, except as addressed and approved in the plan of operations. This measure does not apply to water-borne vessels.
- c. New solid waste disposal sites, other than for drilling waste, will not be approved or located on state property for exploration.

#### 5. Access

a. Public access to, or use of, the lease area may not be restricted except within the immediate vicinity of drill sites, buildings, and other related structures. Areas of restricted access must be identified in the plan of operations.

#### **B.** Definitions

**Facilities**- Any structure, equipment, or improvement to the surface, whether temporary or permanent, including, but not limited to, roads, pads, pits, pipelines, power lines, generators, utilities, airstrips, wells, compressors, drill rigs, camps, and buildings.

**Hazardous substance**- As defined under 42 USC 9601 – 9675 (Comprehensive Environmental Response, Compensation, and Liability Act of 1980).

**Plan of operation-** A lease plan of operations under 11 AAC 83.158 and a unit plan of operations under 11 AAC 83.346.

**Practicable**- Feasible in light of overall project purposes after considering cost, existing technology, and logistics of compliance with the mitigation measure.

Temporary- No more than 24 months.