Chapter Seven: Mitigation Measures and Lessee Advisories

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Chapter Seven: Mitigation Measures and Lessee Advisories

AS 38.05.035(e) and the departmental delegation of authority provide the Director, Division of Oil and Gas (DO&G) ["Director"], with the authority to impose conditions or limitations, in addition to those imposed by statute, to ensure that a resource disposal is in the state's best interests. Consequently, to mitigate the potential adverse social and environmental effects of specific lease related activities, DO&G has developed mitigation measures and will condition plans of operation, exploration, or development and other permits based on these mitigation measures.

Lessees must obtain approval of a detailed plan of operations from the Director before conducting exploration, development, or production activities. A plan of operations must identify the sites for planned activities and the specific measures, design criteria, construction methods and operational standards to be employed to comply with the restrictions listed below. It must also address any potential geophysical hazards that may exist at the site.

These measures were developed after considering terms imposed in earlier competitive lease sales and comments and information submitted by the public, local governments, environmental organizations, and other federal, state, and local agencies. Additional measures will likely be imposed when lessees submit a proposed plan of operations.

Lessees must comply with all applicable local, state and federal codes, statutes and regulations, as amended, as well as all current or future ADNR area plans and recreation rivers plans; and ADF&G game refuge plans, critical habitat area plans, and sanctuary area plans within which a lease area is located. Lease activities must be consistent with the enforceable policies of the Alaska Coastal Management Program (ACMP), including statewide standards and the enforceable policies of an affected coastal district, as amended. In addition, AS 38.05.140(f) designates the submerged and shoreland north of 57 degrees, 30 minutes, North latitude and east of 159 degrees, 49 minutes West, longitude within the Bristol Bay drainage as the Bristol Bay Fish Reserve (BBFR). Within the BBFR, no surface entry permit to develop an oil and gas lease or oil and gas exploration license may be issued on state owned or controlled land until the Legislature, by appropriate resolution, specifically finds that entry will not constitute a danger to the fishery.

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 feasible and prudent or 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. The decision whether to grant an exception will be made during the public review of the plan of operations. Mitigation Measure 7 may not be amended by the Director without completing a supplemental Best Interest Finding.

Abbreviations mean: Alaska Department of Environmental Conservation (ADEC), Alaska Department of Fish and Game (ADF&G), Alaska Department of Labor and Workforce Development (ADLWD), Alaska Department of Natural Resources (ADNR), Alaska Oil and Gas Conservation Commission (AOGCC), Commissioner (ADNR Commissioner), Division of Mining, Land and Water (DMLW), Division of Oil and Gas (DO&G), Federal Aviation Administration (FAA), National Marine Fisheries Service (NMFS); Office of Habitat Management and Permitting OHMP), Office of Project Management and Permitting (OPMP); State Historic Preservation Officer (SHPO), U.S. Army Corps of Engineers (USCOE), U.S. Coast Guard (USCG), and U.S. Fish and Wildlife Service (USFWS).

A. Mitigation Measures

1. Facilities and Operations

- 1. A plan of operations must describe the lessee's efforts to minimize impacts on residential, commercial, and recreational areas, Native allotments and subsistence use areas. At the time of application, lessee must submit a copy of the proposed plan of operations to all surface owners whose property will be entered.
- 2. Facilities must be designed and operated to minimize sight and sound impacts in areas of high residential, commercial, recreational, and subsistence use and important wildlife habitat. Methods may include providing natural buffers and screening to conceal facilities, sound insulation of facilities, or by using alternative means approved by the Director, in consultation with OHMP.
- 3. The siting of facilities, other than docks, roads, utility or pipeline corridors, or terminal facilities will be prohibited within one-half mile of the coast, barrier islands, reefs and lagoons, 500 feet of all fish bearing waterbodies and 1,500 feet from all current surface drinking water sources. Additionally, siting of such facilities will be prohibited within one-half mile of the banks of the Igushik, Naknek, Egegik, King Salmon (tributary to Egegik), David, Milky, Ugashik, King Salmon (tributary to Ugashik), Cinder, Meshik, Ilnik, Muddy, Sandy, Bear, Nelson, Caribou, Sapsuk and Dog Salmon Rivers, Black Hills, Steelhead, Painter and Pumice Creeks, Becharof and Ugashik Lakes and Franks Lagoon. Facilities may be sited within these buffers if the lessee demonstrates to the satisfaction of the Director, in consultation with OHMP and the affected local borough government, that site locations outside these buffers are not feasible and prudent or that a location inside the buffer is environmentally preferred. Road, utility, and pipeline crossings must be consolidated and aligned perpendicular or near perpendicular to watercourses.
- 4. The siting of temporary and permanent facilities will be prohibited within the Bristol Bay Fisheries Reserve.
- 5. Impacts to important wetlands must be minimized to the satisfaction of the Director, in consultation with OHMP and ADEC. The Director will consider whether facilities are sited in the least sensitive areas. Further, all activities within wetlands require permission from the US Army Corps of Engineers. See Lessee Advisory 13 regarding activities within wetlands.
- 6. Pipelines must utilize existing transportation corridors and be buried where conditions permit. In areas with above ground placement, they must be designed, sited, and constructed to allow for the free movement of wildlife. Pipeline gravel pads must be designed to facilitate the containment and cleanup of spilled fluids. Pipelines must be designed and constructed to assure integrity against climatic conditions and geophysical hazards.
- 7. Drilling in offshore tracts will only be conducted directionally from onshore locations.
- 8. Pipelines that must cross marine waters will be constructed beneath the marine waters using directional drilling techniques, unless the Director, in consultation with OHMP and the local borough and CRSAs, approves an alternative method based on technical, environmental, and economic justification.

- 9. Dismantlement, Removal and Rehabilitation (DR&R): Upon abandonment of material sites, drilling sites, roads, buildings or other facilities, such facilities must be removed and the site rehabilitated to the satisfaction of the Director, unless the Director, in consultation with DMLW, OHMP, DEC, an affected local borough, and any non-state surface owner, determines that such removal and rehabilitation is not in the state's interest
- 10. Gravel mining within an active floodplain is prohibited. Gravel mining in upland sites will be restricted to the minimum area necessary to develop the field in an efficient manner.

2. Fish and Wildlife Habitat

- 11. Detonation of explosives within or in proximity to fish bearing waters must not produce instantaneous pressure changes that exceed 2.7 pounds per square inch in the swim bladder of a fish. Detonation of explosives within or in close proximity to a fish spawning bed during the early stages of egg incubation must not produce a peak particle velocity greater than 0.5 inches per second. Blasting criteria have been developed by ADF&G and are available upon request. The location of known fish bearing waters within the project area can be obtained from the OHMP.
- 12. Compaction or removal of snow cover overlying fish bearing waterbodies is prohibited except for approved crossings. If ice thickness is not sufficient to facilitate a crossing, ice or snow bridges may be required.
- 13. Water intake pipes used to remove water from fish bearing waterbodies must be surrounded by a screened enclosure to prevent fish entrainment and impingement. Screen mesh size shall be no greater than 0.1 inches unless another size has been approved by OHMP. The maximum water velocity at the surface of the screen enclosure may be no greater than 0.2 feet per second. Screen material must be corrosion resistant, and must be adequately supported to prevent excessive sagging which could result in unusable intake surface. The intake structure must be designed and installed to avoid excessive fouling from floating debris, and a minimum of eight square feet of effective wetted screen surface must be provided for each multiple of a 450-gallon per minute (one cubic foot per second) pumping rate. The pump intake opening must be placed equidistant from all effective wetted screen surfaces.
- 14. Before commencement of any activities, lessees shall consult with ADF&G to identify the locations of known bear den sites that are occupied in the season of proposed activities. Exploration and development activities started between October 15 and April 30 may not be conducted within ½-mile of known occupied brown bear dens, unless alternative mitigation measures are approved by ADF&G. A lessee who encounters an occupied bear den not previously identified by ADF&G must report it to the Division of Wildlife Conservation, ADF&G, within 24 hours (King Salmon 907-246-3340). Mobile activities shall avoid such discovered occupied dens by ½ -mile unless alternative mitigation measures are approved by the Director with concurrence from ADF&G. Non-mobile facilities will not be required to be relocated
- 15. To minimize impacts to important waterfowl 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 April 6, unless an exception is approved by the Director, in consultation with OHMP. Routine maintenance and emergency repairs will be permitted on a year-round basis during the production phase. A detailed plan describing routine maintenance activities to be conducted between April 7 and November 15 in these areas must be included in the plan of operations.

16 Cape Seniavin Walrus Haulout: Above ground lease-related facilities and structures will be prohibited within one mile inland from the coast, in an area extending one mile northeast and one mile southwest of the Cape Seniavin walrus haulout. See also Lessee Advisories 14, 15 and 16.

3. Subsistence, Commercial and Sport Harvest Activities

- 17. Lease-related use will be restricted when the Director determines it is necessary to prevent conflicts with local subsistence, commercial and sport harvest activities. In enforcing this term DO&G, during review of plans of operation, will consult with other agencies, the affected local borough(s) and the public to identify and avoid potential conflicts. In order to avoid conflicts with subsistence, commercial and sport harvest activities, restrictions may include alternative site selection, requiring directional drilling, seasonal drilling restrictions, and other technologies deemed appropriate by the Director.
- 18. Traditional and customary access to subsistence areas shall be maintained unless reasonable alternative access is provided to subsistence users. "Reasonable access" is access using means generally available to subsistence users.

4. Fuel and Hazardous Substances

- 19. Secondary containment shall be provided for the storage of fuel or hazardous substances.
- 20. Containers with an aggregate storage capacity of greater than 55 gallons which contain fuel or hazardous substances shall not be stored within 100 feet of a waterbody, or within 1,500 feet of a current surface drinking water source.
- 21. During equipment storage or maintenance, the site shall be protected from leaking or dripping fuel and hazardous substances by the placement of drip pans or other surface liners designed to catch and hold fluids under the equipment, or by creating an area for storage or maintenance using an impermeable liner or other suitable containment mechanism.
- 22. 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. Trained personnel shall attend transfer operations at all times.
- 23. Vehicle refueling shall 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.

- 24. All independent fuel and hazardous substance containers shall be marked with the contents and the lessee's or contractors name using paint or a permanent label.
- 25. A fresh water aquifer monitoring well, and quarterly water quality monitoring, is required down gradient of a permanent storage facility, unless alternative acceptable technology is approved by ADEC.
- 26. Waste from operations must be reduced, reused, or recycled to the maximum extent practicable. Garbage and domestic combustibles must be incinerated whenever possible or disposed of at an approved site in accordance with 18 AAC 60.
- 27. New solid waste disposal sites, other than for drilling waste, will not be approved or located on state property during the exploration phase of lease activities. Disposal sites may be provided for drilling waste if the facility complies with 18 AAC 60.
- 28. Drilling mud and cuttings cannot be discharged into lakes, streams, rivers, or important wetlands. On pad temporary cuttings storage will be allowed. Impermeable lining and diking, or equivalent measures, will be required for reserve pits. Injection of non-hazardous oilfield wastes is regulated by AOGCC through its Underground Injection Control (UIC) Program for oil and gas wells. See also Mitigation Measure 37f.

5. Access

- 29. 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. Construction of permanent roads may be allowed, upon approval by the Director in consultation with the local borough government.
- 30 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 facilities. Areas of restricted access must be identified in the plan of operations. Lease facilities and operations shall not be located so as to block access to or along navigable or public waters as defined in AS 38.05.965.

6. Prehistoric, Historic, and Archeological Sites

- 31. Prior to the construction or placement of any structure, road, or facility resulting from exploration, development, or production activities, the lessee must conduct an inventory of prehistoric, historic, and archeological sites within the area affected by an activity. The inventory must include consideration of literature provided by nearby communities, Native organizations, and local residents; documentation of oral history regarding prehistoric and historic uses of such sites; evidence of consultation with the Alaska Heritage Resources Survey and the National Register of Historic Places; and site surveys. The inventory must also include a detailed analysis of the effects that might result from the activity.
- 32. The inventory of prehistoric, historic, and archeological sites must be submitted to the Director, and to SHPO who will coordinate with the local borough government for review and comment. If a prehistoric, historic, or archeological site or area could be adversely affected by a lease activity, the Director, after consultation with SHPO and the local borough, will direct the lessee as to the course of action to take to avoid or minimize adverse effects.

33. If a site, structure, or object of prehistoric, historic, or archaeological significance is discovered during lease operations, the lessee must report the discovery to the Director as soon as possible. The lessee must make reasonable efforts to preserve and protect the discovered site, structure, or object from damage until the Director, after consultation with the SHPO and the local borough, has directed the lessee as to the course of action to take for its preservation.

7. Local Hire, Communication, and Training

- 34. To the extent they are available and qualified, lessees are encouraged to employ local and Alaska residents and contractors for work performed on the lease area. Lessees shall submit, as part of the plan of operations, a proposal detailing the means by which the lessee will comply with the measure. The proposal must include a description of the operator's plans for partnering with local communities to recruit, hire and train local and Alaska residents and contractors. The lessee is encouraged, in formulating this proposal, to coordinate with employment and training services offered by the State of Alaska, the Southwest Vocational Education Training Center and local communities to train and recruit employees from local communities.
- 35. A plan of operations application must describe the lessee's past and prospective efforts to communicate with local communities and interested local community groups.
- 36. A plan of operations application must include a training program for all personnel including contractors and subcontractors. The program must be designed to inform each person working on the project of environmental, social, and cultural concerns that relate to that person's job. The program must use methods to ensure that personnel understand and use techniques necessary to preserve geological, archeological, and biological resources. In addition, the program must be designed to help personnel increase their sensitivity and understanding of community values, customs, and lifestyles in areas where they will be operating.

8. Definitions

37. In this document:

- a. "Facilities" means 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;
- b. "Feasible and prudent" means consistent with sound engineering practice and not causing environmental, social, or economic costs that outweigh the public benefit to be derived from compliance with the standard;
- c. "Important wetlands" means those wetlands that are of high value to fish, waterfowl, and shorebirds because of their unique characteristics or scarcity in the region or that have been determined to function at a high level using the hydrogeomorphic approach;
- d. "Minimize" means to reduce adverse impacts to the smallest amount, extent, duration, size, or degree reasonable in light of the environmental, social, or economic costs of further reduction;
- e. "Plan of operations" means a lease Plan of operations under 11 AAC 83.158 and a unit Plan of operations under 11 AAC 83.346;
- f. "Secondary containment" means an impermeable diked area or portable impermeable containment structure capable of containing 110 percent of the volume of the largest independent container plus 12 inches of freeboard. Double walled tanks do not qualify as Secondary Containment unless an exception is granted for a particular tank.
- g. "Temporary" means no more than 12 months.

B. Lessee Advisories

Lessee Advisories are intended to alert lessees to possible additional restrictions that may be imposed at the permitting stage of a proposed project or activity in certain leasehold areas, especially where entities other than DO&G have permitting authority.

DNR/OHMP

- 1. Under the provisions of Title 41 of the Alaska Statutes, the measures listed below may be imposed by OHMP below the ordinary high water mark to protect designated anadromous fish-bearing streams and to ensure the free and efficient passage of fish in all fish-bearing water bodies. Specific information on the location of anadromous water bodies in and near the area may be obtained from OHMP.
 - a. Alteration of riverbanks may be prohibited.
 - b. The operation of equipment, excluding boats, in open water areas of rivers and streams may be prohibited.
 - c. Bridges or non-bottom founded structures may be required for crossing fish spawning and important rearing habitats.
 - d. Culverts or other stream crossing structures must be designed, installed, and maintained to provide free and efficient passage of fish.
- 2. Removal of water from fish-bearing water bodies requires prior written approval by DMLW and OHMP.
- 3. For projects in proximity to areas frequented by bears, lessees are encouraged to prepare and implement a human-bear interaction plan designed to minimize conflicts between bears and humans. The plan should include measures to:
 - a. minimize attraction of bears to drill sites;
 - b. organize layout of buildings and work areas to minimize interactions between humans and bears:
 - c. warn personnel of bears near or on facilities and the proper actions to take;
 - d. if authorized, deter bears from the drill site:
 - e. provide contingencies in the event bears do not leave the site;
 - f. discuss proper storage and disposal of materials that may be toxic to bears; and
 - g. provide a systematic record of bears on site and in the immediate area.
- 4. The Director, in consultation with OHMP, may impose seasonal restrictions on activities located in, or requiring travel through or overflight of, important moose and caribou calving and wintering areas during the plan of operations approval stage.
- 5. The Director, in consultation with OHMP, may impose seasonal restrictions on activities located in and adjacent to important waterfowl and shorebird habitat during the plan of operations approval stage.

DNR/OPMP

6. Pursuant to Alaska Statutes, applicants for lease are required to comply with all requirements of the Alaska Coastal Management Program, including the District Coastal Management Plans.

ADEC

- 7. Pursuant to state regulations administered by ADEC, lessees are required to have an approved oil discharge prevention and contingency plan (C-Plan) prior to commencing operations. The plan must include a response action plan to describe how a spill response would occur, a prevention plan to describe the spill prevention measures taken at the facility, and supplemental information to provide background and verification information.
- 8. Pursuant to state regulations administered by ADEC and the Clean Air Act administered by EPA, lessees are required to obtain air quality permits prior to construction and operation. The permits will include air quality monitoring, modeling, and emission control obligations.
- 9. Unless authorized by an ADEC permit, surface discharge of reserve pit fluids and produced waters is prohibited.
- 10.Unless authorized by NPDES or state permits, disposal of wastewater into freshwater bodies is prohibited.

ADF&G

11. Management of legislatively designated state game refuges and critical habitat areas is the coresponsibility of ADF&G, per AS 16.20.050-060 and AS 16.20.500-530, and ADNR, per AS 38.05.027. For activities occurring within a refuge or critical habitat area, the lessee will be required to obtain permits from both ADNR and ADF&G. The following requirements are established by, and exceptions may only be granted by, ADF&G.

Five Critical Habitat Areas (CHA) are located within or partially within the Alaska Peninsula lease area: Port Moller CHA, Port Heiden CHA, Cinder River CHA, Pilot Point CHA, and the Egegik CHA. One State Game Refuge (SGR), Izembek SGR, abuts the boundary of the lease sale area.

Operations within these CHAs must comply with the terms and conditions of the sale, the regulations contained within 5 AAC 95.400-990, and the measures listed below:

- a. Surface entry for drilling and above ground lease-related facilities and structures will be prohibited on tide and submerged lands. Surface entry for seismic surveys and similar temporary activities may be allowed in all of these areas, consistent with the Special Area regulations. Directional Drilling from adjacent sites may be allowed.
- b. Exploration, development, and major maintenance activities within wetlands and upland areas will only be allowed between November 16 and April 6, unless an exception is approved by ADF&G and DO&G. Routine maintenance and emergency repairs will be permitted on a year-round basis during the production phase. A detailed plan describing routine maintenance activities to be conducted between April 7 and November 15 must be submitted to ADF&G and DO&G for review and approval.

- c. Gravel pads and wellheads are the only permanent above ground structures that will be allowed on wetlands and uplands. Gravel roads will not be allowed during exploration.
- d. Construction, operation, and maintenance activities shall minimize the visual, environmental, and physical impacts to the CHA.
- e. Surface discharge of produced waters will be prohibited.
- f. Disposal of drilling muds and cuttings will be allowed only at upland sites approved by the director, DO&G, and ADF&G, after consultation with DMLW and DEC.
- g. Facilities within a critical habitat area must be designed to minimize the risk of spills or fires resulting from vandalism or accidents.

Upon abandonment of facilities, such facilities must be removed and the site rehabilitated to the satisfaction of ADF&G and DNR, unless the departments determine that such removal and rehabilitation is not in the state's best interests.

ADLWD

12. The Lessee shall facilitate Alaska resident hire monitoring by reporting project wages on a quarterly basis for each individual employed by the Lessee in the lease area, through electronic unemployment insurance reporting, and by requiring the same of the lessee's contractors and subcontractors.

USCOE

13. Any activity involving wetland-related dredge or fill activities requires a permit from the USCOE.

FAA

- 14. Pilots are requested to follow these guidelines between April 1st and October 31st when traveling near Cape Seniavin:
 - a. Fixed wing aircraft remain at altitudes greater than 2,000 feet above ground level (AGL) within ½ mile of Cape Seniavin (56° 24' N, 160° 09' W). Helicopters remain at altitudes greater than 5,000 feet AGL within one (1) nautical mile of the Cape. If cloud conditions necessitate flying lower than these recommended altitudes, please pass inland to avoid flushing walrus from the beach.
 - b. Walrus are particularly sensitive to changes in engine noise and are more likely to stampede off beaches when planes turn or fly low overhead please avoid circling or turning while in the area of the haulout.
 - c. Aircraft visiting Cape Seniavin should land well away from the haulout and only taxi as close to the haulout as is necessary for landing and take off. Approaching the haulout by foot will greatly reduce the amount of disturbance to the animals resting at the haulout.

USCG

15. Lessees are advised of the U.S. Coast Guard Advisory: United States Department of Interior, Fish and Wildlife Service is asking for mariners' cooperation in minimizing disturbances to walrus resting at Cape Seniavin. Mariners are asked to stay 1,000 yards from shore when transiting past Cape Seniavin 56°24'00"N 160°09'00"W. For more information contact U.S. Fish and Wildlife Service, Marine Mammals Management at 1-800-362-5148.

USFWS

- 16. Walrus Haul Outs: Disturbance of walrus is a violation of the Marine Mammals Protection Act (MMPA) of 1972, as amended (16 USC 1361-1407). The USFWS shares authority over marine mammals with the National Marine Fisheries Service (NMFS), per the MMPA. Oil and gas activities, including exploration and development, in areas where walrus or other marine mammals occur, may result in their disturbance. The unintentional, or incidental, disturbance of marine mammals may be allowed under the MMPA, provided the USFWS or NMFS determine that the proposed activity will have a negligible impact on marine mammals and will not adversely impact subsistence hunting activities. The USFWS reviews requests for the incidental take of marine mammals on a case by case basis, and if authorized, may require certain mitigative measures to minimize industry disturbance and impact to marine mammals. In areas such as the Cape Seniavin walrus haulout, mitigative measures are likely to include protective buffer areas landward and seaward of the haulout, seasonal closures and monitoring programs. The USFWS concurs with the Federal Aviation Administration and U.S. Coast Guard advisories for pilots and mariners operating near Cape Seniavin, and refers pilots and mariners to those advisories for recommendations to avoid walrus disturbance.
- 17. Endangered and Threatened Species: The Lessee is advised that the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et seq.) protects the following endangered or threatened species and candidate species for listing that may occur in the lease sale area:

Table 7.1: Endangered and Threatened Species

Common Name	ESA Status
a. Sei whale	Endangered
b. Humpback whale	Endangered
c. Blue whale	Endangered
d. Steller sea lion (western stock)	Endangered
e. Steller's eider (Alaska breeding population)	Threatened

18. Bald eagles are protected under the Bald Eagle Protection Act (16 U.S.C. 668-668c) and the Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712). Lessees are responsible to ensure their actions do not take bald eagles. The Eagle Protection Act defines "take" to include disturbing birds. A survey for bald eagle nests is necessary prior to beginning exploration or development activities during the nesting period (March 1 through August 31). Any nests located within ½-mile of the project site must be mapped, and destruction of nest trees or locations is prohibited. If any nests are located within ½-mile of a project site, Lessees shall meet with the USFWS prior to construction to review any site-specific concerns regarding the subject nest. USFWS generally recommends no clearing of vegetation within 330 feet of any nest. No activity should occur within 660 feet of any nests between March 1 and June 1. Between June 1 and August 31, no activity should occur within

660 feet of active eagle nests until after juvenile birds have fledged, unless specifically authorized by the USFWS. While the USFWS can recommend ways to avoid the take of eagles, final accountability lies with the party responsible for the action.

19. Lessees are advised of the need to comply with the Migratory Bird Treaty Act (MBTA)(16 U.S.C. 703) which is administered by the U.S. Fish and Wildlife Service. Under the Migratory Bird Treaty Act, it is illegal to "take" migratory birds, their eggs, feathers or nests. "Take" is defined (50 CFR 10.12) to include "pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting." The MBTA does not distinguish between "intentional" and "unintentional" take. Migratory birds include songbirds, waterfowl, shorebirds, and raptors, In Alaska, all native birds except grouse and ptarmigan (which are protected by the State of Alaska) are protected under the MBTA.

In order to ensure compliance with the MBTA, it is recommended that Lessees survey the project area prior to construction, vegetation clearing, excavation, discharging fill or other activities which create disturbance, and confirm there are no active migratory bird nests. It is recommended Lessees contact the U.S. Fish and Wildlife Service for assistance and guidance on survey needs, and other compliance issues under the Migratory Bird Treaty Act. While the Service can recommend methods (such as surveys and timing windows) to avoid unintentional take, responsibility for compliance with the MBTA rests with Lessees. In the Lease area, the Service normally recommends that to prevent impacts to nesting migratory birds, no vegetation clearing, fill placement, excavation, or other construction activities be conducted between May 1 and July 15. Further, ADNR refers lessees to Chapter 3, Section 2, Estuaries, for information relative to the timing windows and locations of migratory birds' migration staging.

NMFS

20. NMFS shares authority for marine mammals with the USFWS, per the Marine Mammals Protection Act of 1972 (16 USC 1361-1407).