

Chapter Seven: Governmental Powers to Regulate Oil and Gas

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Chapter Seven: Governmental Powers to Regulate Oil and Gas

An oil and gas lease grants to the lessee the exclusive right to drill for, extract, remove, clean, process, and dispose of oil, gas, and associated substances. However, an oil and gas lease does not authorize any activities on the lease. A plan of operations or unit plan of operations must be approved before any operations may be undertaken on or in the leased area. In addition, oil and gas activities (exploration, development, production, and transportation) are subject to numerous federal, state, and local laws, regulations, policies, and ordinances, with which the lessee is obligated to comply (Appendix B). Regulatory agencies (state, federal, and local) have different roles in the oversight and regulation of oil and gas activities, although some agencies may have overlapping authorities.

Although there is no “typical” project, some of the various permits and approvals that may be required are discussed below. This chapter does not provide a comprehensive description of the multitude of laws and regulations that may be applicable to oil and gas activities. Rather, its purpose is to illustrate the broad spectrum of authority various government agencies have to prohibit, regulate, and condition activities related to oil and gas. Actual processes, terms, and conditions will vary with time certain, site-specific operations. Lessees are responsible for knowing and complying with all applicable state, federal, and local laws, regulations, policies, and ordinances.

A. Alaska Department of Natural Resources

The ADNR, through the DO&G, the DMLW, the DCOM, the Office of Project Management and Permitting, and the Office of History and Archaeology, and the SPCO review, coordinate, condition, and approve plans of operations or development and other permits as required before on-site activities can take place. The department monitors activities through field inspection once they have begun. Each plan of operations is site-specific and must be tailored to the activity requiring the permit. A plan of operations is required to identify the specific measures, design criteria, and construction methods and standards to be employed so as to comply with the terms of the lease. Applications for other state or federal agency authorizations or permits must be submitted with the plan of operations.

1. Alaska Coastal Management Program (ACMP) Review

The Alaska Coastal Management Program is administered by the DCOM. The North Slope Foothills Areawide lease sale area encompasses habitat in the North Slope Borough’s coastal zone. Therefore, lease related activities are subject to review under the 12 statewide standards of the Alaska Coastal Management Program (ACMP; AS 46.40, 11 AAC 110, 11 AAC 112) and the local coastal district plan. Currently, there is no district plan in effect for the NSB. Future exploration, development, and production activities requiring additional authorizations will undergo separate coastal zone consistency analyses if and when they are actually proposed. Future activities must comply with the ACMP and, once its plan is in effect, the enforceable policies of the North Slope Borough Coastal Management Program (ACMP 2010).

Permit applications for activities under the lease must be as detailed as necessary for a comprehensive agency review. If a project affects or occurs within the coastal zone, a review of the permit application will be conducted to determine whether the proposed activity is consistent with the standards of the ACMP. Following the review, each agency will approve or deny the permit application and determine whether any alternative measures (changes in the project description) or permit conditions are required before approval.

Most permits needed for exploration well drilling require public notice. The ACMP permitting process goes through a 30- or 50-day review and, if other agencies or offices within ADNR require approval, the review is coordinated by DCOM. This process provides for coordinated agency reviews and public input and ensures that proposed activities are consistent with the ACMP and local coastal plans.

The 50-day ACMP review process is initiated when the applicant applies for a state and/or federal permit(s). State authorizations subject to the ACMP are listed on the “C” list discussed below. Federal authorizations subject to the ACMP are listed at 11 AAC 110. The various agencies initiate their internal consistency reviews and must send any requests for additional information to the coordinating agency within 25 days. Public and agency review comments are due on or before Day 30, and a proposed consistency finding is issued on or before Day 44. A request for additional time to complete the review must be received on or before Day 49, and the final consistency determination is issued on Day 50. However, if a reviewing agency objects to the proposed determination, it may elevate the decision to the Commissioner. If the determination is elevated, the Commissioner or delegee will issue a written decision with findings of fact within 45 days after the request for elevation. The 30-day review process has shorter time periods between action points.

The consistency determination process has been streamlined through the development of A, B, and C list activities.

“A list” activities are considered “categorically consistent,” do not result in significant impacts to coastal resources, and do not require a consistency review. On-pad placement of light poles, railings, electrical towers/poles, modules, and associated oil and gas buildings are examples of A list activities.

“B list” reviews are classified as General Concurrences, and the activities are considered routine with standard alternative measures. Examples are exploration sampling, and North Slope ice road construction, storage of construction materials on existing gravel pads, and North Slope installation of permanent snow fences and power transmission lines. B list activities are consistent with the ACMP and are conditioned with standard pre-set mitigation measures. Individual ACMP consistency reviews are not necessary for activities on the B list.

The resource agency(s) will check the CPQ and plan of operations to ensure that the project qualifies for the A or B list. The coordinating agency will also review the standard alternative measures and any applicable procedures against the plan of operations submitted.

“C list” activities are activities not covered by the A or B lists, and reviews are classified as Individual Project Reviews. C list activities are subject to the 30- or 50-day review process described in this section.

2. Plan of Operations Approval (Division of Oil and Gas)

The operations on State of Alaska oil and gas leases are administered by the DO&G. Land use activities within oil and gas leases are regulated under 11 AAC 83.158, 11 AAC 83.346 and paragraphs 9 and 10 of the lease. These require the lessee to prepare plans of operations and development that must be approved by DO&G and by any other interest holder, if ownership is shared, before the lessee may commence any activities within the leased area. Except for uses and activities appearing on the list in 11 AAC 96.020, the lessee must prepare a plan of operations and obtain all required approvals and permits for each phase of exploration, development, or production before implementation of that activity. All permit applications and plans are available for public review, and public notices will be conducted.

An application for approval of a plan of operation must contain sufficient information, based on data reasonably available at the time the plan is submitted for approval, for the Commissioner to

determine the surface use requirements and impacts directly associated with the proposed operations. An application must include statements and maps or drawings setting out the following:

- (1) the sequence and schedule of the operations to be conducted on or in the leased area, including the date operations are proposed to begin and their proposed duration;
- (2) projected use requirements directly associated with the proposed operations, including the location and design of well sites, material sites, water supplies, solid waste sites, buildings, roads, utilities, airstrips, and all other facilities and equipment necessary to conduct the proposed operations;
- (3) plans for rehabilitation of the affected leased area after completion of operations or phases of those operations; and
- (4) a description of operating procedures designed to prevent or minimize adverse effects on other natural resources and other uses of the leased area and adjacent areas, including fish and wildlife habitats, historic and archeological sites, and public use areas (11 AAC 83.158(d)).

When it considers a plan of operations, DO&G often requires stipulations, in addition to the mitigation measures developed through the best interest finding. These additional stipulations address site-specific concerns directly associated with the proposed project. The lease stipulations and the terms and conditions of the lease are attached to the plan of operations approval and are binding on the lessee. The lease also requires that the lessee keep the lease area open for inspection by authorized state officials. Activities are monitored in the field by ADNR, ADEC, ADF&G, and AOGCC to ensure compliance with each agency's respective permit terms. In addition, each permittee must post a bond before beginning operations (11 AAC 83.160). Lease operation approvals are generally granted for three years.

The Commissioner of ADNR may authorize the subsurface storage of gas to avoid waste or to promote conservation of natural resources. Subsurface storage of gas increases reliability of gas delivery to all sources of demand. The Commissioner has delegated the authority to authorize subsurface storage of oil or gas to the Director of DO&G. Subsurface gas storage must comply with all applicable local, state, and federal statutes and regulations, and with any terms imposed in the authorization or in any subsequent plan of operation approvals, or in the AOGCC Storage Injection Order.

3. Geophysical Exploration Permit (Division of Oil and Gas)

Geophysical surveys conducted on State of Alaska oil and gas leases are administered by DO&G. The geophysical exploration permit is a specific type of land use permit issued by DO&G under 11 AAC 96.010. Seismic surveys are the most common activity authorized by this permit and are related to oil and gas development. The purpose of the permit is to minimize adverse effects on the land and its resources while making important geological information available to the state (11 AAC 96.210). Under AS 38.05.035(a)(8)(C), the geological and geophysical data that are made available to the state are held confidential at the request of the permittee. If the seismic survey is part of an exploration well program, the permit will be reviewed as part of the exploration well permit package. The application must contain the following information in sufficient detail to allow evaluation of the planned activities' effects on the land:

- (1) a map at a sufficient scale showing the general location of all activities and routes of travel of all equipment for which a permit is required;
- (2) a description of the proposed activity, any associated structures, and the type of equipment that will be used. (11 AAC 96.030(a)).

Maps showing the precise location of the survey lines must also be provided, though this information is usually held confidential. A \$100,000 bond is required to conduct seismic work. The bond amount for other geophysical surveys is determined when the activity is proposed.

A geophysical exploration permit is usually issued for a single survey season, but may be extended. If the permit is extended, the Director may modify existing terms or add new ones. The permit is revocable for cause for violation of a permit provision or of 11 AAC 96, and is revocable at will if the department determines that revocation is in the state's interest. A permit remains in effect for the term issued, unless revoked sooner. The department will give 30 days notice before revoking a permit at will. A revocation for cause is effective immediately (11 AAC 96.040(a)).

4. Alaska State Pipeline Rights-of-Way

The Alaska Right-of-Way Leasing Act (AS 38.35) is administered by the SPCO. This office is within the Alaska JPO. Most oil and gas transportation facilities within the lease area or beyond the boundaries of the lease area must be authorized by SPCO. These activities include right-of-way applications, drafting leases for Commissioner approval, implementing the public review process, issuance of project specific authorizations, and monitoring compliance with lease conditions. SPCO oversees 21 pipelines in Alaska from the North Slope to the Kenai Peninsula (SPCO 2010).

5. Alaska Petroleum Systems Integrity Office

The Alaska Petroleum Systems Integrity Office (PSIO) is the lead state agency in exercising oversight of the maintenance of facilities, equipment, and infrastructure for the sustained production and transportation of oil and natural gas resources in this state, including such facilities, equipment, and infrastructure not currently within the jurisdiction of another state or federal agency. Through designated agency liaisons, PSIO leads interagency efforts to evaluate industry oversight. Designated agencies, to the extent authorized through legal authorities, require oil and gas producers and operators to provide a comprehensive description of current practices that includes the quality control, quality assurance, monitoring, inspection, and other practices used to ensure the integrity and reliability of oil and natural gas facilities, equipment, infrastructure and activities. The PSIO shall make recommendations to the Commissioner of ADNR regarding ADNR enforcement actions and cases to be referred to other state, local, or federal agencies for appropriate civil or criminal penalties available under the law.

6. Temporary Water Use Authorization (Division of Mining, Land and Water)

Exploration activities may require a temporary water use authorization issued by DMLW. A temporary water use authorization is administered by the DMLW, and is required under 11 AAC 93.035 before the temporary use of a significant amount of water, if the use continues for less than five consecutive years and the water applied for is not otherwise appropriated. The volume of water to be used and permitted depends upon whether it is to be used for consumption or non-consumptive uses, and the duration of use. The authorization may be extended one time for good cause for a period of time not to exceed five years.

An application must include: (1) the application fee; (2) a map indicating the section, township, range, and meridian, the location of the property, the point of withdrawal, diversion, or impoundment, and the point of use; (3) the quantity of water to be used; (4) the nature of the water use; (5) the time period during which the water is to be used; and (6) the type and size of equipment used to withdraw the water. DMLW may issue an authorization for the temporary use of water subject to conditions, including suspension or termination, considered necessary to protect the water rights of other persons or the public interest. Information on lake bathymetry, fish presence, and fish

species may be required when winter water withdrawal is proposed to calculate the appropriate withdrawal limits.

7. Permit and Certificate to Appropriate Water (Division of Mining, Land and Water)

The DMLW also administers authorizations for water use. Industrial or commercial use of water requires a Permit to Appropriate Water under 11 AAC 93.120. The permit is issued for a period of time consistent with the public interest and adequate to finish construction and establish full use of water. The maximum time period for which a permit will be issued for industrial or commercial use is five years, unless the applicant proves or the Commissioner independently determines that a longer period is required. The Commissioner may issue a permit subject to terms, conditions, restrictions, and limitations necessary to protect the rights of others, and the public interest. Under 11 AAC 93.120(e), permits are subject to conditions such as requirements: that no certificate will be issued until evidence is presented of adequate easements or other means necessary to complete the appropriation; that the permittee measure the water use and report water use information to ADNR; and that the permittee maintain, or restrict from withdrawing, a specific quantity, rate of flow or volume of water to protect fish and wildlife habitat, recreation purposes, navigation, sanitation or water quality, prior appropriators, or any other purpose the department determines is in the public interest.

A Certificate of Appropriation will be issued under 11 AAC 93.130 if the permit holder: (1) submits a statement of beneficial use stating that the means necessary for the taking of water have been developed and the permit holder is beneficially using the quantity of water to be certified, along with the required fee; and (2) has substantially complied with all permit conditions. Again, the Commissioner will, in his or her discretion, issue a certificate subject to conditions necessary to protect the public interest. For example, conditions to maintain a specific quantity of water at a given point on a stream or water body, or in a specified stretch of stream, throughout the year or for specified times of the year for the following purposes: to protect fish and wildlife habitat; recreation; navigation; sanitation and water quality; and prior appropriators; or any other purpose the Commissioner determines is in the public's interest (11 AAC 93.130(c)(1)).

8. Land Use Permits (Division of Mining, Land and Water)

Land use permits are issued by DMLW and may be required for exploration, development, and production activities. Land use permits can be issued for periods up to five years depending on the activity, but DMLW anticipates permits issued in conjunction with the lease will likely be for a period of one year.

In accordance with 11 AAC 96.025, a generally allowed use listed in 11 AAC 96.020 is subject to the following conditions:

- (1) activities employing wheeled or tracked vehicles must be conducted in a manner that minimizes surface damage;
- (2) vehicles must use existing roads and trails whenever possible;
- (3) activities must be conducted in a manner that minimizes
 - (A) disturbance of vegetation, soil stability, or drainage systems;
 - (B) changing the character of, polluting, or introducing silt and sediment into streams, lakes, ponds, water holes, seeps, and marshes; and
 - (C) disturbance of fish and wildlife resources;

- (4) cuts, fills, and other activities causing a disturbance listed in (3)(A) - (C) of this section must be repaired immediately, and corrective action must be undertaken as may be required by the department;
- (5) trails and campsites must be kept clean; garbage and foreign debris must be removed; combustibles may be burned on site unless the department has closed the area to fires during the fire season;
- (6) survey monuments, witness corners, reference monuments, mining location posts, homestead entry corner posts, and bearing trees must be protected against destruction, obliteration, and damage; any damaged or obliterated markers must be reestablished as required by the department under AS 34.65.020 and AS 34.65.040;
- (7) every reasonable effort must be made to prevent, control, and suppress any fire in the operating area; uncontrolled fires must be immediately reported;
- (8) holes, pits, and excavations must be repaired as soon as possible; holes, pits, and excavations necessary to verify discovery on prospecting sites, mining claims, or mining leasehold locations may be left open but must be maintained in a manner that protects public safety;
- (9) on lands subject to a mineral or land estate property interest, entry by a person other than the holder of a property interest, or the holder's authorized representative, must be made in a manner that prevents unnecessary or unreasonable interference with the rights of the holder of the property interest.

9. Material Sale Contract (Division of Mining, Land and Water)

If the operator proposes to use state-owned gravel or other materials for construction of pads and roads, an DMLW material sale contract is required. The contract must include a description of the sale area, the volume of material to be removed from the sale area, the method of payment by the purchaser, the method of removal of the material, the bonds and deposits required of the purchaser, the method of scaling to be used by the purchaser, the purchaser's liability under the contract, the improvements to and occupancy of the sale area required of the purchaser, and the reservation of material within the sale area to DMLW. A material sale contract must also include the purchaser's site-specific operating requirements, including requirements relating to boundary markers and survey monument protection; erosion control and protection of water; fire prevention and control; roads; sale area supervision; protection of fish, wildlife, and recreational values; sale area access; and public safety. A contract must state the date upon which the severance or extraction of material under the contract is to be completed. A contract may be extended before its expiration if the director determines that the delay in completing the contract is due to unforeseen events beyond the purchaser's control, or the extension is in the best interests of the state.

In connection with a material sale, the DMLW director may require the purchaser to provide a performance bond that guarantees performance of the terms of the contract. If the director requires a performance bond, the bond amount will be based on the total value of the sale. The performance bond must remain in effect for the duration of the contract unless released in writing by the director.

10. Alaska Office of History and Archaeology

The Alaska Office of History and Archaeology performs the functions of the State Historic Preservation Office (SHPO) (Office of History and Archaeology 2010). In accordance with the state's Historic Preservation Plan, they maintain the Alaska Heritage Resources Survey (AHRS), an inventory of all reported historic and prehistoric sites within the state. This inventory of cultural resources includes objects, structures, buildings, sites, districts, and travel ways, with a general provision that they are over 50 years old. To date, over 39,000 sites have been reported within

Alaska. However, this is probably only a small percentage of the sites that may actually exist but are as yet unreported. The fundamental use of the AHRS is to protect cultural resource sites from unwanted destruction. Before beginning a project, information regarding important cultural and historic sites should be obtained by contacting the Office of History and Archaeology. The AHRS data sets are comprised of “restricted access documents” and specific site location data should not appear in final reports or distributed to others.

AS 41.35.010, the Alaska Historic Preservation Act says that “It is the policy of the state to preserve and protect the historic, prehistoric, and archaeological resources of Alaska from loss, desecration, and destruction so that the scientific, historic, and cultural heritage embodied in those resources may pass undiminished to future generations.” Existing statutes, which apply to both known sites and newly discovered sites, include:

AS 41.35.200. Unlawful acts. A person may not appropriate, excavate, remove, injure, or destroy, without a permit from the Commissioner, any historic, prehistoric, or archaeological resources of the state. “Historic, prehistoric, or archaeological resources” includes deposits, structures, ruins, sites, buildings, graves, artifacts, fossils, or other objects of antiquity which provide information pertaining to the historical or prehistorical culture of people in the state as well as to the natural history of the state (AS 41.35.230(2)).

AS 11.46.482. Criminal mischief in the third degree occurs when a “person knowingly (A) defaces, damages, or desecrates a cemetery or the contents of a cemetery or a tomb, grave or memorial regardless of whether the tomb, grave, or memorial is in a cemetery or whether the cemetery, tomb, grave, or memorial appears to be abandoned, lost, or neglected; (B) removes human remains or associated burial artifacts from a cemetery, tomb, grave, or memorial regardless of whether the cemetery, tomb, grave, or memorial appears to be abandoned, lost, or neglected.”

AS 41.35.210. Criminal penalties. A person who is convicted of violating a provision of AS 41-35.010 – 41.35.240 is guilty of a class A misdemeanor.

AS 41.35.215. Civil penalties. In addition to other penalties and remedies provided by law, a person who violates a provision of AS 41.35.010 – 41.35.240 is subject to a maximum civil penalty of \$100,000 for each violation.

B. Alaska Department of Environmental Conservation

The Alaska Department of Environmental Conservation (ADEC) has statutory responsibility to conserve, improve, and protect Alaska’s natural resources and environment, by controlling air, land, and water pollution, and oil spill prevention and response. ADEC implements and coordinates several federal regulatory programs in addition to state laws (ADEC 2010e).

1. Air Quality Permits

ADEC administers the Clean Air Act and the state’s air quality program under a federally-approved State Implementation Plan (AS 46.14; 18 AAC 50) (EPA 2010b). Through this plan, federal requirements of the Clean Air Act are met including National Ambient Air Quality Standards, New Source Review (NSR), New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants (NESHAP), and Prevention of Significant Deterioration. ADEC also monitors air quality and compliance.

The National Ambient Air Quality Standards set limits on pollutants considered harmful to public health and the environment (EPA 2008a). Limits have been defined for principal pollutants, or criteria pollutants: carbon monoxide, lead, nitrogen dioxide, particulate matter (PM10), particulate matter (PM2.5), ozone, and sulfur dioxide. NSR, a permitting program required for new construction projects, ensures that air quality is not degraded by the new project, and that large new or modified

industrial sources will be as clean as possible (EPA 2010f). New Source Performance Standards are intended to promote use of the best air pollution control technologies available, and they take into account the cost of the technology and any other non-air quality, health, and environmental impact and energy requirements (EPA 2010e). The National Emissions Standards for Hazardous Air Pollutants are set for air pollutants that are not covered by National Ambient Air Quality Standards, but that may be harmful (EPA 2010d). The standards are categorized by type of source, and require the maximum degree of reduction in emissions that is achievable, as determined by the EPA. The purpose of the Prevention of Significant Deterioration program is:

...to protect public health and welfare; preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value; insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources; and assure that any decision to permit increased air pollution...is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decision making process (EPA 2010i).

The two primary types of permits issued to meet these requirements are Title I Construction Permits and Title V Operation Permits (ADEC 2010a). Permits are legal documents that the applicant must follow. Permits specify what activities are allowed, what emission limits must be met, and may specify how the facility must be operated. Permits may contain monitoring, recordkeeping, and reporting requirements to ensure that the applicant meets the permit requirements (ADEC 2010a).

a. Title I (NSR) Construction Permits

i. Permit Description

Title I permits incorporate air quality requirements for the Prevention of Significant Deterioration as well as other requirements of the Clean Air Act. This permit must be obtained before onsite construction can begin. Title I permits are required for projects that are new major sources for pollutants, or major modifications at existing sources. Prevention of Significant Deterioration requires installation of the "Best Available Control Technology (BACT)"; an air quality analysis; an additional impacts analysis; and public involvement (EPA 2010i).

BACT is determined on a case-by-case basis and takes into account energy, environmental, and economic impacts. BACT includes add-on control equipment, or modifications to production processes or methods. Examples include fuel cleaning or treatment, innovative fuel combustion techniques; and design, equipment, work practice, or operational standards (EPA 2010i).

An air quality analysis is required to show that new emissions will not violate air quality standards. In general, an assessment of existing air quality and predictions of future air quality that will result from the project are required (EPA 2010i).

ii. Review Process

The permitting process includes a pre-application meeting between the applicant and ADEC, several ADEC reviews and a Technical Analysis Report, and a 30-day public comment period, after which ADEC may issue a final permit. The final permit includes a final Technical Analysis Report and response to comments. The process for a Title I process can take up to three years, depending on the amount of meteorological data collection required. The permit must be obtained before construction may begin.

b. Title V Operation Permits

i. Permit Description

The federal Clean Air Act of 1970, and its subsequent 1990 revision and expansions (42 USC §§7401-7661), give EPA the authority to limit emissions from point sources (EPA 2010h). EPA regulations require facilities that emit certain pollutants or hazardous substances to obtain a permit to operate the facility, known as a Title V permit. In Alaska, ADEC is responsible for issuing Title V permits and making compliance inspections (ADEC 2010a; 18 AAC 50, and AS 46.14). Permits are legally binding and include enforceable conditions with which the operator must comply. The permit establishes limits on the type and amount of emissions allowed, requirements for pollution control devices and prevention activities, and monitoring and record keeping requirements (ADEC 2010a).

ii. Review Process

Operators have 12 months to submit their completed Title V permit application after commencing their operations, which can continue while ADEC processes the application. However, significant revisions to an existing permitted facility cannot be made until the permit revision is approved by ADEC. Processing time for permit revisions can be up to 6 months. Title V permits and revisions can be processed concurrently with Title I permits.

2. Solid Waste Disposal Permit

ADEC regulates solid waste storage, treatment, transportation, and disposal under 18 AAC 60. EPA administers the Resource Conservation and Recovery Act (RCRA) relating to hazardous wastes and UIC Class I injection wells. A different state agency, the AOGCC, regulates UIC Class II oil and gas waste management wells.

For all solid waste disposal facilities regulated by ADEC, a comprehensive disposal plan is required, which must include engineering design criteria and drawings, specifications, calculations, and a discussion demonstrating how the various design features (liners, berms, dikes) will ensure compliance with regulations. Before approval, solid waste disposal permit applications are reviewed for compliance with air and water quality standards, wastewater disposal, and drinking water standards, as well as for their consistency with the Alaska Historic Preservation Act. The application for a waste disposal permit must include a map or aerial photograph (indicating relevant topographical, geological, hydrological, biological, and archaeological features) with a cover letter describing type, estimated quantity, and source of the waste, as well as the type of facility proposed. Roads, drinking water systems, and airports within a two-mile radius of the site must be identified, along with all residential drinking water wells within one-half mile. There must also be a site plan with cross-sectional drawings that indicate the location of existing and proposed containment structures, material storage areas, monitoring devices, area improvements, and on-site equipment. An evaluation of the potential for generating leachate must be presented as well. For above-grade disposal options, baseline water quality data may be needed to establish the physical and chemical characteristics of the site before installing a containment cell.

Non-drilling related solid waste must be disposed of in an approved municipal solid waste landfill (MSWLF). MSWLFs are regulated under 18 AAC 60.300-.398. All other solid waste (except for hazardous materials) must be disposed of in an approved monofill (18 AAC 60.400-.495). A monofill is a landfill or drilling waste disposal facility that receives primarily one type of solid waste and that is not an inactive reserve pit (18 AAC 60.990(80)). An inactive reserve pit is a drilling waste disposal area, containment structure, or group of containment structures where drilling waste has not been disposed of after January 26, 1996, and at which the owner or operator does not plan to continue disposing of drilling waste (18 AAC 60.990(62)). Closure of inactive reserve pits is regulated under 18 AAC 60.440.

Drilling waste disposal is specifically regulated under 18 AAC 60.430. Design and monitoring requirements for drilling waste disposal facilities are identified in 18 AAC 60.430(c) and (d), respectively. Under 18 AAC 60.430(c)(1), the design must take into account the location of the seasonal high groundwater table, surface water, and continuous permafrost, as well as proximity to human population and to public water systems, with the goal of avoiding any adverse effect on these resources. The facility must be designed to prevent the escape of drilling waste and leachate; be of the minimum volume necessary for drilling waste disposal and emergency relief volume; prevent overflow from, or damage to, containment structures or other waste management areas, from operations, annual average precipitation, wind or wave action; ensure that drilling waste, leachate, or eroded soil from the facility does not cause a violation of applicable water quality standards at the surface water point of compliance or at the uppermost aquifer at the groundwater point of compliance. The plans for the proposed design and construction of the drilling waste disposal facility and the fluid management plan must be approved, signed, and sealed by a registered engineer per 18 AAC 60.430(c)(5).

Presently, the preferred practice is to dispose of drilling fluids by reinjection deep into the ground; however, EPA and ADEC may authorize limited discharge of waste streams under the NPDES permit system. All produced waters must be reinjected or treated to meet Alaska Water Quality Standards before discharge. Before a well may be permitted under 20 AAC 25.005, a proper and appropriate reserve pit, also known as a solid waste disposal cell, must be constructed or appropriate tankage installed for the reception and confinement of drilling fluids and cuttings, to facilitate the safety of the drilling operation, and to prevent contamination of freshwater and damage to the surface environment (20 AAC 25.047).

Typically, a reserve pit is a containment cell lined with an impermeable barrier compatible with both hydrocarbons and drilling mud. Average dimensions are approximately 130 feet wide by 150 feet long by 12 feet deep, although specific configurations vary by site. The cell may receive only drilling and production wastes associated with the exploration, development, or production of crude oil, natural gas or hydrocarbon contaminated solids. The disposal of hazardous or other waste in a containment cell is prohibited. After the well is deepened, the residue in the reserve pit is often dewatered and the fluids are injected into the well annulus. An inventory of injection operations including volume, date, type, and source of material injected is maintained by requirement. Following completion of well activities, the material remaining in the pit is permanently encapsulated in the impermeable liner. Fill and organic soil is placed over it and proper drainage is re-established. Surface impoundments within 1,500 feet are sampled on a periodic basis and analyzed. In addition, groundwater monitoring wells are drilled and sampled on a regular basis. If there are uncontained releases during operations, or if water samples indicate an increase in the compounds being monitored, additional observation may be required. Closure of reserve pits is administered under 18 AAC 60.200.

Substances proposed for disposal that are classified as “hazardous” undergo a more rigorous and thorough permitting and review process by both ADEC, per 18 AAC 62 and 63, and the EPA.

3. Wastewater Disposal Permit

Domestic graywater must be disposed of properly at the surface and requires a Wastewater Disposal Permit per 18 AAC 72. Typically, waste is processed through an on-site plant and disinfected before discharge. ADEC sets fluid volume limitations and threshold concentrations for biochemical oxygen demand (BOD), suspended solids, pH, oil and grease, fecal coliform, and chlorine residual. Monitoring records must be available for inspection, and a written report may be required upon completion of operations.

4. NPDES Discharge Permits and Certification

a. Permit Description

ADEC participates in the federal National Pollution Discharge Elimination System (NPDES) program that is administered by EPA (see Section E.3. below). This program regulates discharges of pollutants into U.S. waters by “point sources,” such as industrial and municipal facilities. Permits are designed to maximize treatment and minimize harmful effects of discharges. EPA administered the NPDES program in Alaska until it began transitioning the administration to ADEC in 2008. On October 31, 2008, EPA approved the state’s application to assume issuing and enforcing permits for wastewater discharges issued under the Clean Water Act. Transfer of authority for the program will be phased in over three years, from November 2008 through November 2011 (ADEC 2010g).

Authority to administer the Alaska Pollution Discharge Elimination System (APDES) permitting will transfer to ADEC in four phases. Phase I included program components of domestic discharges, log storage and transfer facilities, seafood processing and hatcheries. Phase II included federal facilities, storm water, pretreatment and miscellaneous non-domestic discharges. Phase III transferred mining discharges. Phase IV includes administration of discharges for the oil and gas industry, cooling water intakes and munitions, and is scheduled for transfer on October 31, 2011 (ADEC 2010g).

NPDES covers a broad range of pollutants, which are defined as “any type of industrial, municipal, and agricultural waste discharged into water” (EPA 2008c). Examples of oil and gas industry effluents regulated by NPDES include drilling muds, cuttings and wash water, deck drainage, sanitary and domestic wastes, desalination unit waste, blow-out preventer fluids, boiler blowdown, fire control system test water, non-contact cooling water, uncontaminated ballast and bilge waters, excess cement slurry, water flooding discharges, produced waters, well treatment fluids, and produced solids.

There are two basic types of NPDES permits: general permits and individual permits. General permits cover multiple facilities that are similar, for example, oil and gas facilities on the North Slope. General permits are efficient and cost effective because they eliminate redundancy of multiple permits for the same type of facility and discharges (EPA 2008c). They also ensure consistency among similar facilities. Individual permits apply to a specific facility and are tailored to that facility’s characteristics. Individual permits are issued for a defined time period, not exceeding five years, and the facility must reapply for the permit before it expires (EPA 2008c).

For those permits that will continue to be administered by EPA, the ADEC certifies that discharges permitted under NPDES meet state and federal water quality standards. When an application for an NPDES permit is made to EPA, a duplicate must also be filed with ADEC for certification. The permit may impose stipulations and conditions on the facility and operations, such as monitoring and/or mixing zone requirements. Once operations begin, both EPA and ADEC have the responsibility to monitor the project for compliance with the terms of the permit.

b. Review Process

The process for issuing a general permit begins when it is determined that there is a group of facilities in an area that share similar characteristics and discharges. The permitting authority develops a draft permit and fact sheet, which documents the decision-making process for developing effluent limits (EPA 2008c). The permitting authority then issues a public notice, providing opportunity for interested parties to submit comments on the draft permit. Both EPA and ADEC require opportunities for public participation (40 CFR 124.10 - .14; 18 AAC 15.140; 18 AAC 15.150). After considering public input, the permitting authority issues the final permit. The process for an individual permit is similar.

After a general permit is issued, facilities wishing to be included under the general permit submit a “Notice of Intent” to the permitting authority. Additional information describing the facility may be required. The facility may be notified that it is covered by the general permit or the facility may be required to apply for an individual permit (EPA 2008c).

5. Industry Oil Discharge Prevention and Contingency Plans

The ADEC regulates the planning and implementation of spill prevention and response under AS 46.04.030. This authority was delegated to ADEC from EPA per 40 CFR 112. In 2006, ADEC adopted new regulations (18 AAC 75) for oilfield flowlines, new construction, and maintenance standards that apply to oil tanks and pipeline facilities. Additionally, ADEC is placing increased emphasis on oil spill prevention training (ADEC 2010f).

ADF&G and ADNDR support ADEC in these efforts by providing expertise and information. The industry must file C-plans with ADEC before operations commence. ADNDR reviews and comments to ADEC regarding the adequacy of these C-plans (ADEC 2010d).

Lessees must comply with the requirements of AS 46.04.010 - .900, Oil and Hazardous Substance Pollution Control. This requirement includes the preparation and approval by ADEC of a C-plan (AS 46.04.030; 18 AAC 75.445). C-plans for exploration facilities must include a description of methods for responding to and controlling blowouts, the location and identification of oil spill cleanup equipment, the location and availability of suitable drilling equipment, and an operations plan to mobilize and drill a relief well. Parties with approved plans are required to have sufficient oil discharge containment, storage, transfer, cleanup equipment, personnel, and resources to meet the response planning standards for the particular type of facility, pipeline, tank vessel, or oil barge (AS 46.04.030(k)). If development and production should occur, additional contingency plans must be filed for each facility before commencement of activity.

Discharges of oil or hazardous substances must be reported to ADEC on a time schedule depending on the volume released, whether the release is to land or to water, and whether the release has been contained by a secondary containment or structure. The discharge must be cleaned up to the satisfaction of ADEC, using methods approved by ADEC. ADEC will modify cleanup techniques or require additional cleanup techniques for the site as ADEC determines to be necessary to protect human health, safety, and welfare, and the environment (18 AAC 75.335(d)).

A C-plan must describe the existing and proposed means of oil discharge detection, including surveillance schedules, leak detection, observation wells, monitoring systems, and spill-detection instrumentation (AS 46.04.030; 18 AAC 75.425(e)(2)(E)). The C-plan must include: a Response Action Plan; a Prevention Plan; and Supplemental Information to support the response plan, including a Best Available Technology Section (18 AAC 75.425). Operators must also provide proof of financial ability to respond in damages (AS 46.04.040).

The Response Action Plan (18 AAC 75.425(e)(1)) must include, but is not limited to, an emergency action checklist of immediate steps to be taken if a discharge occurs. The checklist must include contact information, response strategies, safety measures, communication planning and long term plans for oil collection, storage, recovery, disposal and site rehabilitation.

The Prevention Plan (18 AAC 75.425(e)(2)) must provide, but is not limited to: an analysis of the potential oil discharges that might occur; a description and schedule of regular pollution inspection and maintenance programs; prevention and mitigation measures using historical information about known discharges, and descriptions of leak detection systems; surveillance schedules; observation wells; monitoring systems; and spill-detection instrumentation.

The Supplemental Information Section (18 AAC 75.425(e)(3)) must include, but is not limited to: a facility description and operational overview, describing oil storage, transfer, exploration, or

production activities; the number and type of oil storage containers and the type and amount of oil stored; procedures for loading or transferring oil; and a description of flow and gathering lines and processing facilities. The supplemental information must show: the response command system; the realistic maximum response operation limitations; the logistical support, including identification of aircraft, vehicle, and vessels; and other transport equipment and personnel. The plan also must address the best available technologies and the justification for the proposed technologies selected (18 AAC 75.425(e)(4)).

The current statute allows the sharing of oil spill response equipment, materials, and personnel among plan holders. ADEC determines the maximum amount of material, equipment, and personnel that can be transferred, and the time allowed for the return of those resources to the original plan holder (AS 46.04.030(o)). The statute also requires the plan holders to “successfully demonstrate the ability to carry out the plan when required by [ADEC]” (AS 46.04.030(r)(2)(E)). ADEC regulations require that exercises (announced or unannounced) be conducted to test the adequacy and execution of the contingency plan. ADEC may, at its discretion, consider regularly scheduled training exercises as discharge exercises (18 AAC 75.485(a) and (d)).

In accordance with AS 46.04.200, ADEC must prepare, annually review, and revise as necessary, the statewide master oil and hazardous substance discharge prevention and contingency Unified Plan (ADEC 2010c). The plan must identify and specify the responsibilities of state and federal agencies, municipalities, facility operators, and private parties whose property may be affected by an oil or hazardous substance discharge, as well as other parties with an interest in cleanup. The plan must incorporate the incident command system, identify actions to be taken to reduce the likelihood of a discharge of oil or a hazardous substance. Revisions are submitted for public and agency review.

ADEC must also prepare and annually review and revise, as necessary, regional master oil and hazardous substance discharge prevention and contingency plans (AS 46.04.210). The regional master plans must contain the same elements and conditions as the state master plan, but are applicable to a specific geographic area. The North Slope subarea plan was revised in April of 2007, and encompasses the entire North Slope Borough (ADEC 2007).

C. Alaska Department of Fish and Game

ADF&G manages most fish and wildlife populations, their habitats, and activities that may affect those resources. For activities in the lease sale area Fish Habitat and hazing permits may be required; however, a public notice is not required.

1. Fish Habitat Permit

Under 16.05.871(b) a Fish Habitat permit is required prior to using, diverting, obstructing, polluting, or changing the natural flow or bed of a specified anadromous fish river, lake, or stream, or to operate vehicles or equipment in the bed of given waterbodies. Under 16.05.841, a permit is required if a stream frequented by any fish is obstructed to ensure efficient passage of migrant fish. In some parts of the lease sale area, a Fish Habitat permit may be subject to ACMP consistency review.

2. Hazing Permit

Under 16.05.920, a permit to haze that may include the actual taking of some species may be issued for public safety and/or spill response. Such permits may not be required if the lessee is a member of Alaska Clean Seas (ACS).

D. Alaska Oil and Gas Conservation Commission

AS 31.05, the Alaska Oil and Gas Conservation Act, created the Alaska Oil and Gas Conservation Commission (AOGCC). Its regulatory authority is outlined in Alaska Title 20, Chapter 25 of the administrative code (20 AAC 25). It acts to prevent waste, protect the correlative rights and improve ultimate recovery, and protect underground freshwater.

AOGCC oversees oil and gas drilling, development and production, reservoir depletion and metering operations on all lands subject to the state's police powers. It administers the Underground Injection Control (UIC) Program for the State of Alaska, as delegated authority of the federal Safe Drinking Water Act (SDWA). It serves as an adjudicatory forum for resolving certain oil and gas disputes between owners, including the state. The Commission carries forth statutory mandates consistent with the protection of health, safety and the environment. It strives for cooperation with industry, while maintaining well-defined and essential regulatory requirements. AOGCC holds hearings and adjudicates decisions, which require the combined expertise of petroleum geology and petroleum engineering (AOGCC 2010b).

1. Permit to Drill

a. Permit Description

In order to drill a well for oil or gas in Alaska, a person must obtain a Permit to Drill from AOGCC. This requirement applies not only to exploratory, stratigraphic test, and development wells, but also to injection and other service wells related to oil and gas activities. AOGCC does not manage or decide whether to develop state owned resources. Rather, it regulates certain oil and gas operations anywhere in Alaska, whether on state, federal, or private land.

AOGCC's oversight of drilling operations focuses on ensuring that appropriate equipment is used and appropriate practices are followed to maintain well control, protect groundwater, avoid waste of oil or gas, and promote efficient reservoir development. AOGCC is not authorized to deny a Permit to Drill on the basis of land use concerns or conflicts between surface and subsurface interests.

AOGCC is one of several state agencies that have roles in reviewing and approving oil and gas activities. AOGCC's issuance of a Permit to Drill does not relieve the applicant of any obligations to comply with the permit or regulatory requirements of other state, local, or federal agencies before drilling (AOGCC 2010a).

b. Review Process

A Permit to Drill from AOGCC is often the last step in the overall approval process, and usually all of the other concerned agencies have given their approval. The application must be accompanied by the items set out in 20 AAC 25.005(c). A geologist and a drilling engineer review the entire application in detail using a multi-question checklist to ensure the application is complete, accurate, and conforms to all applicable regulations.

AOGCC will notify the operator if there are any deficiencies in the application. The operator will either supplement the original application with revised or additional information, or, in the event that substantive changes are needed, resubmit the entire application. If unanticipated exceptions to regulations or AOGCC orders are needed, such as a well spacing exception, the operator will be notified. Usually such exceptions are handled through a public notice process, with an opportunity for a hearing. If the permit is approved, it will include any operational or environmental safety stipulations identified by AOGCC (AOGCC 2010a).

2. Underground Injection Control Program (UIC)

The AOGCC has primacy for Class II wells in Alaska through a Memorandum of Understanding with the EPA. The goal of the UIC program is to protect underground sources of drinking water from contamination by oil and gas (Class II) injection activities. The three types of Class II wells include oilfield waste disposal wells, enhanced oil recovery (EOR) wells, and hydrocarbon storage wells. AOGCC reviews and takes appropriate action on proposals for the underground disposal of Class II oil field wastes (20 AAC 25.252). Before receiving an approval, an operator must demonstrate that the movement of injected fluids into freshwater sources will not occur. Disposal or storage wells must be cased and the casing cemented in a manner that will isolate the disposal or storage zone and protect oil, gas, and freshwater sources (AOGCC 2010a)

Along with a plat showing the location of other wells within one-quarter mile, the disposal injection order application must include information about surface owners located within one-quarter mile of the injection well(s). The disposal injection order application must also contain the name, description, depth, thickness, lithologic description, and geological data of the disposal formation and adjacent confining zones. A description of the fluid to be injected, including composition, source, daily amount, and disposal pressures, and sufficient information and analysis, must be presented demonstrating that the disposal well will not initiate or propagate fractures through the confining zones that allow fluids to migrate. Under certain circumstances a freshwater aquifer exemption may be granted (20 AAC 25.440).

Following approval, liquid waste from drilling operations may be injected through a dedicated tubing string into the approved subsurface zone. The pumping of drilling wastes through the annular space of a well is an operation incidental to drilling of the well, and is not a disposal operation subject to regulation as a Class II well. AOGCC approval of annular disposal operations is required before commencing pumping operations (20 AAC 25.080) (AOGCC 2010a).

3. Annular Disposal of Drilling Waste

An AOGCC permit is required if waste fluid is to be injected into a well annulus. The material must be incidental to the drilling of a well (muds and cuttings). AOGCC may take all actions necessary to allow the state to acquire the primary enforcement responsibility for the control of underground disposal related to the recovery and production of oil and natural gas. ADEC considers the volume, depth, and other physical and chemical characteristics of the formation designated to receive the waste. Annular disposal is not permitted into water bearing zones where dissolved solids or salinity concentrations fall below predetermined threshold limits. Waste not generated from a hydrocarbon reservoir cannot be injected into a reservoir (AOGCC 2010a).

4. Disposal Injection Orders

Operators may apply for disposal injection orders to allow disposal activity in individual wells. After the public review process and Commission analysis, an order may be issued that approves the proposed disposal project (AOGCC 2010a).

5. Area Injection Orders

Injection orders may be issued on an area basis rather than for individual wells in areas where greater activity is anticipated. The area injection orders describe, evaluate, and approve subsurface injection on an area wide basis for enhanced oil recovery and disposal purposes (AOGCC 2010a).

6. Other Oversight Activities

The AOGCC has oversight authority for reservoir plans of operation and development, conservation orders, flaring, inspections and prevention of waste of hydrocarbon resources, and hydraulic fracturing procedures (AOGCC 2010a).

7. Review Process

AOGCC actions that have statewide application, such as adopting regulations, are conducted in accordance with the Administrative Procedures Act. Major actions that result in conservation orders that apply to a single well or field receive public notice by publication in a newspaper and a public hearing may be held (20 AAC 25.540). In addition, a public mailing list is maintained for the purpose of sending appropriate notices, orders, and publications to persons who request to be put on these lists (20 AAC 25.545) (AOGCC 2010a).

E. U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (EPA) protects human health and the environment by implementing, administering, or overseeing programs and regulations promulgated in federal environmental legislation. These programs, some of which are delegated to the states, safeguard the air, land, and water environments.

1. Air Quality Permits

The federal Clean Air Act includes a number of air quality standards and requirements, including National Ambient Air Quality Standards, New Source Review (NSR), New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, and Prevention of Significant Deterioration. The two primary types of permits are issued to meet these requirements: Title I Construction Permits, which must be obtained before onsite construction can begin, and Title V Operation Permits, which regulate facilities that emit certain pollutants or hazardous substances (EPA 2010a).

The ADEC administers the Clean Air Act and the air quality program for the State of Alaska under a federally approved State Implementation Plan that applies these standards. See Section B(1) for further details.

2. Hazardous Waste (RCRA) Permits

The federal Resource Conservation and Recovery Act (RCRA) established a program for managing hazardous wastes to ensure the protection of human health and the environment, with the EPA as the regulatory authority. Regulations established by the EPA direct procedures for transporting, storing, and disposing of hazardous wastes, and for designing and operating treatment, storage, and disposal facilities safely. A corrective action program guides investigations and cleanups of contaminated air, groundwater, surface water, or soil. Regulations are enforced through inspections, monitoring of waste handlers, taking legal action for noncompliance, and providing compliance incentives and assistance (EPA 2010c).

States may receive authorization to implement the program, which requires that the state standards be at least as strict as the federal standards. Alaska is not authorized for this program, and therefore it is implemented by the EPA in Alaska.

3. NPDES Discharge Permit

ADEC has begun to take over authority for administering this program, now titled APDES. EPA is scheduled to transfer authority for the program in phases over three years, from November 2008

through November 2011. Phase IV of the transfer, administration of discharges for the oil and gas industry, is scheduled for October 31, 2011 (ADEC 2010g).

Effluents discharged by the oil and gas industry into waters and wetlands are regulated through EPA's NPDES program as required by the federal Clean Water Act. The NPDES program, which covers other industries and waters as well, ensures that state and federal clean water quality standards are maintained by requiring a permit to discharge wastes into the nation's waters (EPA 2008c). NPDES permits specify the type and amount of pollutant, and include monitoring and reporting requirements, to ensure that discharges are not harmful to water quality and human health (EPA 2010g). Some permits may be subject to procedures of the National Environmental Policy Act (EPA 2010g).

4. Underground Injection Control (UIC) Class I and II Injection Well Permits

EPA is responsible for regulating injection wells, which are used to dispose of fluid wastes by injecting the waste underground (EPA 2008b). Authorized as part of the federal Safe Drinking Water Act of 1974, EPA's Underground Injection Control (UIC) program protects underground sources of drinking water from contamination by injection wells. Injection wells are categorized into five classes; Class I and II are most common in the oil and gas industry. EPA may delegate authority for implementing the program to states that meet federal standards. EPA implements the program for Class I wells in Alaska, and authority for Class II oil and gas wells has been delegated to AOGCC (see Section D.2.).

All injections falling into Class I must be authorized through EPA's UIC Class I program. Class I wells must operate under a permit that is valid for up to 10 years. Permits stipulate requirements such as siting, construction, operation, monitoring and testing, reporting and record keeping, and closure. Requirements differ for wells depending on whether they accept hazardous or non-hazardous wastes (EPA 2008b).

F. U.S. Army Corps of Engineers

1. Section 10 and Section 404 Permits

a. Permit Description

The U.S. Army Corps of Engineers (Corps) has regulatory authority over construction, excavation, or deposition of materials in, over, or under navigable waters of the United States, or any work which would affect the course, location, condition, or capacity of those waters (Rivers and Harbors Acts of 1890 [superseded] and 1899 [33 USC 401, et seq.; Section 10 [33 USC 403]; USACOE 2010b). These Section 10 permits cover oil and gas activities, including exploration drilling from jack-up drill rigs and installation of production platforms.

Section 404 of the Clean Water Act established a program to regulate the discharge of dredged and fill material into waters and wetlands of the United States. This program is administered by the Corps, which is authorized to issue Section 404 permits for discharging dredge and fill materials.

Individual permits (issued for specific projects) are the basic type of permit issued. General permits (including programmatic, nationwide, and regional general permits) authorize activities that are minor and will result in minimal individual and cumulative adverse effects. General permits carry a standard set of stipulations and mitigation measures. Letters of permission, another type of project authorization, are used when the proposed project is minor, will not have significant individual or cumulative environmental impact, and appreciable opposition is not expected (USACOE 2010a; USACOE 2010b).

b. Review Process

Section 404 and Section 10 permits follow a similar three-step review process: pre-application consultation (for major projects); formal project review; and decision making.

During the pre-application consultation, the applicant meets with Corps staff from the local district, interested resource agencies (federal, state, or local), and at times, interested public. These meetings provide informal discussions about the proposal before the applicant commits resources such as funds and detailed designs to the project; provide the applicant with possible alternatives and measures for reducing project impacts; and provide the applicant with information about factors the Corps considers in the permitting process (USACOE 2010a; USACOE 2010b).

After receiving a formal application, the first step in the Corps' project review is to obtain public input, which is central to the permitting process. The project is public noticed, and comments and information are requested that will assist with evaluating the positive and negative effects on the public interest. Public hearings may be held if substantial issues are raised that warrant additional public input. USFWS, NMFS, ADNR, and ADF&G may also submit comments to the Corps (USACOE 2010a; USACOE 2010b).

Next, the Corps evaluates the project's impacts, considers all comments received, negotiates changes to the project as required, and drafts documentation supporting a recommended permit decision including environmental impacts of the project, findings of public input, and other special evaluations depending on the type of project (USACOE 2010a; USACOE 2010b).

In making a final decision on whether to issue a permit, the Corps weighs all relevant factors, which can include conservation, economics, aesthetics, wetlands, cultural values, navigation, fish and wildlife values, water supply, water quality, and other factors judged important to the needs and welfare of the people (USACOE 2010a; USACOE 2010b).

The process for letters of permission is abbreviated. In this situation, the proposal is coordinated with fish and wildlife agencies and adjacent property owners who might be affected by the project, but the public at large is not notified (USACOE 2010a; USACOE 2010b).

ADEC participates in the Section 404 and 10 permit review processes by reviewing the permit application to ensure that the proposed project will comply with Alaska water quality standards. ADEC then approves of the permit through a Clean Water Act Section 401 Certification.

Permits may also receive review by other agencies, such as the USFWS and NMFS, to ensure compliance with other laws such as the Endangered Species Act, the National Environmental Policy Act, and Essential Fish Habitat Provisions of the Magnuson-Stevens Act.

G. U.S. Pipeline and Hazardous Materials Safety Administration

The federal Office of Pipeline Safety (OPS) in the Pipeline and Hazardous Materials Safety Administration (PHMSA), an agency of the U.S. Department of Transportation, is responsible for regulating movement of hazardous materials by pipeline (PHMSA 2010b). OPS develops regulations and other approaches to risk management to assure safety in design, construction, testing, operation, maintenance, and emergency response of pipeline facilities (PHMSA 2010a; PHMSA 2010b). The Pipeline Safety Improvement Act of 2002 advances planning, inspection and maintenance of pipeline transportation systems, with requirements for integrity management and active inspection programs (PHMSA 2010a). There are two federal PHMSA inspectors to review technical issues on hazardous liquid pipelines in Alaska (PHMSA 2010a). Under the PIPES Act of 2006, hazardous liquid pipeline operators are required to develop integrity management programs for transmission pipelines.

H. U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS), is a part of the Department of the Interior and is dedicated to the conservation of natural resources. In Alaska, the USFWS focuses on working with others to conserve, protect and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people (USFWS 2010b). They have management authority for migratory birds, and threatened and endangered species, the national wildlife refuge system, and on lands under their jurisdiction, landscape conservation and aquatic resources. USFWS issues permits related to migratory birds, endangered species, with the intent to manage risks and benefits of projects by using best available science and expertise. Permits can authorize activities consistent with conservation, protection and enhancement of wildlife, plants, and their habitats (USFWS 2010a).

I. Regulation of Oil Spill Prevention and Response

1. Federal Statutes and Regulations

Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 USC §9605), and §311(c)(2) of the Clean Water Act, as amended (33 USC §1321(c)(2)) require environmental protection from oil spills. CERCLA and the Clean Water Act require a National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR §300; 33 USC §1321(d)). See also Section B(5) above concerning delegation of authority to ADEC. Under these regulations, the spiller must plan to prevent and immediately respond to oil and hazardous substance spills and be financially liable for any spill cleanup. If the pre-designated Federal On-Scene Coordinator (FOSC) determines that neither timely nor adequate response actions are being implemented, the federal government will respond to the spill, and then seek to recover cleanup costs from the responsible party.

The Oil Pollution Act of 1990 (OPA 1990) requires the development of facility and tank vessel response plans and an area-level planning and coordination structure to coordinate federal, regional, and local government planning efforts with the industry. OPA 1990 amended the Clean Water Act (§311(j)(4); 33 USC §1231(j)) and established area committees and area contingency plans as the primary components of the national response planning structure. In addition to human health and safety, these area committees have three primary responsibilities:

- Prepare an area contingency plan;
- Work with state and local officials on contingency planning and preplanning of joint response efforts, including procedures for mechanical recovery, dispersal, shoreline cleanup, protection of sensitive areas, and protection, rescue and rehabilitation of fisheries and wildlife; and,
- Work with state and local officials to expedite decisions for the use of dispersants and other mitigating substances and devices.

In Alaska, the Alaska Regional Response Team (ARRT) is an advisory board to the FOSC. It provides processes for participation by federal, state and local governmental agencies to participate in response to pollution incidents (ADEC 2010b). The area contingency plan for the State of Alaska is the Unified Plan. Since Alaska is so large and geographically diverse, the federal agencies have found it necessary to prepare subarea contingency plans. The North Slope Subarea Contingency Plan was revised in April 2007, and encompasses the entire NSB (ADEC 2007).

J. North Slope Borough

The NSB has adopted a comprehensive plan and land management regulations under Title 29 of the Alaska Statutes (AS 29.40.020-040). These regulations are Title 19 of the NSB Municipal Code and require borough approval for certain activities necessary for exploration and development of oil and

gas leases. These activities include construction of facilities, placement of gravel pads, use of explosive devices and tundra travel. The NSB may assert its land management powers to the fullest extent permissible under law to address any outstanding concerns regarding impacts to the area's fish and wildlife species, habitat, and subsistence activities.

The NSB also established a Traditional Land Use Inventory (TLUI). The TLUI data sets are restricted access documents and specific site location data should not appear in final reports or distributed to others (NSB 2011, Dale 2011). The NSB also advises that for any earth-moving activity, ice road, or seismic survey that a Certificate of Inupiat History, Language and Culture /Traditional Land Use Inventory (IHLC/TLUI) Clearance from the NSB Planning Department may be required.

K. Other Requirements

1. Native Allotments

Lessees must comply with applicable federal law concerning Native allotments. Activities proposed in a plan of operations must not unreasonably diminish the use and enjoyment of lands within a Native allotment. Before entering onto lands subject to a pending or approved Native allotment, lessees must contact the Bureau of Indian Affairs (BIA) and the Bureau of Land Management (BLM) and obtain approval to enter.

2. U.S. Coast Guard

The U.S. Coast Guard has authority to regulate offshore oil pollution under 33 CFR §§153-157 and to make a determination of a hazard to navigation under 33 CFR §64.31.

3. Alaska Department of Labor and Workforce Development

The Alaska Department of Labor and Workforce Development administers the Alaska Employment Security Act under AS 23.30 and 8 AAC 85. They promote employment security by increasing opportunities for placement, and provide eligible workers with compensation while unemployed (ADLWD 2010).

The Department also administers some delegated authorities of the Occupational Safety and Health Administration (OSHA), PL-91-596, 1970. Under Section 18 of the law, State Jurisdiction and State Plans, it allows states to obtain approval to assume responsibility for development and enforcement of federal occupational safety and health standards. The Department has obtained approval from OSHA for administration of some of the federal OSHA standards (OSHA 2010; ADLWD 2010).

4. Applicable Laws and Regulations

In addition to existing laws and regulations applicable to oil and gas activities, DO&G requires, under paragraph 26 of the state's standard lease contract, that leases be subject to all applicable state and federal statutes and regulations in effect on the effective date of the lease. Leases will also be subject to all future laws and regulations placed in effect after the effective date of the leases to the full extent constitutionally permissible and will be affected by any changes to the responsibilities of oversight agencies.

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