

Chapter Seven: Governmental Powers to Regulate Oil and Gas

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Chapter Seven: Governmental Powers to Regulate Oil and Gas

AS 38.05.035(g)(1)(B)(v) requires the director to consider and discuss the governmental powers to regulate the exploration, development, production, and transportation of oil and gas or gas only. All exploration license and subsequent lease activities — exploration, development and production, and transportation — are subject to federal, state, and local laws, regulations, ordinances, and policies with which the licensee must comply. An exploration license grants the licensee the right to explore, but does not allow it to do any physical work on the land itself. Should exploration proceed and prove successful, subsequent activities could include building new facilities and infrastructure, and extracting, removing, cleaning, processing and disposing of oil, gas and associated substances.

This chapter is not a comprehensive description of all of the laws and regulations that may apply to activities associated with exploration, development, production, and transportation. Rather, it provides a broad overview of the laws and regulations that pertain to oil and gas activities. Actual requirements and processes, terms, and conditions may vary. Regulatory agencies may have different roles in the oversight and regulation of oil and gas activities; although some agencies may have overlapping authorities. The licensee is responsible for knowing and complying with all applicable state, federal, and local laws, regulations, ordinances, and policies.

In addition to existing laws and regulations applicable to oil and gas activities, DO&G requires, under its standard license and lease contracts, that licenses and leases are subject to all applicable state and federal statutes and regulations in effect on the effective date of the license or lease. Licenses and leases are subject to all future laws and regulations in effect after the effective date of the license or lease to the full extent constitutionally permissible and are subject to any changes to the responsibilities of oversight agencies.

State of Alaska

A. Department of Natural Resources (DNR)

DNR has several agencies that approve, oversee, or coordinate activities related to oil and gas.

1. Plan of Operations Approval (DO&G)

Land use activities under the oil and gas exploration license are regulated under 11 AAC 83.158, 11 AAC 83.346, and the lease. They require the licensee to prepare plans of operations that must be approved by DO&G before the licensee begins work. Each plan of operations is site-specific and is tailored to the activity requiring the permit. DO&G may make field inspections to monitor and assess compliance.

When it considers a plan of operations, DO&G may require stipulations in addition to the mitigation measures developed through the written finding (11 AAC 83.158(e), 11 AAC 83.346(e)). These additional stipulations address site-specific concerns directly associated with the proposed project. The license stipulations are attached to the plan of operations approval and are binding on the licensee. The license also requires the licensee keep the license area open for inspection by authorized state officials. DNR, DEC, ADF&G, and AOGCC may monitor field activities for compliance with each agency's terms. In addition, each permittee must post a bond before beginning operations (11 AAC 83.160).

2. Geophysical Exploration Permit (DO&G)

A geophysical exploration permit is a land use permit issued by DO&G under 11 AAC 96.010. Seismic surveys related to oil and gas development are the most common activity authorized by this permit. Submission of seismic exploration and stratigraphic test data to the state is a permit condition (11 AAC 96.210). Under AS 38.05.035(a)(8)(C), geological and geophysical data are held confidential. 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)).

DO&G may require security depending on the applicant's history of compliance and potential risk to the state (11 AAC 96.060).

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. A permit remains in effect for the term issued, unless revoked sooner. A permit is revocable effective immediately for cause for (1) a violation of a permit provision or (2) a violation of 11 AAC 96. A permit is revocable at will if DO&G determines that revocation is in the state's interest. DO&G will give 30 days' notice before revoking a permit at will (11 AAC 96.040(a)).

3. Pipeline Rights-of-way

The State Pipeline Coordinator's Office (SPCO) administers the Alaska Right-of-Way Leasing Act process (AS 38.35.010). Most oil and gas transportation facilities within the license area or beyond its boundaries must be authorized by SPCO. As prescribed by AS 38.35.010, SPCO issues leases on state land for pipeline rights-of-way (SPCO 2014).

4. Alaska Petroleum Systems Integrity Office (PSIO)

PSIO is the lead state agency for oversight of facilities, equipment, and infrastructure for the sustained production and transportation of oil and natural gas resources in the state. PSIO was established in 2007 by executive order of the governor to:

- (1) ensure that oil and gas infrastructure is designed and maintained in a safe and environmentally sound manner in compliance with state law;
- (2) minimize economic impacts of unplanned interruptions in oil and gas production to the ongoing functions of state government;
- (3) avoid premature abandonment of oil and gas infrastructure and waste of state resources; and
- (4) ensure efficient and effective oversight of oil and gas industry practices by utilizing existing state government structures and processes to the maximum extent possible.

Through designated agency liaisons, PSIO leads interagency efforts to evaluate industry system integrity performance. Designated agencies, to the extent authorized by state regulations, require oil and gas producers and operators to provide comprehensive descriptions of current practices of quality control, quality assurance, monitoring, and inspection used to ensure the integrity and reliability of oil and natural gas facilities, equipment, infrastructure and activities.

The goal of PSIO is to provide a comprehensive and cost-effective approach to statewide oil and gas oversight activities, and to address any gaps in oversight. PSIO is tasked with ensuring that

overarching quality management programs are in place and followed, both within industry and involved state agencies. PSIO makes recommendations to the commissioner of DNR regarding gaps, findings, and issues that address the reliability and system integrity of oil and gas infrastructure (PSIO 2014).

Additionally, the PSIO Coordinator makes recommendations to the DNR commissioner regarding enforcement actions by DNR and cases to be referred to other state, local, or federal agencies for appropriate civil or criminal penalties available under the law (PSIO 2007).

5. Temporary Water Use Authorization (DMLW)

Exploration activities may require a temporary water use authorization. DMLW administers temporary water use authorizations as required under 11 AAC 93.035 before (1) the temporary use of a significant amount of water, (2) if the use continues for less than five consecutive years, and (3) the water applied for is not otherwise appropriated (DMLW 2014). The volume of water to be used and permitted depends upon whether it is 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.

The authorization is 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.

6. Permit and Certificate to Appropriate Water (DMLW)

Industrial or commercial water use 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 this permit 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 to protect fish and wildlife habitat, recreation, 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.

7. Land Use Permits (DMLW)

DMLW issues land use permits and may require them for oil and gas activities unless the activities are approved under a plan of operations. Land use permits can be issued for periods up to five years depending on the activity.

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; and
- (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.

8. Material Sale Contract (DMLW)

If the operator proposes to use state-owned gravel or other materials for construction of pads and roads, DMLW requires a material sale contract (11 AAC 71). The contract must include, at a minimum, a description of the sale area; the volume of material to be removed from the sale area; the method of removal of the material; the bonds and deposits required of the purchaser; and the purchaser's liability under the contract. The material sale contract must also include the purchaser's site-specific operating requirements.

The 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 DMLW director determines the delay in completing the contract is due to unforeseen events beyond the purchaser's control, or the extension is in the state's best interests.

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 required, 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 DMLW director.

9. Office of History and Archaeology (OHA)

OHA does the work of the State Historic Preservation Office (SHPO) (OHA 2014a). OHA follows the state's Historic Preservation Plan in maintaining the Alaska Heritage Resources Survey (AHRS), an inventory of all reported historic and prehistoric sites within the state. This inventory includes objects,

structures, buildings, sites, districts, and travel ways, with a general provision that they are over 50 years old. The fundamental use of the AHRS is to protect cultural resource sites from unwanted destruction (OHA 2014b). Before beginning a project, information regarding important cultural and historic sites should be obtained by contacting the OHA. The AHRS data sets are “restricted access documents” and specific site location data should not appear in final reports or distributed to others.

AS 41.35.010 states that it is the policy of the state to preserve and protect the historic, prehistoric, and archeological resources of Alaska from loss, desecration, and destruction so that the scientific, historic, and cultural heritage embodied in these resources may pass undiminished to future generations. Further, the historic, prehistoric, and archeological resources of the state are properly the subject of concerted and coordinated efforts exercised on behalf of the general welfare of the public in order that these resources may be located, preserved, studied, exhibited, and evaluated.

It is unlawful for a person to appropriate, excavate, remove, injure, or destroy, without a permit from the DNR commissioner, any historic, prehistoric, or archaeological resources of the state (AS 41.35.200(a)).

A person may be charged with criminal mischief in the third degree if 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; and
- (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 11.46.482(a)(3)).

A person who is convicted of violating a provision of AS 41.35.010 –.240 is guilty of a class A misdemeanor. In addition to other penalties and remedies provided by law, a person who violates these provisions is subject to a maximum civil penalty of \$100,000 for each violation.

B. Department of Environmental Conservation (DEC)

DEC 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. DEC implements and coordinates several federal regulatory programs in addition to state laws (DEC 2014a).

1. Interference with Salmon Spawning Permits

DEC is responsible for granting or denying permits for activities that interfere with salmon spawning streams and waters. If a person plans to obstruct, divert, or pollute waters of the state utilized by salmon in the propagation of the species, they must first apply for and obtain a permit before beginning any activities (AS 16.10.010).

Permits may be granted if DEC finds the purpose of the permit is to develop power, or obtain water for civic, domestic, irrigation, manufacturing, mining, or other purposes tending to develop the state’s natural resources. The applicant may also be required to construct and maintain adequate fish ladders, fishways, or other means by which fish may pass over, around, or through the dam, obstruction, or diversion in the pursuit of spawning.

2. Air Quality Permits

DEC administers the federal Clean Air Act (42 USC 85 §§7401-7761q) and the state’s air quality program under a federally-approved State Implementation Plan (AS 46.14; 18 AAC 50). Through this plan, federal requirements of the Clean Air Act are met including National Ambient Air Quality Standards (NAAQS), New Source Review (NSR), New Source Performance Standards (NSPS),

National Emission Standards for Hazardous Air Pollutants (NESHAP), and Prevention of Significant Deterioration (PSD). Additionally, DEC monitors air quality and compliance.

The NAAQS set limits on pollutants considered harmful to public health and the environment. 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 2014a). NSPS are intended to promote use of the best air pollution control technologies available, and account for the cost of technology and any other non-air quality, health, and environmental impact and energy requirements (EPA 2014b). NESHAPs are set for air pollutants that are not covered by NAAQS, but that may be harmful (EPA 2014c). 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 two primary types of permits issued to meet these requirements are Title I Construction Permits and Title V Operation Permits (DEC 2014b). 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 (DEC 2014b).

a. Title I (NSR) Construction Permits

Title I permits incorporate air quality requirements for the PSD 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. PSD requires installation of the "Best Available Control Technology (BACT)"; an air quality analysis; an additional impacts analysis; and public involvement (EPA 2014d).

The permitting process includes a pre-application meeting between the applicant and DEC, several DEC reviews, a Technical Analysis Report, and a 30-day public comment period, after which DEC 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 3 years, depending on the amount of meteorological data collection required.

b. Title V Operations Permits

The federal Clean Air Act gives EPA authority to limit emissions from point sources (EPA 2014e). 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, DEC is responsible for issuing Title V permits and making compliance inspections (AS 46.14; 18 AAC 50; DEC 2012a). 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 (DEC 2014b).

Operators have one year after beginning operations to submit their completed Title V permit application. Operations can continue while DEC processes the application. However, significant revisions to an existing permitted facility cannot be made until DEC approves the permit revision. Processing time for permit revisions can take up to six months. Title V permits and revisions can be processed concurrently with Title I permits.

c. Other Requirements

DEC also operates ambient air quality monitoring networks under the provisions of the Prevention of Significant Deterioration Program to assess compliance with the NAAQS for carbon monoxide, particulates, nitrogen dioxide, sulfur oxide, and lead; assesses ambient air quality for ambient air toxics level; provides technical assistance in developing monitoring plans for air monitoring projects; and issues air advisories to inform the public of hazardous air conditions (DEC 2014b).

Operators in Alaska are required to minimize the volume of gas released, burned, or permitted to escape into the air (20 AAC 25.235(c)). Operators must report monthly to AOGCC any flaring event lasting over an hour. AOGCC investigates these incidents to determine if there was unnecessary waste (AOGCC 2004).

3. Solid Waste Disposal Permit

DEC 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 Underground Injection Control (UIC) Class I injection wells. A different state agency, the AOGCC, regulates UIC Class II oil and gas waste management wells.

DEC requires a comprehensive disposal plan for all solid waste disposal facilities it regulates. Solid waste disposal permit applications are reviewed for compliance with air and water quality standards, wastewater disposal, and drinking water standards, and their consistency with the Alaska Historic Preservation Act before approval.

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).

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).

All produced waters must be reinjected down well or treated to meet Alaska Water Quality Standards before discharge.

Hazardous substances to be disposed of have a separate permitting and review process by both DEC under 18 AAC 62 and 63 and the EPA.

4. Wastewater Disposal Permit

Domestic graywater must be disposed of properly at the surface, which requires a wastewater disposal permit (18 AAC 72). Monitoring records must be available for inspection, and a written report may be required upon completion of operations.

5. APDES Discharge Permits and Certification

DEC administers the Alaska Pollution Discharge Elimination System (APDES) program. 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.

APDES covers a broad range of pollutants, which are defined as “any type of industrial, municipal, and agricultural waste discharged into water” (18 AAC 83.990).

There are two basic types of APDES permits: general permits and individual permits. General permits cover multiple facilities that are similar. Individual permits are issued for a defined time period, not exceeding five years, and the facility must reapply for the permit before it expires.

6. Industry Oil Discharge Prevention and Contingency Plans

DEC regulates spill prevention and response under AS 46.04.030 (DEC 2014c). ADF&G and ADNR support DEC in these efforts by providing expertise and information. Contingency plans (C-plans) must be filed with DEC before beginning operations. DNR reviews and comments to DEC regarding the adequacy of these C-plans (DEC 2014d).

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. Holders of 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 follow, additional contingency plans must be filed for each facility before activity commences.

Discharges of oil or hazardous substances must be reported to DEC recording 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 DEC's satisfaction. DEC will modify proposed cleanup techniques or require additional cleanup techniques for the site as DEC determines to be necessary to protect human health, safety, and welfare, and the environment (18 AAC 75.335(d)).

C-plans must describe 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)). C-plans 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).

C. Alaska Department of Fish and Game (ADF&G)

1. Fish Habitat Permit

Under AS 16.05.871(b) a fish habitat permit is required before performing any work that would affect an anadromous fish stream, including operating vehicles or equipment in the stream bed, or using, diverting, obstructing, polluting or changing the natural flow or bed of an anadromous river, lake or stream. Under AS 16.05.841, a permit is required to ensure that any stream frequented by any fish is not obstructed in any way that would block fish passage.

2. Hazing Permit

Under AS 16.05.920, a permit to haze that may include the actual taking of some species may be issued for public safety or spill response.

3. Special Area Permit

Any land or water use activities in a special area that may impact fish, wildlife, habitats, or existing public use may require a permit (5 AAC 95.420) (ADF&G 2013). Special areas are described as refuges, sanctuaries, or critical habitat areas.

D. Alaska Oil and Gas Conservation Commission (AOGCC)

The Alaska Oil and Gas Conservation Commission (AOGCC) was established by the Alaska Oil and Gas Conservation Act (AS 31.05) to prevent waste, protect correlative rights, improve ultimate recovery, and protect underground freshwater.

Among its other duties, AOGCC issues permits and orders, and administers the UIC Program for the State of Alaska as the delegated authority of the federal Safe Drinking Water Act.

1. Permit to Drill

A permit to drill a well from AOGCC is often the last step in the overall approval process, and usually occurs after 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).

AOGCC will notify the applicant 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 (AOGCC 2014).

2. Underground Injection Control Program (UIC)

AOGCC regulates 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 injected fluids will not move into freshwater sources. 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 2014).

Once approved, 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.

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 muds and cuttings incidental to the drilling of a well. AOGCC 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 2014)

4. Disposal Injection Orders

Operators may apply for disposal injection orders to dispose of waste in individual wells. After the public review process and AOGCC analysis, an order may be issued that approves the proposed disposal project (AOGCC 2014).

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. Area injection orders describe, evaluate, and approve subsurface injection on an area wide basis for enhanced oil recovery and disposal purposes (AOGCC 2014).

E. Department of Labor and Workforce Development (DOLWD)

The Alaska Department of Labor and Workforce Development (DOLWD) administers the Alaska Employment Security Act under AS 23.30 and 8 AAC 85.

DOLWD also administers some delegated authorities of the Occupational Safety and Health Administration (OSHA), PL-91-596, 1970. Section 18 of the law, State Jurisdiction and State Plans, allows states to obtain approval to assume responsibility for development and enforcement of federal occupational safety and health standards. DOLWD has obtained approval from OSHA for administration of some of the federal OSHA standards (OSHA 2014; DOLWD 2014).

Federal

F. Environmental Protection Agency (EPA)

The U.S. Environmental Protection Agency (EPA) implements, administers, or oversees programs and federal environmental regulations. These programs, some of which are delegated to the states, safeguard the air, land, and water.

1. Air Quality Permits

DEC administers the federal Clean Air Act and the air quality program for the State of Alaska under a federally-approved State Implementation Plan (see Section B2) (EPA 2014f).

2. Hazardous Waste (RCRA) Permits

The federal Resource Conservation and Recovery Act (RCRA) regulates the management of solid waste, hazardous waste, and underground storage tanks holding petroleum products or certain chemicals. Regulations set the parameters for transporting, storing, and disposing of hazardous wastes and for designing and operating treatment, storage, and disposal facilities safely. Regulations are enforced through inspections, monitoring of waste handlers, taking legal action for noncompliance, and providing compliance incentives and assistance (EPA 2014g).

Some states may receive authorization to administer parts of the program, which requires the state standards be at least as strict as federal standards. EPA administers the RCRA program in Alaska.

3. NPDES Discharge Permit

DEC administers this EPA program, now titled APDES (see Section B(5)). Permits specify the type and amount of pollutant, and include monitoring and reporting requirements, so that discharges do not harm water quality and human health.

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

EPA regulates injection wells used to dispose of fluid pumped into the well. Authorized as part of the federal Safe Drinking Water Act of 1974, EPA's UIC program protects underground sources of drinking water from being contaminated by the waste injected in the wells. Injection wells are categorized into five classes; Classes I and II are most common in the oil and gas industry. EPA administers 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.

G. U.S. Army Corps of Engineers (COE)

The COE 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; COE 2014]). 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 regulates discharge of dredged and fill material into United States waters and wetlands. This program is administered by COE, which is authorized to issue Section 404 permits for discharging dredge and fill materials.

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 will not have significant individual or cumulative environmental impact, and appreciable opposition is not expected (COE 2014).

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.

In making a final decision on whether to issue a permit, COE considers 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 (COE 2014).

The process for letters of permission is shorter. 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 is not notified (COE 2014).

DEC reviews Section 404 and 10 permit applications for compliance with Alaska water quality standards. If the applications comply, DEC approves the permit.

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

H. Pipeline and Hazardous Materials Safety Administration (PHMSA)

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 regulates movement of hazardous materials by pipeline (PHMSA 2014a). Federal PHMSA inspectors review technical issues on hazardous liquid pipelines in Alaska (PHMSA 2014b). The Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 requires hazardous liquid pipeline operators to develop integrity management programs for transmission pipelines.

I. Fish and Wildlife Service (USFWS)

USFWS is a part of the Department of the Interior and dedicated to the conservation of natural resources. It has management authority for migratory birds, some threatened and endangered species, the national wildlife refuge system, and on lands under their jurisdiction, landscape conservation and aquatic resources (USFWS 2014a). USFWS issues permits related to migratory birds and endangered species, with the goal of managing risks and benefits of projects by using best available science and expertise. Permits may authorize activities consistent with conservation, protection and enhancement of wildlife, plants, and their habitats (USFWS 2014b).

J. National Marine Fisheries Service

The National Marine Fisheries Service (NMFS) is a division of the National Oceanic and Atmospheric Administration within the Department of Commerce. It is the federal agency responsible for the management, conservation, and protection of living marine resources within the United States' Exclusive Economic Zone (3-200 miles offshore). Under the Marine Mammals Protection Act and the

Endangered Species Act, NMFS works to help protected marine species stocks recover. Under the Magnuson-Sevens Act NMFS assesses and predicts the status of fish stocks, and ensures compliance with fisheries regulations (NMFS 2014).

K. 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.

L. Regulations of Oil Spill Prevention and Response

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)). Under these regulations, the violator 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 the response is neither timely nor adequate, 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 regional citizen advisory councils (RCACs) and area contingency plans as the main parts of the national response planning structure.

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 (DEC 2010). The Unified Plan is the area contingency plan for Alaska. Since Alaska is so large and geographically diverse, the federal agencies have found it necessary to prepare subarea contingency plans.

M. Alaska National Interest Lands Conservation Act (ANILCA) Title VIII. Section 811

ANILCA ensures that rural residents engaged in subsistence uses shall have reasonable access to subsistence resources on public land.

N. Native Allotments

Licensees 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 lands subject to a pending or approved Native allotment, licensees must contact the Bureau of Indian Affairs (BIA) and the Bureau of Land Management (BLM) and obtain approval to enter.

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