# APPENDIX E—LAWS, PERMITS, APPROVALS, AND CONSULTATIONS REQUIRED

# E1.0 INTRODUCTION

The Pebble Project would be required to adhere to numerous federal laws and Executive Orders, and obtain permits and approvals from federal, state, and local governments. The key federal laws and Executive Orders pertaining to the actions evaluated in this Environmental Impact Statement (EIS) are described below. Where federal laws are administered by the state or where there are state regulations that apply to the same activity regulated by the federal government, these state programs are also described below. Table E-1 lists the permits, approvals, and consultations typically required for development and operation of a hard-rock mine in Alaska.

## E1.1 NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

The National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321 et seq.) applies to all federal agencies and their major federal actions that may significantly affect the quality of the human environment. NEPA establishes the public procedures that federal agencies use to evaluate the environmental impacts of major federal actions.

The Council on Environmental Quality (CEQ) has issued NEPA regulations and guidance for all agencies. This EIS was prepared according to the United States (US) Army Corps of Engineers (USACE) regulations implementing NEPA (33 Code of Federal Regulations [CFR] Part 325; Appendix B), which state that an EIS must provide detailed information regarding the proposed project and alternatives, the environmental impacts of the alternatives, potential applicable mitigation measures, and any adverse environmental impacts that cannot be avoided if the proposal is implemented. This EIS includes analysis of measures to avoid and minimize impacts to fish, wildlife, habitats, and other resources; and addresses applicable USACE-required compensatory mitigation for impacts to waters of the US (WOUS), including wetlands, which cannot be avoided or minimized.

## E1.2 CLEAN WATER ACT (1972)

Section 404 of the Clean Water Act (CWA) requires that a USACE permit be obtained for the placement or discharge of dredged and/or fill material into WOUS, including jurisdictional wetlands (33 USC 1344). USACE defines wetlands as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. USACE evaluates proposed actions for compliance with the CWA Section 404(b)(1) Guidelines, which were developed by the US Environmental Protection Agency (EPA) in conjunction with the Secretary of the Army. EPA reviews and comments on permit applications for compliance with CWA Section 404(b)(1) Guidelines and other statutes and authorities under their jurisdiction.

Under Section 402 of the CWA, discharges to surface waters from construction, operations, and reclamation of the Pebble Project would require compliance with the National Pollutant Discharge Elimination System (NPDES), administered by the Alaska Department of Environmental Conservation (ADEC) as the Alaska Pollutant Discharge Elimination System (APDES). EPA provides oversight of the state-issued wastewater permits subject to the requirements of the APDES.

The ADEC, Division of Water, Wastewater Discharge Authorization Program regulates wastewater discharges from hard-rock mining facilities (including the Pebble Project) through various permits that are applicable to the project. Depending on the discharge type (e.g., mine contact water, stormwater, and/or domestic wastewater) and the disposal site (e.g., WOUS, land

application, and/or subsurface discharge), several permits administered by the Wastewater Discharge Authorization Program to protect aquatic resources may be involved, including:

- APDES Individual Permit for point-source discharge(s) into WOUS.
- Integrated Waste Management Permit for solid waste disposal and wastewater discharge not into WOUS.
- APDES Alaska Construction General Permit for construction stormwater discharges.
- APDES Multi-Sector General Permit for stormwater discharge(s).
- Domestic Wastewater Discharge Permit for discharge of treated domestic wastewater.

Regulations in 18 Alaska Administrative Code (AAC) 70 require that the conditions in permits ensure compliance with the state Water Quality Standards (WQS). The state's WQS are composed of use classifications, numeric and/or narrative water quality criteria, and an Antidegradation Policy. The use classification system designates the beneficial uses that each waterbody is expected to achieve. The numeric and/or narrative water quality criteria are the criteria deemed necessary by the state to support the beneficial use classification of each waterbody. The Antidegradation Policy ensures that the beneficial uses and existing water quality are maintained. Waterbodies in Alaska are designated for all uses unless the water has been reclassified under 18 AAC 70.230 as listed under 18 AAC 70.230(e). Some waterbodies in Alaska can also have site-specific water quality criterion per 18 AAC 70.235, such as those listed under 18 AAC 70.236(b).

The numeric water quality criteria are used to derive permit limits, which are calculated through statistical analysis of the effluent and receiving water quality data following the guidance procedures in *Alaska Pollutant Discharge Elimination System (APDES) Permits Reasonable Potential Analysis and Effluent Limits Development Guide, June 30, 2014.*

## E1.3 RIVERS AND HARBORS ACT (1899)

Section 10 of the Rivers and Harbors Act of 1899 requires that a USACE permit be obtained for the construction of structures, or work in and/or affecting navigable waters of the US (NWUS) (33 USC 403), which includes excavation or deposition of material in navigable waters, or other actions that could affect the course, location, condition, or capacity of these waters. Authorization under Section 10 is required for the work and structures associated with construction of the port facilities, ferry terminals, lightering locations, and the natural gas pipeline in NWUS.

## E1.4 ALASKA NATIVE CLAIMS SETTLEMENT ACT (1971)

Alaska Native regional and village corporations own lands and minerals in the project area under the provisions of Alaska Native Claims Settlement Act (ANCSA) (43 USC 1601, et seq.).

The transportation corridor connecting Amakdedori port to the mine site crosses both state land and land patented under ANCSA. ANCSA corporations were invited to participate in the National Historic Preservation Act (NHPA) Section 106 process for cultural resource identification and mitigation.

## E1.5 PIPELINE SAFETY, REGULATORY CERTAINTY, AND JOB CREATION ACT OF 2011

The Pipeline Safety, Regulatory Certainty, and Job Creation Act (49 USC 60101) was enacted to provide for enhanced safety and environmental protection in pipeline transportation. Enforcement falls under the jurisdiction of the US Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA), the agency that regulates and enforces the operations

of pipeline transportation systems in the US, and oversees pipeline infrastructure. PHMSA has the primary responsibility for the issuance of Department of Transportation special permits and approvals for hazardous materials and for natural gas and hazardous liquid pipelines. Special permits authorize a person to perform a function outside of PHMSA regulations or to not perform a function currently required under PHMSA regulations. Approvals authorize the transportation of designated hazardous materials (e.g., explosives) or the performance of a designated hazardous materials function (e.g., cylinder retester) under PHMSA regulations. Pebble Limited Partnership (PLP) proposes to build the natural gas pipeline to existing federal code; however, if they desired to design the pipeline in a way that would not conform to existing code, they would need to request and obtain a special permit from PHMSA.

## E1.6 CLEAN AIR ACT (1970)

The Clean Air Act (CAA) of 1970, with amendments in 1990, addresses standards for many categories of air pollutants and defines how EPA implements its regulatory authority for air quality (42 USC 85). This law sets health- and environmental-based standards, and identifies control methods to reduce the emission of common air pollutants. The potential construction and operations of a mine and power plant would introduce activities that are associated with particle pollution and ground-level ozone pollution. Both of these forms of air pollution, and others have known health effects and would be subject to further evaluation under federal- and state-implemented air quality management programs. Implementation of the CAA has been delegated to the State of Alaska; therefore, ADEC would issue any air permits associated with this project. EPA provides oversight of the state-issued air permits. Notwithstanding ADEC's role in implementation, federal agencies are required under the CAA to determine that that their activities (including issuing permits) conform to approved State Implementation Plans.

## E1.7 ENDANGERED SPECIES ACT (1973)

The Endangered Species Act (ESA) of 1973 was enacted to conserve endangered and threatened species that have been found to be at risk of extinction in all or a substantial portion of their habitats, and to conserve the ecosystems on which they rely (16 USC 1531 et seq.). The US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have regulatory authority for implementing the ESA. In general, USFWS is responsible for managing the terrestrial animal and plant species listed as endangered and threatened, and generally coordinates related issues for terrestrial and freshwater species, while NMFS is responsible for most marine mammals and anadromous fish species. Some marine mammals, including the northern sea otter, are managed by USFWS. Pebble Project vessel traffic would traverse areas where threatened or endangered species occur.

## E1.8 HISTORIC PRESERVATION LAWS AND REGULATIONS

Section 106 of the NHPA of 1966 (as amended) and USACE's Procedures for the Protection of Historic Properties (33 CFR Part 325, Appendix C) require federal agencies, prior to making a decision, to take into account the effects of any "undertaking" on "historic properties" listed on, or eligible for inclusion on, the National Register of Historic Places (National Register). In addition, the Alaska Historic Preservation Act (1971) (Alaska Statute [AS] 41.35) guides the management of all historic, prehistoric, and archeological resources situated on land owned or controlled by the state, including tideland and submerged land, and would apply to the submerged lands in the project area.

The NHPA authorizes the Advisory Council on Historic Preservation (ACHP) to administer and promulgate regulations implementing the Section 106 process (36 CFR Part 800). The NHPA

acknowledges that places of traditional religious and cultural significance to federally recognized tribes, including Alaska Native tribes, are eligible for inclusion on the National Register. The NHPA also requires federal agencies to consult with federally recognized tribes regarding historic properties of traditional religious and cultural significance during the Section 106 process.

ACHP's regulation establishes a four-step process by which federal agencies fulfill their Section 106 obligations. This process requires federal agencies to initiate the Section 106 process by determining that the federal action is an undertaking and invite consulting parties; identifying historic properties that may be affected by the undertaking; determining the effects of the undertaking on those historic properties; and seeking to resolve any adverse effects through avoidance, minimization, or mitigation. At every step of this process, the federal agency must consult with the State Historic Preservation Office (SHPO), ACHP, and federally recognized tribes.

The project has the potential to affect historic properties and properties of traditional religious or cultural significance. 36 CFR Part 800.14 allows for the resolution of adverse effects from complex projects through negotiation of a programmatic agreement between appropriate state and federal agencies, the consulting parties in the Section 106 process, and ACHP. The identification, documentation, and evaluation of historic properties and adverse effects, as well as proper avoidance, minimization, and mitigation for the project will be accomplished through a programmatic agreement that is currently under development with consultation among PLP, the USACE, ACHP, the Alaska SHPO, tribal representatives, and others, as appropriate.

## E1.9 NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

The Native American Graves Protection and Repatriation Act (NAGPRA, 25 USC 3001), establishes, among other things, a legal regime to protect human remains, funerary objects, sacred objects, and objects of cultural patrimony that are located or discovered on federal and tribal lands, inclusive of native allotments, from unauthorized excavation or removal. NAGPRA also established procedures for the repatriation of such items to Indian tribes. The potential for impacts from the project to resources protected under NAGPRA are evaluated in the EIS.

## E1.10 AMERICAN INDIAN RELIGIOUS FREEDOM ACT OF 1978

The American Indian Religious Freedom Act of 1978 (42 USC 1996) requires federal agencies to consider Native American religious concerns when a federal management decision has the potential to impact an Indian religious practice or a spiritually significant site (on both federal and non-federal lands affected by the federal action). The potential for impacts from the project to activities protected under this act is evaluated in the EIS.

## E1.11 MARINE MAMMAL PROTECTION ACT (1972)

USFWS and NMFS have regulatory authority for implementing the Marine Mammal Protection Act (MMPA) (16 USC 1361-1407), which prohibits the harassment, hunting, capture, or killing of marine mammals, or the attempt to harass, hunt, capture, or kill marine mammals. The law provides exceptions for authorized subsistence and other uses by Alaska Natives dwelling on the coast of the North Pacific Ocean or the Arctic Ocean. Actions that have potential to take marine mammals must be reviewed and approved by the regulating agencies. Pebble Project vessel traffic would traverse areas where marine mammals occur.

## E1.12 MIGRATORY BIRD TREATY ACT (1918)

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-712) implements several international conventions to protect migratory birds. Following treaty amendments in 1997, regulations for subsistence bird harvests were established under the purview of the Alaska Migratory Bird Co-Management Council, operating under authority of the MBTA, as amended. Under the MBTA, takings are prohibited unless expressly authorized or exempted. This EIS addresses potential impacts of the project and associated infrastructure on birds protected under the MBTA.

## E1.13 BALD AND GOLDEN EAGLE PROTECTION ACT (1940, 1962)

The Bald and Golden Eagle Protection Act (16 USC 668, et seq.) provides for the protection of the bald eagle and the golden eagle by prohibiting, except under certain specified conditions, the take, possession, and commerce of such birds (among other prohibitions). Eagle take permits may be necessary for activities that result in the removal of nests, loss of habitat, and disturbance of birds during construction, operations, and maintenance of the project. This EIS identifies the presence of eagles or their nests in the project area (along with associated infrastructure routes), and analyzes potential impacts of the project on both bald and golden eagles as protected under the Bald and Golden Eagle Protection Act. Alaska-specific information can be found at: https://www.fws.gov/alaska/pages/migratory-birds/eagles-other-raptors/eagle-permits/eagle-protection-act.

## E1.14 FISH AND WILDLIFE COORDINATION ACT (1980)

The Fish and Wildlife Coordination Act (FWCA), as amended, (16 USC 661, et seq.), requires the agency that is authorized to permit or license changes in a water body to first consult with USFWS and the appropriate state fish and game agency. Because the project would result in potential impacts to fish and wildlife, the FWCA relates to agency coordination between the USFWS and USACE. The FWCA provides that wildlife conservation receive equal consideration, and be coordinated with other features of the development project. The FWCA authorizes the USFWS to conduct surveys and investigations to determine the possible damage of proposed developments on wildlife resources to make recommendations for preventing their loss or damage. The USFWS incorporates the concerns and findings of state and other federal agencies, including NMFS, into a report that addresses wildlife factors and provides recommendations for mitigating or enhancing impacts to wildlife affected by a federally constructed, permitted, or licensed water development project. The term wildlife resources is explicitly defined to include “birds, fishes, mammals, and all other classes of wild animals and types of aquatic and land vegetation upon which wildlife is dependent” (16 USC 666 [b]). Additionally, the FWCA states that reports determining the possible damage to wildlife resources and an estimation of wildlife loss be made an integral part of any report prepared or submitted to the agency with permitting authority that is authorizing construction of a water resources development project (16 USC 662 [b][f]).

## E1.15 NATIONAL WILDLIFE REFUGE SYSTEM ADMINISTRATION ACT OF 1966, AS AMENDED

The National Wildlife Refuge System Administration Act (16 USC 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57), established a unified mission for the National Wildlife Refuge System and a compatibility standard for assessing proposed uses in a refuge. The refuge system is dedicated to the conservation of fish, wildlife, and plant resources and their habitats in the refuge. Although the project would not install infrastructure in a refuge, the activities of the project have the potential to affect refuge land and resources.

## E1.16 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

To provide for the conservation and management of sustainable fisheries, the Magnuson-Stevens Fishery Conservation and Management Act sets forth a mandate for NMFS, regional fishery management councils, and other federal agencies to identify and protect important marine and anadromous fish habitats (16 USC 1801-1883). Federal agencies must consult with NMFS on actions or proposed actions authorized by the federal agency that may adversely affect Essential Fish Habitat (EFH). EFH includes habitats necessary to a species for spawning, breeding, feeding, or growth to maturity. The project has the potential to affect EFH.

## E1.17 RESOURCE CONSERVATION AND RECOVERY ACT OF 1976

Under this act, EPA develops and implements regulatory programs to manage hazardous waste (and non-hazardous solid wastes) from generation until ultimate disposal, including issuing an identification number for any entity that generates hazardous wastes. Construction, operations, and reclamation of the project would generate wastes subject to Resource Conservation and Recovery Act regulations (40 CFR Parts 239–282).

## E1.18 TOXIC SUBSTANCES CONTROL ACT OF 1976

Under the Toxic Substances Control Act (TSCA) of 1976 (15 USC 2601), EPA develops and implements regulatory requirements for the testing of new and existing chemical substances, and regulates the treatment, storage, and disposal of those substances. Construction, operations, and reclamation of the Pebble Project would involve chemical substances subject to TSCA rules.

## E1.19 THE FEDERAL MINE SAFETY AND HEALTH ACT OF 1977 (THE MINE ACT)

The Mine Safety and Health Administration (MSHA) administers the provisions of the Mine Act (30 USC 22) to enforce compliance with mandatory safety and health standards as a means to eliminate fatal accidents, reduce the frequency and severity of non-fatal accidents, minimize health hazards, and promote improved safety and health conditions in the nation's mines. Operations of the Pebble Project would require compliance with MSHA standards.

## E1.20 EMERGENCY PLANNING AND COMMUNITY-RIGHT-TO-KNOW ACT OF 1986

Authorized by Title III of the Superfund Amendments and Reauthorization Act (SARA), the Emergency Planning & Community Right-to-Know Act (EPCRA) (42 USC 116) was enacted by Congress as the national legislation on emergency planning. This law is designed to help local communities protect public health, safety, and the environment from extremely hazardous substances. This law requires industry to report on the storage, use, and releases of hazardous substances to federal, state, and local governments.

To implement EPCRA, Congress requires each state to appoint a State Emergency Response Commission (SERC). The SERCs are required to divide their states into emergency planning districts and to name a Local Emergency Planning Committee for each district.

Broad representation by firefighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented.

## E1.21 SAFE WATER DRINKING ACT OF 1974

The Safe Drinking Water Act (42 USC 300 [f] et seq.) was established to protect drinking water in the US. This law focuses on all waters actually or potentially designed for drinking use, whether

from above-ground or underground sources. This act authorizes EPA to establish minimum standards to protect tap water, and requires all owners or operators of public water systems to comply with these primary (health-related) standards. State governments, which can be approved to implement these rules for EPA, also encourage the attainment of secondary standards (nuisance-related). Under the act, EPA also establishes minimum standards for state programs to protect underground sources of drinking water from endangerment by underground injection of fluids. PLP will operate a public water system that will supply drinking water to camps and other buildings.

## E1.22 OIL POLLUTION ACT OF 1990

The Oil Pollution Act (OPA) of 1990 (33 USC 40) streamlined and strengthened EPA's ability to prevent and respond to catastrophic oil spills. The OPA requires oil storage facilities and vessels to submit plans detailing how they would respond to large discharges to the federal government. The OPA also requires the development of area contingency plans to prepare and plan for oil spill response on a regional scale.

## E1.23 PORTS AND WATERWAYS SAFETY ACT OF 1972

The Ports and Waterways Safety Act (PWSA) of 1972 (33 USC 25) authorizes the US Coast Guard (USCG) to establish vessel traffic services and separation schemes (VTSS) for ports, harbors, and other waters subject to congested vessel traffic. The VTSS apply to commercial ships, other than fishing vessels, weighing 300 gross tons (270 gross metric tons) or more. The OPA amended the PWSA to mandate that appropriate vessels must comply with the VTSS.

## E1.24 OUTER CONTINENTAL SHELF LANDS ACT OF 1953

The Outer Continental Shelf Lands Act (OCSLA) of 1953 (43 USC 1331) requires the Department of Interior (DOI) to manage the orderly leasing, exploration, development, production, and decommissioning of oil and gas resources on the federal Outer Continental Shelf (OCS), while simultaneously ensuring the protection of the human, marine, and coastal environments and assuring receipt of fair market value for the lands leased and the rights conveyed by the federal government. OCSLA also requires coordination with state and local governments affected by OCS development activities.

Under OCSLA, the Bureau of Environmental Safety and Environmental (BSEE) is responsible for regulating and monitoring oil and gas operations on the federal OCS, promoting safety, and protecting the environment. BSEE approves right-of-way (ROW) authorization for pipelines in federal OCS waters, and is responsible for approving ROW authorization for the subsea natural gas pipeline for the Pebble Project.

## E1.25 EXECUTIVE MEMORANDUM OF APRIL 29, 1994, ON GOVERNMENT-TO-GOVERNMENT RELATIONS WITH NATIVE AMERICAN TRIBAL GOVERNMENTS, AND EXECUTIVE ORDER 13175—CONSULTATION AND COORDINATION WITH INDIAN TRIBAL GOVERNMENTS

Federal agencies are instructed to operate under a government-to-government relationship with federally recognized tribes; tasked with consulting with potentially affected tribal governments prior to taking actions that affect federally recognized tribal governments; and must also evaluate the impact of federal government plans, projects, programs, and activities on tribal trust resources; and assure that tribal government rights and concerns are considered during the development of such plans, projects, programs, and activities. USACE, as the lead federal agency

for this EIS, is required to consult with federally recognized tribes potentially affected by the project.

## E1.26 EXECUTIVE ORDER 11514—PROTECTION AND ENHANCEMENT OF ENVIRONMENTAL QUALITY

This order requires EPA to review and evaluate the Draft EIS (DEIS) and Final EIS (FEIS) for compliance with CEQ Guidelines.

## E1.27 EXECUTIVE ORDER 11988—FLOODPLAIN MANAGEMENT

This order requires federal agencies to establish procedures ensuring that the potential effects of flood hazards and floodplain management are considered for actions undertaken in a floodplain. Impacts to floodplains are to be avoided to the extent practicable. The Pebble Project has the potential to impact floodplains.

## E1.28 EXECUTIVE ORDER 11990 – PROTECTION OF WETLANDS

This order requires federal agencies to avoid short- and long-term adverse impacts to wetlands whenever a practicable alternative exists. This EIS analyzes impacts to wetlands.

## E1.29 EXECUTIVE ORDER 12898—FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL JUSTICE IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS

This order instructs federal agencies to develop environmental justice strategies to identify and address disproportionately high and adverse human health and environmental effects of their programs, policies, and activities on minority populations and low-income populations. This order specifically requires federal agencies to consider these effects to Native American and Alaska Native communities.

## E1.30 EXECUTIVE ORDER 12962—RECREATIONAL FISHERIES

This order instructs federal agencies to evaluate proposed federal actions for potential effects to aquatic systems and recreational fisheries. The quantity, function, sustainable productivity, and distribution of aquatic resources are to be improved to the practicable extent permitted by law. This EIS analyzes potential impacts to aquatic systems and recreational fishing opportunities.

## E1.31 EXECUTIVE ORDER 13007—INDIAN SACRED SITES

This order requires federal agencies to accommodate access to and ceremonial uses of Indian sacred sites located on federal property by Indian religious practitioners, and to avoid adversely affecting the physical integrity of such sacred sites. This EIS analyzes the potential for impacts to Indian sacred sites.

## E1.32 EXECUTIVE ORDER 13045—PROTECTION OF CHILDREN FROM ENVIRONMENTAL HEALTH RISKS AND SAFETY RISKS

The order applies to economically significant rules under Executive Order 12866 (Regulatory Planning and Review) that concern an environmental health or safety risk that EPA has reason to believe may disproportionately affect children. This EIS analyzes potential impacts to human health, including children.

## E1.33 EXECUTIVE ORDER 13751—SAFEGUARDING THE NATION FROM THE IMPACTS OF INVASIVE SPECIES

This Executive Order, an amendment to Executive Order 13112—Invasive Species, instructs federal agencies to take steps to eradicate and control invasive species. Federal agencies are instructed to prevent the introduction of invasive species, control those that are introduced, and provide for the restoration of native species. Executive Order 13112 also created a coordinating body, the Invasive Species Council, to oversee implementation, encourage proactive planning and action, develop recommendations for international cooperation, and take steps to improve the federal response to invasive species.

## E1.34 NATIONAL INVASIVE SPECIES ACT OF 1996

The National Invasive Species Act (NISA) of 1996 amended the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990. The 1990 Act, along with the Nonindigenous Aquatic Nuisance Prevention and Control Act in 1990, established the Aquatic Nuisance Species (ANS) Task Force. Members are charged with preventing the introduction and spread of ANS, and monitoring and controlling ANS. NISA furthered ANS activities by calling for ballast water regulations.

## E1.35 EXECUTIVE ORDER 13186—RESPONSIBILITIES OF FEDERAL AGENCIES TO PROTECT MIGRATORY BIRDS

This order requires federal agencies to avoid or minimize the impacts of their actions on migratory birds and take active steps to protect birds and their habitats.

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| **Federal** | | |
| **Federal Laws and Executive Orders Common To Multiple Federal Agencies** | | |
| National Environmental Policy Act (42 USC [United States Code] 4321) | The National Environmental Policy Act (1969) requires all federal agencies to prepare a detailed statement of the environmental effects of proposed major federal actions that may significantly affect the quality of the human environment. | • Environmental Impact Statement |
| National Historic Preservation Act of 1966 (54 USC 300101 et seq.) | Prior to the issuance of a federal permit, federal agencies are responsible for taking into account the effects of the undertaking on historic properties. | • Section 106 Consultation, Section 106 Programmatic Agreement |
| Executive Order 13751 - Safeguarding the Nation from the Impacts of Invasive Species | Federal agencies take steps to prevent the introduction and spread of invasive species, and to support efforts to eradicate and control invasive species that are established. | • Invasive species management planning |
| National Invasive Species Act of 1996 | Federal agencies coordinate efforts among agencies, state, and private entities to work collaboratively by sharing resources, expertise, and ideas across agency and organizational lines on invasive species prevention and management. The United States (US) Army Corps of Engineers (USACE) is a member; US Fish and Wildlife Service (USFWS) is a co-chair; and US Environmental Protection Agency (EPA), National Park Service, and US Coast Guard (USCG) are also members. | • Collaborative review of invasive species management planning |
| **US Army Corps of Engineers** | | |
| Clean Water Act 1972 (33 USC 1344) | Discharge of dredged or fill material into waters of the US (WOUS), including wetlands. | • Department of the Army (DA) Permit |
| Rivers and Harbors Act of 1899 (33 USC 403) | Work and/or construction of structures in, over, or navigable waters of the US (NWUS), or which affects the course, location, condition, or capacity of such waters. | • DA Permit |
| **US Department of Interior, Bureau of Safety and Environmental Enforcement** | | |
| Title 30 Mineral Lands and Mining<br>(30 CFR [Code of Federal Regulations] Part 250.1000-1019, Subpart J – Pipelines and Pipeline Rights of Way) | Bureau of Safety and Environmental Enforcement (BSEE) is responsible for regulating and monitoring oil and gas operations on the federal Outer Continental Shelf (OCS), promoting safety, and protecting the environment. BSEE approves right of way (ROW) authorization for pipelines in federal OCS waters. | • ROW Authorization for subsea natural gas pipeline in OCS waters. |
| **US Coast Guard** | | |
| Rivers and Harbors Act of 1899 (33 USC 403)<br>Ports and Waterways Safety Act of 1972 | USCG and Department of Homeland Security approve safety features in ports and waterways; establish requirements for facilities and vessels that engage in oil (e.g., diesel fuel) and hazardous material transfers and spill response measures; and outline provisions for handling of dangerous cargo at ports, such as provisions specific to ammonium nitrate. | • Application for Cargo Transfer Operations<br>• Port Operations Manual Approval<br>• Facility Response Plans (FRPs) |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| Title 33 Navigation and Navigable Waters, Subchapter L, Waterfront Facilities (33 CFR Part 126)<br>Title 33 Navigation and Navigable Waters, Subchapter P, Ports and Waterways Safety (33 CFR Parts 160 through 169)<br>Title 33 Navigation and Navigable Waters, Subchapter O, Pollution (33 CFR Parts 154 through 158)<br>General Bridge Act of 1946<br>Title 33 Navigation and Navigable Waters, Subchapter J, Bridges (33 CFR Parts 114 through 118) | USCG has authority over locations and clearances of bridges and causeways in or over NWUS. | • Private Aids to Navigation Authorization<br>• Vessel Inspections<br>• Notice to Mariners<br>• Bridge permits |
| **US Environmental Protection Agency** | | |
| Clean Air Act of 1967, Amended 1977 (42 USC 7401 et seq.) | EPA conducts a review and evaluation on the environmental impact and adequacy of the Draft EIS and Final EIS as authorized by Section 309 of the Clean Air Act (CAA).<br>EPA has oversight responsibilities of state-issued air permits. | • Section 309 evaluation |
| Clean Water Act of 1972, Amended 1977 (33 USC 1251 et seq.)<br>(40 CFR Parts 110 and 112) | Section 311 – EPA requires owners/operators to prepare and implement spill prevention, control, and countermeasure (SPCC) plans for facilities that store more than 1,320 gallons in aggregate in above-ground tanks with a capacity of 55 gallons or more.<br>Section 312(p) – The Vessel Incidental Discharge Act (VIDA), signed into law on December 4, 2018, establishes a new framework for the regulation of vessel incidental discharges. Regulation of discharges incidental to the normal operation of a commercial vessel when operating as a means of transportation (i.e., "incidental discharges"), including a broad range of incidental discharges such as ballast water, bilgewater, graywater (e.g., water from sinks, showers), and deck washdown and runoff, that were previously regulated under the National Pollutant Discharge Elimination (NPDES) permitting program, will be phased out over time (about 4 years). These discharges will be regulated under the new CWA Section 312(p) program: Uniform National Standards for Discharges Incidental to Normal Operation of Vessels. Under VIDA, all provisions of EPA's Vessel General Permit (VGP) remain in force and effect until the new EPA-developed National Standards of Performance (NSPs) and USCG implementation, compliance, and enforcement regulations for those NSPs are finalized. | • Oversight of SPCC Rule Requirements<br>• VGP authorization<br>• Review of APDES permit applications<br>• Review of DA permit applications pursuant to Section 404 |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| | Section 402—EPA oversees draft Alaska Pollutant Discharge Elimination System (APDES) permits and can object to proposed permit decisions.<br>Section 404—EPA reviews and comments on permit applications for compliance with CWA Section 404(b)(1) Guidelines and other statutes and authorities under their jurisdiction. | |
| Oil Pollution Act of 1990<br>(40 CFR Part 112.20) | Section 4202 of the Oil Pollution Act amended CWA Section 311(j) by requiring owners or operators of tank vessels, offshore facilities, and certain onshore facilities to prepare and submit Facility Response Plans (FRPs). | • Review of FRPs |
| Resource Conservation and Recovery Act (RCRA) | Establishes criteria governing the management of hazardous waste. Any hazardous waste generated at a facility associated with the project is subject to the hazardous waste regulations administered by EPA. | • RCRA registration for identification number; for the transportation and storage of hazardous waste material |
| Safe Drinking Water Act of 1974 (42 USC 300 [f] et seq.) | Requires EPA to set limits for maximum allowable levels of contaminants in public drinking water systems. | • Sets the standard for public drinking water quality |
| Toxic Substances Control Act of 1976 (15 USC 2601) | Develops and implements regulatory requirements for the testing of new and existing chemical substances, and regulates the treatment, storage, and disposal of certain toxic substances. | • Reporting requirements |
| **US Department of Transportation, Pipeline and Hazardous Materials Safety Administration** | | |
| Pipeline Safety Regulations<br>(49 CFR Parts 190–199)<br>Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 Public Law 109-468<br>The Pipeline Safety Statute<br>(49 USC 60101–60301) | Pipeline transportation and pipeline facilities must meet the minimum safety standards as regulated and enforced by the Pipeline and Hazardous Materials Safety Administration. | • Meet minimum safety standards |
| Hazardous Materials Transportation Act (49 USC 1801–1819) | Hazardous materials must be transported according to US Department of Transportation regulations. | • Hazardous materials registration |
| US Federal Aviation Act<br>(14 CFR Parts 61, 91, 119) | The Federal Aviation Administration regulates air navigation facilities and air traffic control. | • Notice of Landing Area Proposal (existing airstrip)<br>• Notice of Controlled Firing Area for Blasting<br>• Notice of construction, activation, and deactivation of airports |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| **US Department of Interior, Fish and Wildlife Service** | | |
| Bald and Golden Eagle Protection Act (16 USC 668) | USFWS works with permitting agencies and project proponents to develop mitigation measures to avoid and reduce impacts to eagles, and assists in developing methods for compensatory mitigation for impacts that are unavoidable. USFWS may provide limited take permits of eagles or nests where avoidance and minimization measures have been incorporated into project design. | • Permits to take, haze, relocate or destroy birds or their nests, for public safety purposes |
| Marine Mammal Protection Act (16 USC 1361 et seq.) | USFWS has regulatory authority for implementing the Marine Mammal Protection Act (MMPA), which prohibits the harassment, hunting, capture, or killing of marine mammals, or the attempt to harass, hunt, capture, or kill marine mammals. Requires Incidental Take Authorizations (ITAs) under Section 101(a)(5)(A) or (D) of the MMPA. ITAs may be issued as either: 1) regulations and associated Letters of Authorizations; or 2) Incidental Harassment Authorizations.<br>Note that the National Marine Fisheries Service (NMFS) also administers the MMPA. | • ITAs (as necessary); Letters of Authorization or Incidental Harassment Authorizations |
| Migratory Bird Treaty Act (16 USC 703) | USFWS implements provisions of the Migratory Bird Treaty Act (MBTA). | • MBTA consultation |
| Endangered Species Act of 1973 (16 USC 1531) | USFWS provides consultation on effects to threatened or endangered species, and to designated critical habitat, and issues incidental take authorizations. Species include terrestrial mammals, plants, birds, and several marine mammals.<br>Note that NMFS also administers the Endangered Species Act (ESA). | • ESA consultation, USACE issuance of Biological Assessment, USFWS issuance of Concurrence or Biological Opinion |
| Clean Water Act of 1972 (33 USC 1344) | CWA Section 1344(m) authorizes the Department of Interior through USFWS to submit comments with respect to applications for permits or proposed general permits for discharge of dredged and fill material. The basic premise is USFWS will provide recommendations on potential methods to avoid and minimize impacts to fish and wildlife, as well as provide recommendations for compensation that would be necessary for any remaining unavoidable impacts. | • Section 404 DA application review and involvement with mitigation |
| Fish and Wildlife Coordination Act, as amended, (16 USC 661, et seq.) | The Fish and Wildlife Coordination Act, as amended (16 USC 661, et seq.), requires the agency that is authorized to permit or license changes in a waterbody to first consult with USFWS and the appropriate state fish and game agency. Because the project would result in potential impacts to fish and wildlife, the Act relates to agency coordination between USFWS and USACE. | • Coordination between USACE and USFWS |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| **National Oceanic and Atmospheric Administration-Fisheries (also known as National Marine Fisheries Service)** | | |
| Magnuson-Stevens Fishery Conservation and Management Act (16 USC 1801–1883) | NMFS provides consultation on the effects on Essential Fish Habitat (EFH), including habitats necessary to a species for spawning, breeding, feeding, or growth to maturity. | • EFH consultation |
| Marine Mammal Protection Act (16 USC 1361 et seq.) | NMFS has regulatory authority for implementing the MMPA, which prohibits the harassment, hunting, capture, or killing of marine mammals, or the attempt to harass, hunt, capture, or kill marine mammals. Requires ITA under Section 101(a)(5)(A) or (D) of the MMPA. ITAs may be issued as either: 1) regulations and associated Letters of Authorizations; or 2) Incidental Harassment Authorizations.<br>Note that USFWS also administers the MMPA. | • Incidental Take Authorization; Letters of Authorization or Incidental Harassment Authorizations |
| Endangered Species Act of 1973 (16 USC 1531) | NMFS provides consultation on effects to threatened or endangered species, and to designated critical habitat, and issues incidental take authorizations. Species include most marine mammals (see USFWS species exceptions), and anadromous fish species.<br>Note that USFWS also administers the ESA. | • ESA Consultation, USACE Issuance of Biological Assessment, NMFS issuance of concurrence or Biological Opinion |
| **US Department of the Treasury** | | |
| Treasury Department Order No. 120-1 | The US Department of the Treasury, Bureau of Alcohol, Tobacco, Firearms, and Explosives requires that applicants obtain a Permit to Purchase Explosives for blasting prior to the purchase, storage, and use of explosives for conducting blasting activities. | • License to transport explosives<br>• Permit and license for use of explosives |
| **Federal Communications Commission** | | |
| Communications Act of 1934 (47 USC 151 et seq.) | The Federal Communications Commission regulates interstate and international communications by radio, television, wire, satellite, and cable, including radio licensing. | • Radio license |
| **US Department of Homeland Security** | | |
| Aviation and Transportation Security Act | The Transportation Security Administration (TSA) oversees security for airports. | • TSA Inspection Program at Airport<br>• Chemical Facility Anti-Terrorism Standards<br>• Airport Security Operations Plan<br>• Port Security Operations Plan<br>• Port Facility Coordinator Certification |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| **Advisory Council on Historic Preservation** | | |
| NHPA of 1966 (54 USC 300101 et seq.) (36 CFR Part 800) | Federal agencies must consult with the Advisory Council on Historic Preservation (ACHP) during the Section 106 process and in the development of a programmatic agreement, and must allow ACHP to comment on the undertaking's effects on historic properties.<br>Where ACHP has officially involved itself in the Section 106 process, a programmatic agreement cannot be executed without its signature. | • Section 106 Consultation<br>• Section 106 Programmatic Agreement |
| **US Department of Labor** | | |
| Federal Mine Safety and Health Act of 1977 as amended by the Mine Improvement and New Emergency Response Act of 2006 (30 USC 801 et seq.) (30 CFR Parts 1–199) | The Mine Safety and Health Administration (MSHA) develops and enforces safety and health rules for all US mines regardless of size, number of employees, commodity mined, or method of extraction. MSHA also provides technical, educational and other types of assistance to mine operators. We work cooperatively with industry, labor, and other federal and state agencies to improve safety and health conditions for all miners in the US. | • Mine identification number<br>• Notification of legal identity |
| **State of Alaska[1]** | | |
| **Alaska Department of Environmental Conservation** | | |
| Clean Air Act of 1967, Amended 1977 (42 USC 7401 et seq.)<br>Air Quality Control (18 AAC [Alaska Administrative Code] 50 et seq.) | Alaska Department of Environmental Conservation (ADEC) issues Air Quality Control permits to construct and to operate.<br>ADEC issues Title V Operating permits and prevention of significant deterioration (PSD) permits for air pollutant emissions under the CAA Amendments (Title V). | • Air Quality PSD Permit<br>• Title V Operating Permit<br>• Air Quality Construction Permit |
| Clean Water Act of 1972, Amended 1977 (33 USC 1251 et seq.) | Section 401 requires (for USACE permit pursuant to Section 404) that ADEC certify that discharges into WOUS will comply with the CWA, the State Water Quality Standards (18 AAC 70), and other applicable state laws. | • Section 401 Water Quality Certification |
| Clean Water Act of 1972, Amended 1977 (33 USC 1251 et seq.)<br>Wastewater Disposal (18 AAC 72)<br>Alaska Pollutant Discharge Elimination System (18 AAC 83)<br>Water Quality Standards (18 AAC 70)<br>Drinking Water Standards (18 AAC 80) | ADEC provides approval for domestic wastewater collection, treatment, and disposal plans for domestic wastewaters.<br>ADEC requires a permit for disposal of domestic and non-domestic wastewater to state land and groundwater.<br>ADEC is fully authorized to administer EPA's NPDES program through the Alaska Pollution Discharge Elimination System overseen by EPA. Existing regulations at 18 AAC 15 (Administrative Procedures) and 18 AAC 72 were amended to comply with the CWA. New regulations, 18 AAC 83, were also promulgated in addition to amending the existing regulations. | • APDES permits<br>• Review Storm Water Discharge Pollution Prevention Plans<br>• Plans review of treatment systems<br>• Plan Review for Non-Domestic Wastewater Treatment System<br>• Plan Review and Construction Approval for Domestic Sewage System |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| | ADEC provides approval for treatment and disposal plans for industrial wastewaters. | • Domestic wastewater disposal permit<br>• Non-domestic wastewater disposal permit |
| Solid Waste Management (18 AAC Chapter 60) (AS [Alaska Statute] 46.03.100) | ADEC reviews and approves solid waste processing and temporary storage facilities plans for handling and temporary storage of solid waste and landfills. | • Integrated Waste Management Permit/Plan Approval<br>• Reclamation plan approval and bonding |
| Food Permit and Registration Requirements (18 AAC 31.020) | ADEC may issue permits for persons seeking to operate a food establishment. | • Food Establishment Permit |
| Drinking Water System Classification and Plan Approval (18 AAC 80.200) | ADEC may issue approval of public drinking water plans. | • Potable water well logs<br>• Approval to Construct and Operate a Public Water Supply System<br>• Public Water System Identification Number |
| Open Burning (18 AAC 50.065) | ADEC enforces air quality requirements for open burning, and requires a permit for controlled open burning of forest land, vegetative cover, fisheries, or wildlife habitat in excess of 40 acres annually. | • Air Quality Permit to Open Burn |
| Oil and Hazardous Substances Pollution Control Regulations (18 AAC 75) (AS 46.04.040, 050) | ADEC requires production and terminal facilities having an effective above-ground or below-ground storage capacity of greater than 10,000 barrels (420,000 gallons) of refined petroleum products to prepare an Oil Discharge Prevention and Contingency Plan and provide Proof of Financial Responsibility. | • Oil Discharge Prevention and Contingency Plan<br>• Operation of vessels and petroleum product barges on state waters<br>• Oil terminal/storage facility capable of storing 10,000 barrels or more<br>• Above-ground Storage Tank Program (>420,000 gallons) |
| **Alaska Department of Fish and Game** | | |
| Fish and Wildlife Conservation Act of 1980 (16 USC 2901)<br>Fish and Wildlife Conservation Act of 1980 (16 USC 661 et seq.) | The Alaska Department of Fish & Game (ADF&G) consults with USFWS about fish and wildlife resources to conserve or improve wildlife resources.<br>ADF&G provides comments and recommendations to federal agencies pursuant to the Fish and Wildlife Conservation Act. | • Wildlife consultation |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| Anadromous Fish Act (AS 16.05.871) | An individual or governmental agency notifies and obtains authorization from ADF&G for activities that could use, divert, obstruct, pollute, or change the natural flow of specified anadromous fish streams. | • Title 16 Fish Habitat Permits |
| Fishway Act (AS 16.05.841) | The Fishway Act requires that an individual or government agency notify and obtain authorization from ADF&G for activities in or across a stream used by fish if it is determined that such uses or activities could represent an impediment to the efficient passage of resident or anadromous fish. | • Title 16 Fish Habitat Permits |
| Activities Requiring a Special Area Permit (5 AAC 95.420) | A special area permit must be obtained from the ADF&G for activities (except for lawful hunting, trapping, fishing, viewing, and photography) occurring in state game refuges, state recreation areas, across designated wild and scenic rivers, or through state parks. | • Special area permits for designated areas |
| License, Permit, and Tag Fees; Surcharge; Miscellaneous Permits to Take Fish and Game (AS 16.05.340) | ADF&G may issue a permit to collect fish and game, subject to limitations and provisions that are appropriate, for a scientific, propagative, or educational purpose. | • Permit to collect fish and game |
| Permit for Scientific, Educational, Propagative, or Public Safety Purposes (5 AAC 92.033) | ADF&G may issue a permit for the taking, possessing, importing, or exporting of game for scientific, educational, propagative, or public safety purposes. | • Fish collection permits for field studies |
| **Alaska Department of Natural Resources** | | |
| Alaska Historic Preservation Act (AS 41.35.010-.240)<br>National Historic Preservation Act of 1966 (54 USC 300101 et seq.) (36 CFR Part 800)<br>Archaeological Resources Protection Act of 1979 (16 USC 470) | Section 106 of the NHPA requires consultation with the State Historic Preservation Office (SHPO), ACHP, and federally recognized Indian tribes.<br>The SHPO issues a Field Archaeology Permit for archaeological fieldwork on state lands. The SHPO would also be consulted by USACE.<br>ADNR Office of History and Archaeology issues a Cultural Resources Concurrence for developments that may affect historic or archaeological sites. | • Section 106 Programmatic Agreement<br>• Archaeology collection permit<br>• Field archaeology permit |
| Material Sales (AS 38.05.550-565 and AS 38.05.810)<br>Permits (AS 38.05.850)<br>Mining Sites Reclamation Plan Approvals (AS 27.19)<br>Plan of Operations Approval (11 AAC 86.800)<br>Upland Mining Leases (AS 38.05.205) | ADNR Division of Mining, Land and Water Leases, ROWs, and Approvals:<br>ADNR issues a Material Sales Contract for mining and the purchase of gravel from state lands.<br>ADNR issues ROW and land use permits for the use of state land for ice road construction on state land and in state waters.<br>ADNR approves mining reclamation plans and bond cost estimates for non-coal mines on state, federal, municipal, and private land and water. Bonds can include financial assurances for long-term environmental management obligations, post-mining. | • Material sales contract<br>• ROW easements for road, pipeline, and fiber-optic cable on state lands and waters<br>• Reclamation plan approval and bonding<br>• Land use permits and leases |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| Millsite Leases (AS 38.05.255)<br>Water Use (AS 46.15) | ADNR approves the plan of operations for non-coal mines, and is required for all mining projects on state land.<br>ADNR issues upland mining leases for certain areas of Alaska that have been designated to be available for mining only under an upland mining lease.<br>ADNR requires a Millsite Lease for mine project facilities on state land. This lease gives the applicant a surface property right for the associated facilities.<br>ADNR requires a Tidelands Lease for the use of state-owned tidelands for marine facilities such as docks. For the use of state-owned uplands, a lease is required for facilities such as transportation and staging facilities. These leases would apply to the use of state-owned lands outside the mine site, such as the port structures constructed below the high tide line.<br>ADNR requires a permit before constructing snow or ice roads on state land, or conducting overland travel. Crossings of fish-bearing water bodies by snow or ice roads also require authorization by ADF&G, Division of Habitat, prior to construction.<br>ADNR issues temporary water use authorizations for temporary uses of a water (up to 5 years) necessary for construction and operations.<br>ADNR issues a water rights permit for the appropriation of a significant amount of water on other than a temporary basis. | • Bonding and financial assurance approval<br>• Plan of Operations approval<br>• Upland Mining Lease approval<br>• Millsite Lease approval<br>• Upland or Tidelands Lease approval<br>• Snow or ice road approval<br>• Temporary Water Use Authorizations<br>• Appropriation of Water Permit/ Certificate to Appropriate Water |
| Right-of-Way Leasing Act (AS 38.35) | ADNR, Division of Oil and Gas, State Pipeline Coordinator's Section, issues pipeline ROW leases for new pipeline and pipeline-related construction and operation across State lands. The ADNR commissioner signs the leases and the State pipeline coordinator manages them. | • ROWs |
| Duties and Powers of Department of Natural Resources, Limitations (AS 41.21.020)<br>Section 6(f) of the Land and Water Conservation Fund (16 USC 4601 et seq.) | ADNR has the responsibility for outdoor recreation planning and administering the Land and Water Conservation Fund program in Alaska. | • Administer LWCF program |
| Water Management, Article 3 (Dam Safety) (11 AAC 93.150 – 201) | ADNR Dam Safety and Construction Unit issues certificates to construct and operate dams in Alaska. | • Certificate of Approval to Construct, Modify, Remove, or Abandon a Dam<br>• Certificate of Approval to Operate a Dam |
| Mining License Tax (AS 43.65) | Alaska Department of Revenue | • Mining License |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| **Alaska Department of Public Safety, Division of Fire and Life Safety** | | |
| General function of the Department of Public Safety with respect to fire protection (AS 18.70.010)<br>Alaska Fire and Life Safety Regulations (13 AAC 50-55) | The Alaska Department of Public Safety, Division of Fire and Life Safety, has statewide jurisdiction for fire code enforcement and plan review authority, except in communities that have received deferrals. | • Approval to transport hazardous materials<br>• Life and Fire Safety Plan checks<br>• Plan Review Certificate of Approval for each building<br>• Fire Marshal permits |
| 2009 International Fire Code (IFC) | All fuel systems being developed to support port and airport operations during pipeline construction and operations must be reviewed and found to conform to the 2009 IFC requirements. Although explosive blasting is not anticipated to be used in the project; if used, the storage magazine type, location, and any barricade requirements must meet IFC requirements. | • 2009 IFC requirements |
| **Alaska Department of Transportation and Public Facilities** | | |
| Chapter 25 Operations, Wheeled Vehicles: Oversize and Overweight Vehicles (17 AAC 25.300) | The Alaska Department of Transportation and Public Facilities (ADOT&PF) issues permits for oversize or overweight vehicles. | • Oversize or overweight vehicle permits |
| Chapter 25 Operations, Wheeled Vehicles: Transportation of Hazardous Materials, Hazardous Substances, or Hazardous Waste (17 AAC 25.200) | ADOT&PF regulates the transportation of hazardous materials, hazardous substances, or hazardous waste by vehicles. | • Compliance with the transportation of hazardous materials, hazardous substances, or hazardous waste regulations |
| Utility Permits (17 AAC 15.011) | ADOT&PF issues permits authorizing applicants to construct or install utility facilities in a department ROW. | • Utility permits |
| Driveway and approach roads (17 AAC 10.020) | ADOT&PF issues permits authorizing applicants to construct and maintain driveway or approach roads that are constructed in a highway ROW. | • Driveway/Approach Road Permit |
| **Alaska Department of Labor, Standards and Safety** | | |
| Health Safety and Housing (AS 18.60.180), (8 AAC) | The Alaska Division of Labor, Standards and Safety enforces Occupational Safety and Health Administration regulations, and ensures that project-related activities meet standards and regulations for occupational health and safety. | • Certificates of Inspection for Fired and Unfired Pressure Vessels<br>• Occupational Safety and Health (inspections and certificates)<br>• Employer Identification Number |

**Table E-1: Permits, Approvals, and Consultations Required**

| Legal Authority | Agency | Role |
|---|---|---|
| **Alaska Department of Military Affairs** | | |
| Emergency Planning Districts and Committees, Plan Review (AS 26.23.073, .077) | Planning and reporting requirements for facilities that handle, store, and/or manufacture hazardous materials. | • Hazardous chemical inventories |
| **Alaska Division of Homeland Security & Emergency Management** | | |
| Hazardous Chemicals, Materials, and Wastes (AS 29.35.500) | The State Emergency Response Commission enforces reporting and planning requirements for facilities that handle, store, and/or manufacture hazardous materials. | • Hazardous chemical inventories |
| **Local** | | |
| **Lake and Peninsula Borough** | | |
| Lake and Peninsula Borough Title 9<br>Development Permit (09.07.10–90)<br>Large Project Permit (09.08.010–110)<br>Flood Hazard Management and Flood Insurance (09.09.010–050) | The Lake and Peninsula Borough requires a development permit and large project permit for the mine and road area in the borough. | • Zoning<br>• Plan review and development permit<br>• Solid waste |
| **Kenai Peninsula Borough** | | |
| Kenai Peninsula Borough Title 17 (17.10.185, 17.08-50) | The Kenai Peninsula Borough Land Management Division requires compliance with its code for utility or pipeline easements. | • Easements for utilities, pipelines, and travel ways<br>• Floodplain Development Permit<br>• Conditional Use Permit |
| **Tribal** | | |
| National Historic Preservation Act of 1966 (54 USC 300101 et seq.) (36 CFR Part 800) | The NHPA requires federal agencies to consult with any federally recognized tribe that ascribes traditional religious and cultural significance to historic properties in the undertaking's area of potential effects.<br>Federal agencies must engage in such consultation in identifying historic properties, evaluating adverse effects, resolving adverse effects, and developing a programmatic agreement. | • Section 106 Consultation<br>• Section 106 Programmatic Agreement |

Notes:
[1]The State of Alaska has provided additional information on their regulatory process for permitting large mine projects in responses to Request for Information (RFI)-064, RFI-064a, and RFI-131. These RFIs are included as Attachment A of this appendix.

# ATTACHMENT A—STATE OF ALASKA REGULATORY INFORMATION FOR PERMITTING LARGE MINE PROJECTS

**RFI 064**
**Pebble Project EIS**

**Request for Information**

| | |
|---|---|
| **Title/Subject:** | **Regulation of Effluent Discharges** |
| **Requestor:** | **AECOM** |
| **Date Transmitted:** | **August 8, 2018** |
| **Recipient:** | **Alaska Department of Environmental Conservation** |
| **Response Requested by** | **August 21, 2018** |
| **Rationale:** | **There is public concern that discharges, particularly waterborne metals, from the proposed Pebble Mine would adversely affect anadromous salmon and other aquatic life. Some concern has been expressed that the discharge limits specified in permits would not be protective of freshwater species.** |
| **Describe the Information Requested and Level of Detail:** | **Please summarize how wastewater discharges from the Pebble Mine would be regulated to protect aquatic resources.** |

**Recipient Response Form**

| | |
|---|---|
| **Date Received from USACE:** | Click here to enter text. |
| **Response from Recipient (Describe Information Requested to the Level of Detail Requested; Provide Attachments as Needed):** | **See attached response** |
| **List Number and Type of Response Attachments:** | **20180827_RFI_064_Regulation_of_Effluent_Discharges_ADEC.DOCX** |
| **Date Returned to USACE:** | **8/27/2018** |

**AECOM Intake Form**

| | |
|---|---|
| **Date Response was Received:** | **8/27/2018** |
| **Received by:** | **AECOM** |
| **Describe any Follow-up Related to this RFI:** | **None at this time** |

***Please summarize how wastewater discharges from the Pebble Mine would be regulated to protect aquatic resources.***

The Department of Environmental Conservation, Division of Water, Wastewater Discharge Authorization Program regulates wastewater discharges from hard-rock mining facilities (including the proposed Pebble Project) through various permits that are applicable to the project. Depending on the discharge type (e.g. mine contact water, storm water, and/or domestic wastewater) and the disposal site (e.g. waters of the United States (WOTUS), land application, and/or subsurface discharge) may involve several permits administered by the Wastewater Discharge Authorization Program to protect aquatic resources, including:

- Alaska Pollutant Discharge Elimination System (APDES) Individual Permit for point source discharge(s) into WOTUS;
- Integrated Waste Management Permit for solid waste disposal and wastewater discharge not into WOTUS;
- APDES Multi-Sector General Permit for storm water discharge(s); and/or
- Domestic Wastewater Discharge Permit (individual or general permit – may be under the APDES or state-issued permitting program depending if WOTUS is proposed for disposal).

Regulations in 18 AAC 70 require that the conditions in permits ensure compliance with the State Water Quality Standards (WQS). The state's WQS are composed of use classifications, numeric and/or narrative water quality criteria, and an Antidegradation Policy. The use classification system designates the beneficial uses that each waterbody is expected to achieve. The numeric and/or narrative water quality criteria are the criteria deemed necessary by the state to support the beneficial use classification of each waterbody. The Antidegradation Policy ensures that the beneficial uses and existing water quality are maintained. Water bodies in Alaska are designated for all uses unless the water has been reclassified under 18 AAC 70.230 as listed under 18 AAC 70.230(e). Some water bodies in Alaska can also have site–specific water quality criterion per 18 AAC 70.235, such as those listed under18 AAC 70.236(b).

The numeric water quality criteria are used to derive permit limits which are calculated through statistical analysis of the effluent and receiving water quality data following the guidance procedures in, *Alaska Pollutant Discharge Elimination System (APDES) Permits Reasonable Potential Analysis and Effluent Limits Development Guide, June 30, 2014*.

References

Alaska Water Quality Standards - http://dec.alaska.gov/water/water-quality/standards/

DEC, 2014. Alaska Pollutant Discharge Elimination System (APDES) Permits Reasonable Potential Analysis and Effluent Limits Development Guide, June 30, 2014.

**RFI 064a**
**Pebble Project EIS**

## Request for Information

| | |
|---|---|
| **Title/Subject:** | **Follow-up to RFI 064 response –Water Quality Criteria** |
| **Requestor:** | **AECOM** |
| **Date Transmitted:** | **9/11/18** |
| **Recipient:** | **Alaska Department of Environmental Conservation (ADEC)** |
| **Response Requested by:** | **9/21/18** |
| **Rationale:** | **The response to RFI 064 describes the regulations and process for establishing treated water discharge limits under the APDES program, and indicates that site-specific criterion may be established in certain cases (under 18 AAC 70.235). EPA comments on the pre-draft EIS request additional information on how site-specific background levels would be used in site performance monitoring. For some constituents, ADEC water quality criteria are more stringent than natural background levels in the project area (e.g., ERM 2015).** |
| **Describe the Information Requested and Level of Detail:** | **1) Does the State consider background levels in establishing surface water and groundwater quality monitoring requirements at locations downgradient of project facilities? How are site-specific background levels established and utilized to determine if those levels are being exceeded due to mine operations?**<br>**2) For facilities that would be reclaimed at closure, would background levels be considered in deciding how long monitoring would be required downgradient of a reclaimed facility?**<br>**3) Describe how the process works for establishing site-specific water quality criteria under 18 AAC 70.235.**<br>**4) What were the reasons that site-specific criteria were established at the mine sites listed in 18 AAC 70.236(b)? Are there any other mines in Alaska where site-specific water quality criteria are under consideration?**<br><br>**References:**<br><br>**ERM Alaska, Inc. 2018. Pebble Project Supplemental Environmental Baseline Document, 2004-2012, 9.1 Surface Water Quality, Bristol Bay Drainages.** |

## Recipient Response Form

| | |
|---|---|
| **Date Received from USACE:** | Click here to enter text. |
| **Response from Recipient (Describe Information Requested to the Level of Detail Requested; Provide Attachments as Needed):** | **See attached response** |
| **List Number and Type of Response Attachments:** | **09_11_2018_RFI_064 Followup – Regulation WQ Criteria_ADEC.docx** |
| **Date Returned to USACE:** | Click here to enter text. |

## AECOM Intake Form

| | |
|---|---|
| **Date Response** | **10/16/2018** |

| | |
|---|---|
| **was Received:** | |
| **Received by:** | **AECOM** |
| **Describe any Follow-up Related to this RFI:** | **None at this time** |

# Department of Environmental Conservation

## Division of Water- Water Quality Standards Section

### Background:

DEC Water Quality Standards (WQS) section has received a request for information (RFI 064a) from AECOM pertaining to the Pebble Project.

1) **Does the State consider background levels in establishing surface water and groundwater quality monitoring requirements at locations downgradient of project facilities?**

Yes, DEC does consider background levels when developing APDES discharge permit limits and monitoring requirements. Specific monitoring locations are evaluated by the department to determine their 'representativeness' of ambient conditions. This information is available in the draft permit and fact sheet and from the department upon request.

**How are site-specific background levels established and utilized to determine if those levels are being exceeded due to mine operations?**

In accordance with 18 AAC 70.235 the department may establish a site-specific criterion (SSC) if the department finds that the evidence reasonably demonstrates that the SSC will:

- fully protect designated uses;
- is more or less stringent than necessary to ensure full protection of the corresponding class use; or
- the criterion could be better expressed in terms different than those used at 18 AAC 70.020(b).

Adoption of SSC is considered a change in water quality standards and must be approved of by EPA prior to application in state water pollution control programs.

> "Natural Condition" is defined in the Water Quality Standard regulations (18 AAC 70.990(41)) as any physical, chemical, biological, or radiological condition existing in a waterbody before any human-caused influence on, discharge to, or addition of material to, the waterbody.

Per the DEC *Guidance for the Implementation of Natural Conditions-Based Water Quality Standards (*2006)

> By definition, the natural character and constituents of a waterbody are those not attributable to human activities. Natural water quality is affected by local geophysical, hydrological and meteorological processes and wildlife. The natural condition standard provision applies to any parameter listed in 18 AAC 70.020(b), except as discussed below. DEC anticipates that the natural condition provision would most frequently apply to parameters such as:
>
> - Bacteria attributed to wildlife including waterfowl,
> - Metals derived from natural mineral deposits,
> - Nutrients attributed to background soil, vegetation or wildlife sources,
> - Sediments from natural stream morphology processes or organic matter,
> - Temperature due to seasonal shifts and other natural processes, and

- Dissolved oxygen due to seasonal shifts and other natural processes.

Natural condition-based standards are not appropriate for human created substances that do not naturally exist in the environment. For example natural condition-based standards would not be appropriate for synthetic compounds that do not occur naturally such as polychlorinated biphenyls (PCBs) or pesticides such as aldrin or dieldrin.

DEC uses the following approach to establish a natural condition-based WQS

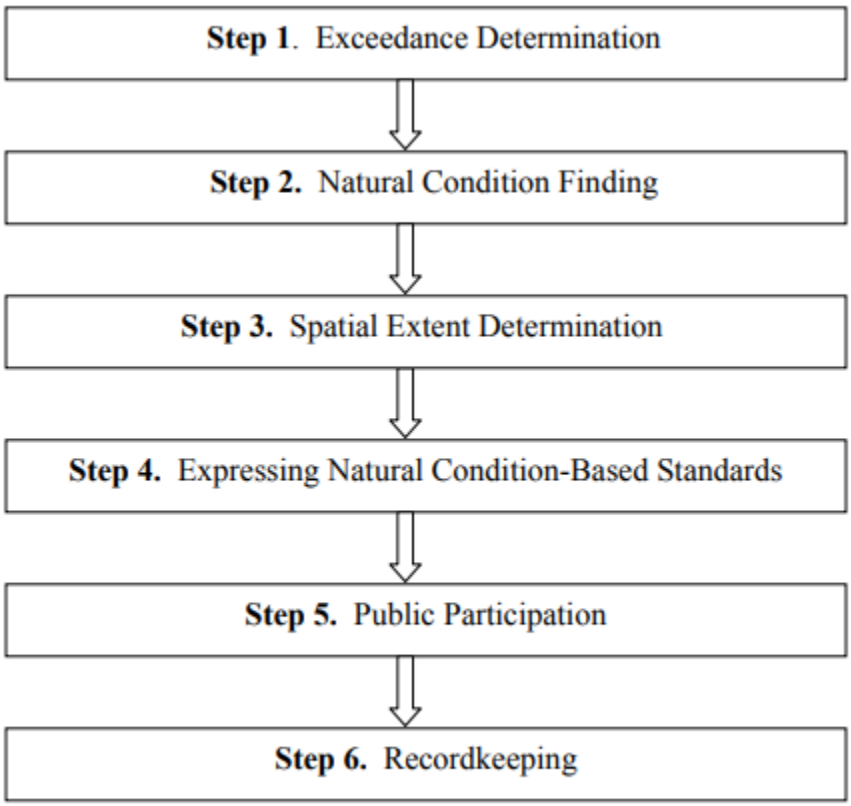


**Figure 1. Establishing a Natural Condition-Based Water Quality Standard Process Overview**

In determining whether the quality of a waterbody reflects its natural condition, DEC staff will consider:

- The nature extent, and intensity of any human use and development within the watershed,
- Whether human use and development is historic or continuing,
- Whether the types of human use and development are generally known to affect the specific water quality parameters that fall outside of the water quality criteria-based standards, and

- Whether the quality of the subject waterbody is similar to that of other waterbodies known or believed to reflect a natural condition.

A finding that the quality of a waterbody reflects its natural condition must include:

- An explanation of why human activities in a watershed are not directly or indirectly the cause of the exceedances of a water quality criteria for the pollutant of concern,
- Evidence that there has been minimal human activity in the watershed that would affect the water quality parameter in question, and
- An explanation as to how natural processes are adequate to explain the observed exceedances of the water quality criteria for the pollutant of concern.

DEC staff are afforded significant flexibility in deciding what sort of documentation is sufficient for this threshold determination, based on the availability of existing information and the difficulty of obtaining additional information. In any event, the record for a natural condition-based standard must include a compelling basis for a finding that the water quality criteria-based standards are being exceeded. In the event that an exceedance determination leads to the need to express a natural condition-based standard for use in a permit or other agency action or decision, site-specific water quality monitoring will be required. In order to express the natural condition as a standard, it will be necessary to provide information about the magnitude, duration and frequency that natural conditions exceed water quality criteria.

Once a natural condition SSC has been adopted and approved of by EPA, DEC establishes project-specific monitoring stations and conditions both upstream as well as downstream of the project area. This data is reviewed on an annual basis to determine whether site-specific and permitting conditions are still applicable. DEC has the ability to review water quality data, both discharge as well as ambient water, throughout the life of the permit to determine whether further adjustments to the permit is required.

The triennial review process, as authorized at §303(d) of the Clean Water Act, allows for all site-specific criteria to be reviewed every three years. The review of a natural condition-based SSC may be requested through the triennial review public comment process.

2) **For facilities that would be reclaimed at closure, would background levels be considered in deciding how long monitoring would be required downgradient of a reclaimed facility?**

Department-issued Alaska Pollutant Discharge Elimination System (APDES) and Integrated Waste Management Permits (WMP) require surface water and groundwater monitoring during exploration, development, operation, cessation of mining and milling, site reclamation, and post-closure periods of the mine life.

Background water quality which is collected in and around the mine site prior to mine development is an important reference that is used, in part, to establish the conditions under which further monitoring will no longer be required. The department requires that, after the permittee decision of permanent cessation of mining and milling, updated reclamation and monitoring plans be submitted

to the department for approval. The updated plans must address current conditions at the facility and become enforceable upon department approval.

In addition to other requirements of the updated reclamation and monitoring plan, permanent closure of the waste disposal facilities will be complete when permit-specified criteria are met, including that active water treatment is not required for any water discharged from the facilities. Post-closure monitoring may be required up to 360 months after reclamation and stopping active water treatment. A department-approved determination that the monitoring data does not exhibit a statistically significant increase above the background concentrations using methods described in 18 AAC 60.830 for the analysis of statistical significance will trigger a halt in post-closure monitoring.

3) **Describe how the process works for establishing site-specific water quality criteria under 18 AAC 70.235.**

See response to question 1.

4) **What were the reasons that site-specific criteria were established at the mine sites listed in 18 AAC 70.236(b)?**

In accordance with 18 AAC 70.235, the department may establish a site-specific water quality criterion that modifies a water quality criterion set out in 18 AAC 70.020(b) upon application or on its own initiative if the department finds that the evidence reasonably demonstrates that the site-specific criterion will fully protect designated uses of the water body.

Site-specific criterion of mine sites listed in 18 AAC 70.236(b) include waters in or near the Kensington Mine and Red Dog Mine which were both established upon application by the project proponent. A site-specific criterion was in development for the Chuitna Coal project located near Tyonek, upon application by the project proponent, PacRim Coal, LLC. However, PacRim Coal withdrew their application and the department discontinued further development of the site-specific criterion in March, 2017. As of October, 2018, the department is not considering site-specific water quality criterion for other mining projects in Alaska.

Site-specific criteria were adopted by DEC for the Red Dog mine for Total Dissolved Solids (TDS) and subsequently approved of by EPA in 2006. The basis for approval was toxicity-based evidence indicating that aquatic life (Arctic grayling) are affected by TDS at a level different than approved of in 18 AAC 70.020(b). Additional information, including the EPA approval, is available upon request.

**Are there any other mines in Alaska where site-specific water quality criteria are under consideration?**

DEC adopted and EPA approved of SSC for manganese for a specific reach of Marguerite Creek, a waterbody in immediate proximity to the Usibelli Coal Jumbo Dome project in 2017. DEC found that natural conditions, coupled with a recalculation of human health criteria for manganese, met the conditions noted in Question 1 and warranted a change in the water quality criterion. DEC used the most recent EPA-recommended exposure data (2015), a site-specific fish intake value, and a site-

specific bioconcentration factor that was indicative of the aquatic life present for human consumption (Arctic grayling). Monitoring locations were established through the SSC process both above and below the project area to ensure the representativeness of ambient water quality monitoring was maintained. Additional information is available from the department upon request.

**RFI 131**
**Pebble Project EIS**

## Request for Information

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| **Title/Subject:** | **Permitting for Large Mine Projects in Alaska** |
| **Requestor:** | **AECOM** |
| **Date Transmitted:** | **8/6/2019** |
| **Recipient:** | **State of Alaska** |
| **Response Requested by:** | **8/16/2019** |
| **Rationale:** | Many of the permits required for approval of the Pebble Project are under the jurisdiction of the State of Alaska. Information on the state's permitting review processes, standard permit requirements, and industry standards for large mine projects is necessary to inform the impact analysis of the project. These practices have been developed to ensure projects are designed, operated, and reclaimed in a manner consistent with state laws and regulations and can be used as a form of mitigation considered for the NEPA impacts evaluation. |
| **Describe the Information Requested and Level of Detail:** | Please provide additional information on the state's permitting review processes, standard permit requirements, and industry standards for large mine projects to be incorporated into Chapter 5, Sections 5.2.1 and 5.2.1.1, of the EIS. Discussions from technical meetings held the week of July 26, 2019 indicated that there may be additional practices that could be further explained for the public in these sections that could also help further inform the impact analysis. An example of a standard practice discussed during the meetings is the requirement for an annual audit for compliance with State permits and to ensure adequate oversight of the mine by state regulators; performed by a 3rd party (and paid for by the mine operator). Section 5.2.1.1 could also benefit from a more robust explanation of typical monitoring required for large mine projects. |

## Recipient Response Form

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| **Date Received from USACE:** | Click here to enter text. |
| **Response from Recipient (Describe Information Requested to the Level of Detail Requested; Provide Attachments as Needed):** | The State of Alaska's coordinated permitting process is a networked program that relies on the regulatory authorities and expertise of several state agencies, particularly the Alaska Departments of Natural Resources (ADNR), Environmental Conservation (ADEC), and Fish and Game (ADF&G). The Office of Project Management and Permitting (OPMP), within ADNR, coordinates state review and permitting processes for natural resource development projects, including mineral development projects, per Alaska Statute (AS) 38.05.020(b)(9). Please see "Permitting Large Mine Projects in Alaska" (2018) for more details (attached).<br><br>ADNR, ADEC, and ADF&G each have regulatory authorities to condition their respective authorizations, if issued and as necessary, to ensure the approved activities comply with applicable state laws. Permit conditions (also referred to as "stipulations") are legally binding for the applicant and enforceable by the issuing agency. Although authorizations issued by the same agency for different projects may include the same or similar enforceable conditions, such stipulations are not standardized. Rather, the issuing agency will condition the permit, if necessary, based on project specific information and regulatory requirements.<br><br>Please see attached examples of Reclamation Plan Approvals, Waste Management Permits, and Alaska Pollutant Discharge Elimination System (APDES) Permits for the five currently operating hard rock mines in Alaska, as well as the recently permitted Donlin Gold Project.<br><br>Conditions specific to environmental audits are found in the Reclamation Plan Approvals and Waste Management Permits, and the environmental audit reports for the five operating hard rock mines are attached to this response. These reports |

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| | summarize and evaluate the required monitoring activities under the Reclamation Plan Approval and Waste Management Permit. Monitoring requirements under APDES Permits are described in Section 4 of "Alaska Pollutant Discharge Elimination System (APDES) Permits Reasonable Potential Analysis and Effluent Limits Development Guide, June 30, 2014.<br><br>Regarding special conditions typically included in Certificates of Approval to Construct a Dam issued by ADNR, please see Chapters 3, 4, and 5 of the attached "Guidelines for Cooperation with the Alaska Dam Safety Program" (Revised Draft July 2017).<br><br>The Revised Draft Guidelines for Cooperation with the Alaska Dam Safety Program are available on the Alaska Dam Safety Program's website at http://dnr.alaska.gov/mlw/water/dams/. All of the attached project-related documents are available on ADNR's Large Mine Permitting website at http://dnr.alaska.gov/mlw/mining/largemine/. |
| **List Number and Type of Response Attachments:** | 1) Permitting Large Mine Projects in Alaska (ADNR, 2018)<br>2) Revised Draft Guidelines for Cooperation with the Alaska Dam Safety Program (ADNR, 2017)<br>3) Red Dog Reclamation Plan Approval (ADNR, 2016)<br>4) Red Dog Waste Management Permit (ADEC, 2016)<br>5) Red Dog APDES Permit (ADEC, 2017)<br>6) Red Dog Environmental Audit (AECOM, 2014)<br>7) Fort Knox Plan of Operations Approval (ADNR, 2014)<br>8) Fort Knox Reclamation Plan Approval (ADNR, 2014)<br>9) Fort Knox Waste Management Permit (ADEC, 2014)<br>10) Fort Knox APDES Permit (ADEC, 2012)<br>11) Fort Knox Environmental Audit (SRK, 2019)<br>12) Pogo Plan of Operations Approval (ADNR, 2018)<br>13) Pogo Waste Management Permit (ADEC, 2018)<br>14) Pogo APDES Permit (ADEC, 2018)<br>15) Pogo Environmental Audit (HDR, 2016)<br>16) Kensington Reclamation Plan Approval (ADNR, 2013)<br>17) Kensington Waste Management Permit (ADEC, 2013)<br>18) Kensington APDES Permit (ADEC, 2019)<br>19) Kensington Environmental Audit (HDR, 2017)<br>20) Greens Creek Reclamation Plan Approval (ADNR, 2014)<br>21) Greens Creek Waste Management Permit (ADEC, 2014)<br>22) Greens Creek APDES Permit (ADEC, 2015)<br>23) Greens Creek Environmental Audit (HDR, 2019)<br>24) Donlin Reclamation Plan Approval (ADNR, 2019<br>25) Donlin Waste Management Permit (ADEC, 2019)<br>26) Donlin APDES Permit (ADEC, 2018)<br>27) Alaska Pollutant Discharge Elimination System (APDES) Permits Reasonable Potential Analysis and Effluent Limits Development Guide, June 30, 2014 (ADEC, 2014) |
| **Date Returned to USACE:** | Click here to enter text. |

## AECOM Intake Form

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| **Date Response was Received:** | **8/30/2019** |
| **Received by:** | **AECOM** |
| **Describe any Follow-up Related to this RFI:** | Click here to enter text. |