

# **Department of Natural Resources**

OFFICE OF PROJECT MANAGEMENT AND PERMITTING

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# Permitting Large Mine Projects in Alaska

Numerous state, federal, and local government permits and approvals are required before the development and operation of a large hardrock mine in Alaska can proceed. Each project presents unique challenges; therefore, the specific permits and approvals can vary substantially from project to project. The State of Alaska has developed the Large Mine Permitting Team (LMPT) process to coordinate much of the state agency permitting for such projects. This process, which may also integrate with federal and local government permitting processes, seeks to improve mine permitting by implementing a robust, coordinated process that is predictable, consistent, and responsive to the needs of regulatory agencies and project applicants. The process also seeks to provide relevant information to the public in a transparent, understandable way.

The Alaska Department of Natural Resources, Office of Project Management and Permitting (OPMP), may coordinate the permitting of large mine projects in the state, per Alaska Statute (AS) 38.05.020(b)(9). For applicants that choose to participate in the LMPT process, OPMP assigns a Large Project Coordinator to serve as the primary state contact and to facilitate the project specific LMPT. Each LMPT is an interagency group of regulatory experts that works cooperatively with large mine applicants and operators, federal resource agencies, and the public to ensure that projects are designed, operated, and reclaimed in a manner consistent with state laws and regulations. The Large Project Coordinator's primary responsibility is to ensure a coordinated process with minimum duplication. This often involves tailoring the process to fit specific project needs.

Some of the permits and approvals that may be required include, but are not limited to, the following:

#### STATE AGENCIES

## ALASKA DEPARTMENT OF NATURAL RESOURCES (ADNR)

**Plan of Operation Approval.** This approval authorizes the plan of operations for non-coal mines and is required for all mining projects on state land. ADNR's Division of Mining, Land and Water, Mining Section issues this approval. ADNR generally issues a courtesy public notice prior to final approval.

**Reclamation Plan and Bond Approval.** This approval authorizes the reclamation plan and bond cost estimate for non-coal mines on all lands in Alaska. ADNR's Division of Mining, Land and Water, Mining Section issues this approval. Bonds can include financial assurances for long-term environmental management obligations, post-mining. ADNR generally issues a courtesy public notice prior to final approval.

**Easements for Access and Utilities.** For projects on state land, an easement is required for infrastructure such as roads, pipelines, and powerlines. Other access authorizations may be required for non-state lands as well. ADNR's Division of Mining, Land and Water, Lands Section issues easements.

Public notice and a written decision are required for easements.

**Millsite Lease.** A Millsite Lease may be recommended, for mine project facilities on state land. This lease gives the applicant a surface property right for the associated facilities. ADNR's Division of Mining, Land and Water, Mining Section issues this lease.

**Permit to Appropriate Water.** A Temporary Water Use Authorization or Water Right from the State is generally required for water uses over 500 gallons per day, including withdrawals, impoundments, and diversions. Applicants coordinate with the ADNR's Division of Mining, Land and Water, Water Resources Section to determine which application is appropriate. The Water Resources Section issues both Temporary Water Use Authorizations and Water Rights. An Agency Notice is required for all Temporary Water Use Authorizations. A Public Notice and Agency Notice are required for Water Rights applications over 5,000 gallons per day.

**Dam Safety Certification.** Certificates of Approval are issued to construct, modify, repair, operate, or abandon any jurisdictional dam in the state. These certificates involve a detailed engineering review of the dam's design, performance, operation, and findings of periodic safety inspections. The certificates are issued by ADNR's Division of Mining, Land and Water, Dam Safety and Construction Unit.

**Upland or Tideland Leases.** An applicant may require a property interest in lands outside the boundaries of their mine site. A Tideland Lease is required for the use of state-owned tidelands for marine facilities such as docks. Likewise, for use of state-owned uplands, a lease is required for facilities such as transportation and staging facilities. ADNR's Division of Mining, Land and Water, Lands Section issues these leases. Public notice and a Best Interest Finding are required prior to final approval. The lease may also be subject to additional deliverables prior to final approval, such as a survey, insurance, bonding, appraisal, and applicable land use fees.

**Material Site and Material Sale.** If materials such as sand, gravel, or rock, are needed from state lands off a Millsite Lease, a separate Material Site must be designated if one does not already exist. Once designated, a Material Sale may be approved from that site. ADNR's Division of Mining, Land and Water, Lands Section designates sites and issues material sale contracts. Public notice and a Best Interest Finding are required for material site designations.

Winter Travel Permits. Cross-country travel on snow or ice roads is commonly used to stage equipment and supplies for a project. A permit from the Division of Mining, Land and Water, Lands Section must be obtained before constructing such roads on state land or conducting overland travel. Crossings of fish-bearing water bodies by snow or ice roads also require authorization by The Alaska Department of Fish and Game, Habitat Section prior to construction (see below).

Cultural Resources Review. Consultation with the Alaska Office of History and Archaeology and State Historic Preservation Office is required to demonstrate avoidance, minimization, or mitigation of adverse effects to significant cultural resources. State law requires all activities requiring licensing or permitting from the State of Alaska or conducted by state agencies for public construction and improvement, to comply with the Alaska Historic Preservation Act (AS 41.35.070). Projects on federal lands in Alaska or that include federal licensing, permitting, or funding require compliance with Section 106 of the National Historic Preservation Act (54 USC 306108).

**Easement, Lease, or Permit (License).** The Alaska Mental Health Trust Authority has authorized the ADNR's Trust Land Office (TLO) to manage its approximately one million acers of land and other non-cash assets to generate revenue for the trust.

Projects may need authorization from the TLO if they are located on land owned by the Alaska Mental Health Trust Authority, or if they need access through them.

**Special Park Use Permit.** The ADNR's Division of Parks and Outdoor Recreation (DPOR) is responsible for managing over 156 state park units. Note that many state park units are Legislatively Designated Areas (LDAs) and DPOR does not have the authority to issue authorizations for utilities in those areas. Projects within an LDA will need to contact the Alaska State Legislature to obtain legislative approval for project infrastructure. Projects may need authorization from DPOR if they are located within a DPOR-managed area that was established under an Interagency Land Management Agreement (ILMA).

## ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (ADEC)

Integrated Waste Management Permit and Financial Responsibility. The Integrated Waste Management Permit authorizes the disposal of tailings, waste rock, and wastewater that are not discharged into waters of the United States. This permit usually requires pre-operational, operational, and post-closure monitoring. The permit also requires proof of financial responsibility (i.e. bonding) to assure compliance with applicable closure standards and post-closure monitoring requirements. Public notice is required before final approval.

Alaska Pollutant Discharge Elimination Permit. The State of Alaska has the authority to administer the National Pollutant Discharge Elimination System (NPDES) program for the mining sector under 18 AAC 83, Alaska Pollutant Discharge Elimination System (APDES) program. All facilities in Alaska that have a discharge to surface or marine waters of the United States are required to obtain an APDES permit prior to discharging. Under this program mine discharges are still required to meet applicable (40 CFR 440.104) New Source Performance Standards (NSPS) and state water quality standards, whichever provides the more stringent limitation. APDES permits require regular monitoring to ensure compliance with permit stipulations and the protection of water quality. Public notice is required prior to final approval.

Storm Water Discharge Pollution Prevention Plan. ADEC administers APDES Storm Water General Permits for both construction activities and during operational phases of the facilities through the APDES Multi-Sector General Permit for industrial activities. ADEC approves Storm Water Pollution Prevention Plans (SWPPPs) that include storm water best management practices. The facility may have separate APDES permits to cover wastewater and storm water discharges, or the requirements may be combined into one APDES permit.

**Domestic and Non-Domestic Wastewater Disposal Permits.** Under 18 AAC 72, ADEC permits wastewater discharges to state land and groundwater. If injection wells are part of the wastewater disposal plan, then the requirements for the Environmental Protection Agency's (EPA)Underground Injection Control (UIC) Class V wells must be met in addition to any requirements in a state wastewater permit.

Certificate of Reasonable Assurance for 404 Permits. Activities involving dredging or discharge of fill material within waters of the United States are governed by the terms and conditions of a Clean Water Act (CWA) Section 404 Permit from the U.S. Army Corps of Engineers. CWA Section 401 also requires the applicant to obtain state certification that any discharge under CWA Section 404 will comply with applicable state water quality standards.

Air Quality Permits. The construction, modification, and operation of mining facilities that produce air contaminant emissions require a state Air Quality Control Permit to Construct and a separate Air Quality Control Permit to Operate. The determination to require a permit is based on the source location, total emissions, and changes in emissions for sources specified in 18 AAC 300(a). Generally, air quality must be maintained at the lowest practical concentrations of contaminants specified in the Ambient Air Quality Standards of 18 AAC 50.020(a). Public notice is required prior to final approval.

Approval to Construct and Operate a Public Water Supply System. Prior to start of construction, ADEC must approve, in writing, detailed engineering reports, plans, and specifications for the construction alteration, or modification of a public water system. Once construction has been completed, ADEC must approve operation of a public water system.

Plan Review for Non-Domestic Wastewater Treatment System. Engineered plans for disposal of wastewater from milling operations and other non-domestic wastewater sources must be submitted to ADEC for approval through either a state Wastewater Disposal Permit or an APDES Permit. Public notice is required prior to final approval.

Plan Review and Construction Approval for Domestic Sewage System. The construction and operation of facilities that collect, treat, and dispose of wastewater is governed by a plan review to ensure that minimum standards are applied. Detailed engineering reports, plans, and specifications must be certified by a registered Professional Engineer.

Oil Discharge Prevention and Contingency Plan. Approval by ADEC of an oil discharge prevention and contingency plan is required prior to commencement of operation of above- ground tank facilities capable of storing 420,000 or more gallons of refined petroleum product or 210,000 or more gallons of crude oil. These contingency plans are reviewed every five years. (See AS 46.04.030 and 18 AAC 75).

## ALASKA DEPARTMENT OF FISH AND GAME (ADF&G)

**Fish Habitat Permits.** ADF&G Habitat Section has the statutory responsibility for the proper protection of important freshwater anadromous fish habitat and ensuring free passage for all fish in fresh waterbodies (AS 16.05.841-871). Fish Habitat Permits (FHPs) will likely be required for mining activities or projects that are conducted within any fish bearing waterbodies. Mining activities that may require FHPs include culvert & bridge installations, water withdrawals, placer mining, stream crossings, stream diversions, dams, etc.

**Special Area Permits.** If a mining project is proposed within a state refuge, sanctuary, or critical habitat, it will require a Special Area Permit from ADF&G Habitat Section; such activities may include access roads, pipelines, pump stations, etc.

Aquatic Resource Permits. If fish (including shellfish and amphibians) must be captured or transported from a dewatered mine or construction site, an Aquatic Resource Permit will be required from ADF&G Division of Sport Fish.

Aquatic biomonitoring surveys may be performed by ADF&G staff at exploration projects or operating mines to document baseline and/or ongoing environmental conditions within the watershed (i.e./ fish and their habitat).

## ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES (ADOT&PF)

**Right-of-Way Permit, Utility Permit, Driveway Permit, and Lane Closure.** The ADOT&PF is responsible for designing, constructing, operating, and maintaining the State's transportation systems, including highways, airports, harbors, the state's ferry system, and various public facilities, including airports. Projects may need authorization from DOT&PF if they are within ADOT&PF-managed Rights-of-Way.

#### UNIVERSITY OF ALASKA

Land Use Permit. The University of Alaska (University or UA) Land Management is responsible for managing University land throughout the state, including over 137,000 acres of investment properties. Projects may need authorization from the University if they are located on University land, or if access is needed through them.

#### FEDERAL AGENCIES

The involvement of federal agencies may vary for each project. OPMP coordinates with appropriate federal agencies throughout the permitting process and serves as the main point of contact when the State is a Cooperating Agency under provisions of the National Environmental Policy Act (NEPA).

#### **NEPA**

NEPA is a federal law that requires federal agencies to assess the environmental and related social and economic effects of projects prior to deciding on awarding federal funds, implementing an action, or issuing an authorization.

If a project receives federal funds, or requires one or more federal authorizations, a NEPA review will be required. The lead federal agency that will conduct the NEPA review is typically the federal agency with the largest authorization in play.

## U.S. Department of the Interior, Bureau of Land Management (BLM)

BLM is responsible for managing federally owned lands and minerals not managed by other agencies. Projects may need authorization from the BLM if they are located on BLM land, or if access is needed through them.

#### U.S. Department of the Interior, Fish and Wildlife Services (FWS)

FWS is responsible for managing National Wildlife Refuges. Projects may need authorization from the FWS if they are located on FWS land, such as a National Wildlife Refuge, or if access is needed through them.

## U.S. Department of the Interior, National Park Service (NPS)

NPS is responsible for managing National Parks for the enjoyment, education, and inspiration of all people. Projects may need authorization from the NPS if they are located on NPS land, such as a National Park, or if access is needed through them.

## **U.S. Department of the Army Corps of Engineers (USACE)**

USACE is responsible for regulating the discharge of dredged and/or fill materials in waters of the U.S. under Section 404 of the Clean Water Act and all work in navigable waters under Section 10 of the Rivers and Harbors Act of 1899. Projects may need authorization from the USACE if they add structures or fill to waterbodies or wetlands, or if they will affect a navigable waterbody.

#### U.S. Department of Homeland Security Coast Guard (USCG)

Projects may need authorization from the USCG if they involve building a bridge or causeway over tidal (ocean) waters, or navigable rivers, streams, or lakes, building access to an island, or siting, construction, or operation of a deep-water port.

#### **U.S. Department of Agriculture National Forest Service (NFS)**

NFS is responsible for managing National Forests. Projects may need authorization from the NFS if they are located on NFS land, such as a National Forest, or if access is needed through them.

#### NATIVE VILLAGE OR REGIONAL CORPORATION LAND

Land use authorizations must be obtained from Native Village(s) or Regional Corporation(s) if a project is located on, or will need access through, Native Village or Regional Corporation land.

#### LOCAL GOVERNMENT

Don't forget to check with local governments (boroughs, municipalities, cities, or a combination) for authorizations they may require for your project.

#### THE LARGE MINE PERMITTING TEAM (LMPT) PROCESS

The goal of the Large Mine Permitting Team (LMPT) process is to coordinate the multi-agency review of the numerous permits required for a large, complex hardrock mine to proceed. The LMPT reviews technical documents and provides coordinated comments, when necessary. OPMP, through the LMPT, works with the agencies and the applicant to develop a schedule that synchronizes, to the greatest extent possible, the agencies' statutory, regulatory, policy, and other requirements, with project needs and goals. A Large Project Coordinator in OPMP is assigned to function as a primary point-of-contact to the applicant, agencies, and public, and the Large Project Coordinator assists in navigating the processes and securing consistent, defensible, transparent, and timely authorization decisions by facilitating meetings, coordinating joint-agency public notices, and helping both the applicant and agencies prepare for the upcoming permitting needs for the project. The LMPT process reduces duplication of effort, improves communication, and information sharing compared with multiple single-agency reviews. Goals, targets, and deliverables are defined, opportunities to conduct concurrent steps are identified, communication is ongoing, and progress is monitored.

Federal authorizations usually trigger the requirement for an Environmental Assessment (EA) or Environmental Impact Statement (EIS) pursuant to NEPA. The State of Alaska can participate as a Cooperating Agency in the EIS process, ensuring the LMPT has access to information and can provide information on state permitting requirements to the federal agencies.

OPMP also coordinates the LMPT process, to the extent possible, with local governments.

The following is a summary of the general process OPMP follows for this team approach to permitting a large mine in Alaska:

**Pre-Application.** One of the first tasks for the LMPT is to work with the potential applicant to ensure the pending permitting process and regulatory requirements are understood, that appropriate baseline environmental data are collected, to define application information requirements, and develop a realistic schedule.

**Permit Application.** The applicant submits an application package, typically consisting of the Plan of Operations, Reclamation Plan, Waste Management Plan, reclamation and closure cost estimates, associated monitoring and management plans, and baseline study reports. The LMPT reviews the submittals to ensure all the necessary information for a complete review is included.

**Review and Analysis.** The LMPT collaboratively reviews the proposed plans and supporting documents to inform their respective agencies' permitting decisions and to ensure the project design complies with all applicable state laws and regulations.

**Issues Resolution.** The LMPT works with the applicant to identify and address potential permit challenges and opportunities, sometimes resulting in modifications to the project design, operation, or monitoring plans.

**Public Notice and Permit Issuance.** Draft Plan of Operations Approval, Reclamation Plan Approval, Integrated Waste Management Permit, and financial assurance costs are publicly noticed together with final proposed plans and supporting documents from the applicant. Public comments are reviewed by the LMPT and incorporated, as appropriate, into final agency approvals, which are then posted publicly on ADNR's Large Mine Project website (link below).

**Post Permit Issuance.** Once the permits are issued and construction and operation begins, the LMPT is active in permit maintenance, site inspections, and compliance monitoring.

**Reclamation and Final Closure.** The LMPT ensures that reclamation and closure objectives are met, including long-term environmental management, and that financial assurances are in place to ensure an orderly and stable closure.

**Funding the LMPT Process.** OPMP establishes a Memorandum of Understanding (MOU) with each applicant and Reimbursable Service Agreements (RSAs) with each participating state agency to reimburse the State's costs for the LMPT process. An MOU does not guarantee an applicant receives any of the required permits, rather it provides the means for the State to dedicate experienced staff to the coordinated permitting effort. These agreements are renewed annually, and "not-to-exceed" limitations are applied to help control costs.

## QUESTIONS OR FOR MORE INFORMATION

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