



ALASKA DEPARTMENT OF NATURAL RESOURCES

OFFICE OF PROJECT MANAGEMENT AND PERMITTING

PERMITTING LARGE MINE PROJECTS IN ALASKA

Numerous state, federal, and local government permits and approvals are required before development and operation of a large hardrock mine in Alaska can begin. 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 all State agency permitting for such projects. This process, which also integrates with federal and local government permitting, has significantly improved mine permitting for the benefit of both the industry and the public.

The Department of Natural Resources (DNR), Office of Project Management and Permitting (OPMP), coordinates the permitting of large mine projects in the state. OPMP assigns a project manager to serve as the primary contact for a large mine project. The project coordinator manages the permitting activities of the state team assigned to work on the project. The large mine project team is an interagency group, coordinated by DNR, that works cooperatively with large mine applicants and operators, federal resource agencies, and the Alaskan public to ensure that projects are designed, operated and reclaimed in a manner consistent with the State regulations. The 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/approvals that may be required include, but are not limited to, the following:

DEPARTMENT OF NATURAL RESOURCES (DNR)

Plans of Operation Approval. This approval authorizes the plan of operations for non-coal mines, and is required for all mining projects on state land. DNR's Division of Mining, Land and Water/Mining Section issues this 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. DNR's Division of Mining, Land and Water/Mining Section issues this approval. Bonds can include financial assurances for long-term environmental management of projects post-mining.

Surface Coal Mine Permit. For coal mines, Alaska's Coal Regulatory Program issues surface coal mining permits in accordance with the Alaska Surface Coal Mining and Reclamation Act. This permit approves the mine's plan of operations, reclamation plan, and financial assurance. DNR's Division of Mining, Land and Water/Mining Section issues this permit.

Right-of-Way for Access and Utilities. For projects on state land, a right-of-way is required for infrastructure such as roads, pipelines, and powerlines. Other access authorizations may be required for non-State lands as well. DNR's Division of Mining, Land and Water/Lands Section issues this approval.

Millsite Lease. A Millsite Lease is required for mine project facilities on State land. This lease gives the proponent a surface property right for the facilities. DNR's Division of Mining, Land and Water/Mining Section issues this lease.

Permit to Appropriate Water. Appropriation of a significant amount of water on other than a temporary basis requires authorization by a Water Rights Permit. A Water Right is a property right for the use of public surface and subsurface waters. Temporary uses of a significant volume of water, for up to five years, require a Temporary Water Use Permit. DNR's Division of Mining, Land and Water/Water Section issues this permit.

Dam Safety Certification. A Certificate of Approval to Construct and a Certificate of Approval to Operate must be obtained for any significant dam in the State. These certificates involve a detailed engineering review of the dam's design and operation. The certificates are issued by DNR's Division of Mining, Land and Water/Dam Safety Unit.

Upland or Tideland Leases. A project may require a property interest in lands not adjacent to the minesite itself. For use of state-owned tidelands, a tideland lease is issued 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. DNR's Division of Mining, Land and Water/Lands Section issues these leases.

Material Sale. If materials such as sand, gravel, or rock, are needed from state lands off the millsite lease, then a separate material sale must be issued. DNR's Division of Mining, Land and Water/Lands Section issues this sale.

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 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 will require authorization by ADF&G Habitat prior to construction.

Cultural and Historical Resource Protection. Clearance must be obtained from the State to ensure that a project will not significantly impact cultural and archaeological resources. If significant disturbance cannot be avoided, then a compensation strategy is developed. Cultural resource clearances are obtained from DNR's State Historic Preservation Office.

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (ADEC)

Waste Management Permit. If tailings or waste rock from a mine project has the potential for impacting state waters, then a Waste Management Permit must be obtained. This permit usually requires pre-operational, operational and post-closure monitoring. The permit also requires financial assurance both during and after operations, and to cover short and long-term treatment, if necessary, and closure costs, monitoring, and maintenance needs.

Alaska Pollutant Discharge Elimination Permit. In 2010 the State of Alaska assumed authority over National Pollutant Discharge Elimination System (NPDES) permitting for the mining sector under 18 AAC 83. As a result ADEC now regulates mine discharges to all waters under the Alaska Pollutant Discharge Elimination System program (APDES). All mines that have a discharge to surface or marine waters of the U.S. 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) or 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.

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 waste water 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 Army Corps of Engineers (COE). 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 50.300(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).

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 are to be submitted to the state for approval for either a state Wastewater Disposal Permit or an APDES Permit.

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 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 three years. (See 46.04.060 and 18 AAC 75)

ALASKA DEPARTMENT OF FISH AND GAME (ADF&G)

Title 16 Permit. This permit, regardless of land ownership, is required for any activity conducted within fish-bearing waters, such as bridges, culverts, fords (winter or summer), material sites, tailings facilities, and water-withdrawal structures. ADF&G's Division of Habitat issues this permit.

If a project is within a state refuge, sanctuary, or critical habitat, any activity within the special area will require a Special Areas Permit from ADF&G. A permit from ADF&G, called a Scientific Collection Permit, is required for any sampling of fish or wildlife resources.

On operating mines, DF&G often conducts fish surveys and studies as part of on-going environmental monitoring.

FEDERAL AGENCIES

The involvement of federal agencies may vary for each project, but most projects at least require authorizations from the US Army Corps of Engineers. DNR's Office of Project Management and Permitting also coordinates with the pertinent federal agencies, as required:

U.S. Army Corps of Engineers Section 404 and Section 10 permits. A discharge of dredged or fill material, including mine tailings, into waters or wetlands of the United States is prohibited unless authorized by the Corps of Engineers (COE) under Section 404 of the CWA. To the degree that activities have an effect on "waters of the United States," these activities undertaken in connection with mining operations might require a Section 404 Permit (including road or bridge construction, construction of dams for tailings storage, water storage dams, and stream diversion structures).

The COE is responsible for determining consistency of the proposed action with the Section 404 (b)(1) guidelines. Section 404 permit actions are subject to NEPA (40 CFR Part 6, Subpart F). Therefore, COE would issue a Record of Decision in conjunction with the final permit action.

Under Section 10 of the Rivers and Harbors Act of 1899, the COE also must issue a permit for any structure or work that could obstruct traditionally navigable waters.

U.S. Environmental Protection Agency Permits. In addition to its review authority over COE 404 Permit decisions, the EPA may use its Clean Water Act (CWA) authority to review the Spill Prevention, Control, and Countermeasure (SPCC) Plan required for oil storage. Facilities with an above ground oil storage capacity greater than 1,320 gallons as well as any facility with underground tank storage capacity greater than 42,000 gallons are required to develop and implement an SPCC Plan. EPA also retains review authority over APDES permits issued by ADEC and over the state water quality standards incorporated into APDES permits. Under Section 404 (c), EPA has review authority over the COE 404 Permit decisions.

Appropriate Federal Land Manager. If a project is on Federal lands, then authorizations must be obtained from the appropriate managing agency, such as the U.S. Forest Service or Bureau of Land Management. If the mine requires review under the federal National Environmental Policy Act (NEPA), the federal land manager is the lead agency conducting the review.

US Fish and Wildlife Service. Federal agencies must conduct a Section 7 Endangered Species Act consultation with the U.S. Fish and Wildlife Service (USFWS) regarding any threatened or endangered species that may be affected by the proposed project. The level of required informal or formal consultation depends on whether listed species occur in the project area, and, if so, whether they are likely to be affected by the proposed project. If listed species occur in the area and they may be affected, then agencies and the USFWS would undergo the formal consultation process. This is typically an involved process that results in measures designed to minimize the impact of the project on listed species.

The USFWS implements provisions of the Bald Eagle Protection Act and the Migratory Bird Act. The USFWS also provides technical expertise and provides comments and recommendations to federal agencies via the Fish and Wildlife Coordination Act (16 USC 661 et. Seq.).

National Marine Fisheries Service. Federal agencies may have to conduct a Section 7 Endangered Species Act consultation with the National Marine Fisheries Service (NMFS) in accordance with the Endangered Species Act (ESA). If any impacts are predicted for any threatened or endangered marine species, specific design measures to protect the affected species must be developed.

In a similar manner, Federal agencies must consult with NMFS concerning any action that might adversely affect essential fish habitat (EFH). EFH includes habitats necessary to a species for spawning, breeding, feeding, or growth to maturity. EPA will provide NMFS with an EFH assessment.

THE LARGE MINE TEAM PROCESS

The goal of the state's Large Mine Project Team is to coordinate the timing and completion of the numerous permits. The team reviews all the complex technical documents generated during the process and provides coordinated comments. The team also coordinates stakeholder involvement and provides a primary point of contact for the public when multiple agency actions are in public review. The team provides the public, agencies and the applicant the opportunity to view the project as a whole.

Federal authorizations usually trigger the requirement for an Environmental Assessment (EA) or Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). The State can participate as a cooperating agency in the EIS process, and the team endeavors to dovetail the state's permitting process with the EIS process.

The Large Mine Project Team also coordinates, to the extent possible, with local governments. For example, the team worked closely with the City and Borough of Juneau throughout the permitting and EIS process for the Kensington Mine. The City's Conditional Use Permits are critical authorizations for the mine, and may place additional stipulations on the project.

The following is a summary of the general process used by the team:

Pre-Permitting Schedule. The first task for the Large Mine Project Team is to work with the potential applicant to ensure that they understand the process and regulatory requirements and sideboards, that they are collecting the appropriate baseline data, that they understand what information the State needs in a permit application or other approval, and that a realistic schedule is developed.

Permit Application. The applicant submits an application package, and the team reviews this to make sure all the necessary information is included.

Review and Analysis. The team reviews the proposed mine plan and supporting studies in a collaborative effort to generate final permits that meet all applicable State regulations.

Issues Resolution. The team works with the applicant to resolve issues, usually resulting in modifications to the permit application package.

Post Permit issuance. Once the permits are issued and construction and operation begins, the team is active in permit maintenance, inspection, and compliance monitoring.

Reclamation and Final Closure. The team is responsible for ensuring 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.

A Memorandum of Agreement (MOA) is typically required by the state to reimburse the cost of permitting for large mine projects. An MOA provides the means for the state to dedicate experienced staff to the permitting efforts. This assures that key personnel from the various agencies are devoted to specific projects. These agreements are renewed annually. "Not-to-exceed" limitations can be applied to help control costs. In its coordinating role, DNR acts as the centralized accounting function for the MOA. The issuance of permits is not guaranteed by an MOA.

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<http://dnr.alaska.gov/commis/opmp/>

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