



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 construction and operation of a large hardrock mine in Alaska can begin. Each project presents unique challenges, therefore the specific permits and approvals required can vary from project to project. The State of Alaska has developed a process to coordinate all State agency permitting for such projects. This process, which also integrates with federal and local government permitting, has significantly streamlined 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 manager coordinates the permitting activities of the state team assigned to work on the project. The large mine permitting team (LMPT) 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 public interest. The project manager's primary responsibility is to ensure a coordinated process with minimum duplication. This often involves tailoring the process to fit specific project needs.

For coal mine projects in Alaska, the coordinating role is held by the Coal Regulatory Program, within DNR's Division of Mining, Land and Water/Mining Section.

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.

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.

Title 41 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. DNR's Office of Habitat Management and Permitting (OHMP) issues this permit.

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 5 years, require a Temporary Water Use Permit. DNR's Division of Mining, Land and Water 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 OHMP prior to construction.

Cultural 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.

ACMP Consistency Review. If a project is within Alaska's Coastal Zone, it is reviewed for consistency with the Alaska Coastal Management Program's enforceable policies, including coastal district policies. The review is a coordinated review of federal and state authorizations, all of which require a positive consistency determination before issuance. Coastal Consistency Review's are conducted by DNR's Division of Coastal and Ocean Management (DCOM).

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, closure costs, monitoring, and maintenance needs.

Domestic and Non-Domestic Wastewater Disposal Permits. ADEC must authorize the discharge of wastewater into or upon all waters and land surfaces of the state. A separate state permit is not required if the department certifies an NPDES permit. If injection wells are part of the wastewater disposal plan, then the requirements for EPA's 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 402 and 404 Permits. Activities involving discharge of wastewater or fill material into waters of the United States are governed by the terms and conditions of a Clean Water Act (CWA) Section 402 NPDES Permit from the Environmental Protection Agency (EPA) and a CWA Section 404 Permit from the COE. CWA Section 401 also requires the applicant to obtain state certification that any discharge under CWA Sections 402 or 404 will comply with applicable state water quality standards.

Storm Water Discharge Pollution Prevention Plan. ADEC certifies the NPDES Storm Water General Permits for both construction activities and during operational phases of the facilities. ADEC approves Storm Water Pollution Prevention Plans under its CWA Section 401 certification authority. The facility may have separate NPDES permits to cover waste water and storm water discharges, or the requirements may be combined into one permit.

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. 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 NPDES Permit. ADEC reviews plans for the NPDES application under CWA Section 401.

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 contingency plan is required prior to commencement of operation of vessels and oil barges on state waters, or for oil terminal facilities capable of storing more than 1,320 gallons above ground or more than 42,000 gallons underground. These contingency plans are reviewed every 3 years.

ALASKA DEPARTMENT OF FISH AND GAME (ADF&G)

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.

FEDERAL AGENCIES

The involvement of federal agencies may vary for each project, but most projects at least require authorizations from the US Environmental Protection Agency and 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. Environmental Protection Agency Section 402 NPDES Permit. Sections 301 and 306 of the CWA require that EPA develop wastewater effluent standards for specific industries, including mines. These standards are established both for existing sources and new sources. For new mines with new waste discharges, New Source Performance Standards (NSPS) are applicable (40 CFR 440.104). Section 402 of the CWA requires the mine to obtain an NPDES permit for its proposed discharge. The NPDES permit would be required to meet the NSPS or the water quality standards, whichever provides the more stringent limitation.

In accordance with Section 511(c)(1) of the CWA, NPDES permit actions for new sources are subject to NEPA (40 CFR Part 6, Subpart F). Therefore, EPA would issue a Record of Decision in conjunction with the final permit action.

EPA is the NPDES permitting authority in Alaska. ADEC, pursuant to Section 401 of the CWA, must provide certification to EPA that the discharge would comply with any applicable state water quality standards. Mixing zones for the dilution of effluent pollutants may be allowed under ADEC certification, and the mixing zone requirements would be incorporated into the EPA NPDES permit.

EPA could use its CWA authority to review the Spill Prevention, Control, and Countermeasure Plan required for storage of large quantities of oil.

Other EPA permits include:

- Review of COE CWA Section 404 Permit
- Stormwater Construction and Operation Permit
- Class V Underground Injection Control (UIC) Permit

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. Under Section 404 (c), EPA has review authority over the COE 404 Permit decisions.

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.

Appropriate Federal "Landowner. " 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.

US Fish and Wildlife Service. Federal agencies must conduct a Section 7 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 must conduct a Section 7 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 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 single point of contact for the public. The team provides the public, agencies and the applicant the opportunity to view the project as a whole.

The requirement for the federal authorizations usually triggers the requirement for an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). The State usually participates as a cooperating agency in the EIS process, and the team endeavors to dovetail the state's permitting process with the EIS process. For example, during the Pogo Mine process, the public Draft EIS included drafts of all the major state permits. This gave the public the opportunity to see how the state's management decisions could be implemented on the ground, and enabled them to comment on the project as a whole.

The Large Mine Project Team also coordinates, to the extent possible, with local governments. For example, the team has been working 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-Scoping/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 an application, 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.

Scoping/Issues Identification. The team works with the applicant, public, agencies, and other stakeholders to identify the issues that will need to be addressed during the process.

Review and Analysis. The team reviews the baseline data and the application package, and identifies the potential impacts from the project.

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

Project Authorization. The team drafts the authorizations, gathers public input, and finalizes the authorizations.

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, and that financial assurances are released.

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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