

**APPENDIX 15**

**TEMPORARY SHUTDOWNS**

**Greens Creek Mining Company**

August 1995

December 2005

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## 1 INTRODUCTION

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At times during its operating life, the Greens Creek Mine may temporarily shut down some or all of its operations for economic or other reasons. Since startup, the mine has experienced one temporary shutdown, beginning in April 1993 and extending through June 1995. The mine resumed operations by the end of 1996. During this shutdown, the mine continued mine exploration and development projects, as well as regulatory and permit maintenance, monitoring, and compliance activities.

Temporary shutdowns may be relatively short in duration (less than nine months) or of a longer duration (greater than nine months, but probably less than five years). In general, Kennecott Greens Creek Mining Company will follow the same procedures for either short or longer-term duration temporary shutdowns. Differences are noted in this appendix.

During temporary shutdowns, it is the Company's intent to maintain all leases and permits, continue all of the required monitoring and regulatory mandated compliance, and maintain the mine facilities to allow the resumption of operations as quickly as possible.

### 1.1 Permits and Leases

The mine holds a variety of property leases and permits for mine operations. During a temporary shutdown of any duration, all leases and permits will be maintained. All conditions and stipulations set by the permits and leases will be followed and lease fees paid. Clause 29 of the Forest Service leases regarding lease termination states: "This lease shall terminate at such time as the Greens Creek mineral deposit is exhausted or upon failure of the lessee to use the leased site for two consecutive years unless such nonuse is waived annually by the Forest Supervisor." Table 1 summarizes the current operational permits and leases in existence and the measures needed to maintain them during a temporary shutdown. Individual permits and leases must be consulted for details on the requirements. Copies of all permits and leases are on file in the Greens Creek Environmental Affairs office.

**TABLE 1****PERMIT/LEASE INDEX**

**Actions Necessary to Retain Permits During Temporary Shutdowns  
(should we just replace this table with the current legal requirements table?)**

<b>AGENCY</b>	<b>DESCRIPTION</b>	<b>NUMBER</b>	<b>ISSUE DATE</b>	<b>EXPIRATION DATE</b>	<b>MAINTENANCE ACTIONS</b>
NRC	Licensed Material	50-23276-01	9/2/03	8/21/13	Comply with conditions of permit
USCG	Special Permit-Bulk Shipments	7-95 replaces 5-88	6/12/95	5/31/99	Comply with conditions of permit
ADNR	Right of Way Permit (Marine Outfall to Hawk Inlet)	ADL 105124	7/1/91	6/30/2016	Annual fee due 7/1
ADNR	Tideland Lease (Young Bay Dock)	ADL 103514	8/26/88	8/26/98	Annual fee due 8/26
ADNR	Tideland Permit (Mooring Buoy in Hawk Inlet)	SET-91-019	10/6/90	10/05/95	Annual fee due 10/6
ADNR	Water Use Permit (700 gal/min-Greens Creek-for milling purposes)	11807	10/5/88	3/10/98	Comply with conditions of permit
ADNR	Water Use Permit (5 dewatering wells within millsite complex)	11808	8/5/88	3/10/98	Comply with conditions of permit
ADNR	Water Rights # 656 (Cannery Creek - 17,000 Gal/Day - Public Supply)	ADL 43347	10/06/86	Until water use is abandoned for 5 years	Comply with conditions of permit

<b>AGENCY</b>	<b>DESCRIPTION</b>	<b>NUMBER</b>	<b>ISSUE DATE</b>	<b>EXPIRATION DATE</b>	<b>MAINTENANCE ACTIONS</b>
ADEC	Waste Management Permit((60 lbs/day incinerator ash, 60 lbs/day sewage sludge)	0211-BA001	11/07/03	11/7/08	Comply with conditions of permit
ADEC	Cannery Camp - (Food Service)	113010178	2/19/93	no expiration date	Annual fee due 1/1
ADEC	Title V Air Quality Operating Permit (Mine/Mill)	302TVP01	7/8/03	7/8/08	Initial Title V Permit for the 920 area
USFS	Lease-Mine Portal/Mill Site (61.19 acres) (Tailings Impoundment & Pipeline)	4050-03	8/12/86	mineral deposit is exhausted or upon failure to use the leased site for two years unless waived by the forest Supervisor	Annual fee due 1/1
USFS	Lease for Mining - Waste Area E (9.7 acres)	4050-08	11/23/87	ibid	Annual fee due 1/1
USFS	Lease for Milling - 1350 Portal and Campsite (9.82 acres)	4050-09	1/01/87	ibid	Annual fee due 1/1
USFS	Lease for Mining (39.89 acres) Tailings & Pipeline	4050-10	9/1/88	ibid	Annual fee due 1/1
USFS	Communications Site Permit (.18 acres)	4050-11	8/20/93	12/31/03	Annual fee due 1/1
USFS	Special Use	4050-02	8/10/94	12/31/97	Annual fee due 1/1

AGENCY	DESCRIPTION	NUMBER	ISSUE DATE	EXPIRATION DATE	MAINTENANCE ACTIONS
	Permit-Road (146 acres)				
EPA/ADEC	NPDES	AK- 004320-6	7/1/05	7/1/10	NPDES Permit covers point sources 001 and 002, and 10 storm water discharge sites

## **1.2 Monitoring/Sampling Requirements**

### **1.2.1 Fresh Water Monitoring**

The Fresh Water Monitoring Program is set out in Appendix 1, Fresh Water Monitoring. This program will continue to operate through both short- and longer-term temporary closures, throughout the operating life of the mine.

### **1.2.2 Fish Mitigation**

The Fish Mitigation Program is discussed in detail in Appendix 4, Fish and Wildlife Monitoring. This program will continue to operate during both short- and long-term temporary closures, as detailed in Appendix 4.

### **1.2.3 Air Quality Monitoring**

Kennecott Greens Creek has voluntarily implemented an ambient air quality program around the Hawk Inlet Shiploading Facility and the 920 Millsite Complex. The purpose of the monitoring is to establish concentrations of suspended particulates and target metals. The data is used to assess the mine's effect on air quality. Monitoring will continue to operate during both short- and longer-term temporary shutdowns. See Appendix 12 - Air Quality, for details of the air monitoring program.

### **1.2.4 Marine Water Monitoring**

The marine water sampling program began in 1982 in order to establish background data regarding heavy metals and cyanide. The marine water monitoring will be continued during temporary shutdowns. See Appendix 2 for details on the marine water sampling programs.

## **1.3 Maintenance**

### **1.3.1 Roads**

Roads at the Greens Creek Mine area will be maintained during short- and long-term temporary shutdowns according to road use demand. Roads will be graded to maintain proper drainage. Culverts and ditches will be maintained to assure good runoff from the road and nearby watersheds. Damage to roads, bridges and culverts will be repaired as soon as possible after it is discovered. Road banks will be reseeded and revegetated as needed to minimize erosion. If erosion occurs, it will be repaired and revegetated as soon as possible. See Appendix 8 - Road Operation and Maintenance for more details.

### **1.3.2 Docks**

The Hawk Inlet Marine Terminal docks and the Young Bay pedestrian dock will be maintained during a temporary shut down of any duration. Damage to docks will be repaired as soon as possible after it is discovered.

### **1.3.3 Buildings/Structures**

All buildings and structures will be maintained during both short- and long-term temporary closures. Depending on use and need, some buildings may be closed for the duration of the shutdown and may not be heated. This will be decided at the time of the shut down, based on the anticipated duration of the shut down and the use of the building. Unused and unheated buildings will be inspected at least monthly to check for damage or deterioration. Damage to buildings and structures will be repaired as soon as possible after it is discovered.

### **1.3.4 Fuel Storage**

Fuel consumption needs will be less during a shutdown, however some buildings will need to remain heated, therefore fuel will continue to be stored at the mine during shutdowns in quantities consistent with fuel consumption needs. Unheated buildings will have their fuel tanks drained.

Bulk tanks, pipelines and containment areas will continue to be inspected once per week as required by Title 40 CFR Part 112. Inspections are recorded on inspection log forms, signed by the inspector, and kept on-site for a period of three years.

Personnel will continue to be trained in operation and maintenance of equipment to prevent the discharge of oil. A designated person-in-charge will be accountable for oil spill prevention. Reporting any spills to company management will continue to be the responsibility of any employee aware of a spill. If an oil spill occurs or is discovered during a temporary shutdown, Greens Creek will follow the spill reporting and response procedures contained in Appendix 5, Best Management Practices. Damage to fuel storage tanks will be repaired as soon as possible after it is discovered.

### **1.3.5 Mill Chemicals/Reagents**

In the event of a temporary shutdown, the continued storage of chemicals/reagents at the Greens Creek Mine will be assessed. Factors in determining whether to continue the storage of chemicals/reagents during a temporary shutdown include:

- Anticipated duration of the shutdown;
- Known or anticipated use of chemical/reagent during shutdown;

- Future use or need for the chemical/reagent;
- Hazards of chemical/reagent; and
- Shelf life of chemical/reagent.

These and any other relevant factors will be considered in deciding whether to store chemicals/reagents or to remove them during temporary shutdowns. Greens Creek will determine what chemicals/reagents and quantities need to remain in stock and what chemicals/reagents can reasonably be returned to vendors, sold to other mine operators, or disposed of, considering the anticipated length of the shutdown. In the case of a short-term shutdown, the chemical/reagent inventory will most likely be stored in place.

Appendix 5 - Best Management Plan, Section 4.1 - Hazardous Substance and Toxic Materials Inventory provides an overview of hazardous or toxic substances presently used and stored at the Greens Creek Mine. If a spill of chemical/reagent occurs during a temporary shutdown, Greens Creek will follow the spill reporting and response procedures contained in Appendix 5, Best Management Practices.

### **1.3.6 Spill Contingency Plan**

In the event of an unplanned release of fuel, oil, or chemical reagent, the procedures in the Contingency Plan located in Appendix –6 – Spill Prevention, Control and Countermeasure (SPCC) Plan, will be followed.

Emergency equipment will be maintained at the level specified in the SPCC during a temporary shut down of any duration as long as chemicals/reagents and/or petroleum products are used or stored at the mine.