OZ MINERALS - Canada

Storm Water Management Plan

(Care and Maintenance)

LUPIN MINE SITE

Doc Number:

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Effective

Contents

1 Facility Information

1.1 Material Inventory

For a list of the major chemical materials found on-site please refer to the Lupin Petrochemical and Chemical Products Inventory. Due to the cessation of mining and processing operations at Lupin, the majority of the chemical reagents used in processing were removed from site during February and March 2005. Only a small amount of reagents remain.

The principal materials exposed to contact by stormwater in the form of direct precipitation and/or runoff that are not included within the spill contingency plan are disturbed native soils and the fine-grained fraction of waste rock materials. The soil horizon in the Arctic is extremely thin to non-existent, so the volume of disturbed soil contained in stormwater runoff is minimal. The majority of sediment contained in runoff is waste rock fines, typically exposed during mining activities and found in areas generally categorized as surface ore excavations, waste rock storage dumps, sand stockpiles, roads, and miscellaneous "administrative" areas such as parking lots, storage yards (laydowns), and buildings. No potential pollutants to stormwater are known to exist in the sediment at the site. All stormwater runoff sedimentation from the area of the minesite will be controlled with Best Management Practices (BMPs) including, but not limited to, sedimentation traps, silt fencing, or diversion ditching as needed and where applicable.

The areas of disturbance controlled by BMPs are discussed in the following section.

2 Specific Facility Descriptions and Best Management Practices Employed Onsite.

2.1 Roads

Roads are effectively prevented from contributing contaminated stormwater runoff by a combination of construction of the road base with benign materials (non-acid forming), and side-ditching to enable runoff to reach other down gradient controls as listed elsewhere in this SWMP. Stormwater runoff is controlled by culverts installed to direct water flow to follow natural drainage patterns.

2.2 Minesite Area

The Minesite Area referred to in this SWMP entails the Mine Plant Buildings, Shops, Accommodations, Laydowns, Storage Facilities, Weather Station and the Tank Farm. The Lupin Minesite is constructed on a topographic dome. Drainage to the northwest is towards the tank farm, which is isolated by a containment berm system. Drainage to southwest and south reports to the sewage pond system, which is contained by dykes. The north and east perimeter of the site is composed of laydown pads. The grade of the pads tends to direct meltwater and stormwater into three main courses (to the north down the airstrip access road, to the northeast down the surface crusher access road, and to the southeast towards the burn pit road) through a combination of gradient, culverts, and ditches. Because of the minimal amount of sediment contained in the meltwater and stormwater, no controls are in place to prevent water flow to the environment.

Stormwater runoff originating from the roofs of buildings will be minor in comparison with overland runoff flow, and as such, will not be treated differently.

Best Management Practices for stormwater control at the Lupin minesite may include: (1) use of rip rap check dams to control sediment, and (2) various passive BMPs such as good housekeeping, visual inspections, and operator care when working near drainage ways.

2.3 Airstrip

The gradient of the airstrip results in water flow from south to north. Meltwater and stormwater flow parallel to the strip, controlled through a combination of natural gradient, culverts, and ditches. The water flows naturally to Boot Lake, to the northwest, and carries negligible sediment.

3 Responsible Individuals

Key Personnel for Implementing the SWPPP

Andrew Mitchell

Project Manager

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Lupin Mine Site

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4 Best Management Practices

Lupin Operation utilizes a number of BMPs to control the discharge of stormwater runoff to points outside the mine's operation footprint. In addition to the specific BMPs discussed in section 2 of this SWMP, Lupin follows the more *general* BMPs discussed as follows.

4.1 Good Housekeeping

Lupin management supports the concept of good housekeeping by instructing all personnel to perform job functions in a neat, clean, and orderly fashion so as to maximize personal safety and to minimize exposure of materials to stormwater. All chemical inventories are stored under cover in buildings to prevent interaction with storm events.

4.2 Preventative Maintenance

Regular inspection and maintenance of field equipment are top priorities with Lupin personnel. Lupin has scheduled maintenance for mobile equipment, and the fluid management system is under tight inspection to make sure fluids in process do not escape. Management constantly seeks to encourage improvements in maintenance and operations to maximize fluid recovery and to minimize downtime from equipment breakdowns.

4.3 Visual Inspections

Site conditions at materials storage facilities such as the Cold Storage Buildings, Warehouse, Tankfarm, et al are visually inspected on a regular basis for unusual circumstances which might lead to environmental harm during the course of normal activities.

4.4 Material Handling Practices

The following material handling practices are used by Lupin personnel to minimize exposure of pollutants to stormwater: (1) containers are to remain in their appropriate storage locations at all times other than when in immediate use, (2) lids, covers, and caps are to be in place at all times other than when in immediate use, and (3) operators are to use caution when transferring material from one container to another.

4.5 Spill Prevention and Emergency Response

Lupin has in effect a Spill Contingency Plan, designed to deal with proper procedures for oil and chemical spill prevention and response. Employees are trained in procedures to minimize the environmental and health risks.

4.6 Sediment and Erosion Control (Stormwater Runoff Controls)

Ephemeral and intermittent drainage ways exist throughout the Lupin minesite, many of which transmit flows only on one or two occasions per year when it rains heavily or during snowmelt. There is a potential for sedimentation to occur in some of these ephemeral or intermittent drainages, and if it is observed to be excessive, then it may be controlled by use of up gradient diversion ditching or sediment fencing (geotextile). Section 2 addresses specific erosion control BMPs employed on discrete areas at the Lupin minesite.

5 Periodic Evaluation Schedule

Lupin will periodically review and update this SWMP as facilities and conditions warrant.