

Employees are directed to the Tailings Management Plan included within this EPP as supporting document S10i for further information on procedures related to the management and operation of the tailings management system.

5.1 Environmental Sensitivities

The following are considered sensitive areas of environmental concern associated or in close proximity to the Tail Lake tailings management system. Employees are directed to help in protecting these areas to the greatest degree possible by avoidance of human contact wherever possible and by following appropriate operating procedures when working in or around these areas:

- The downstream aquatic environment in both Doris Lake, Doris Outflow Creek, and in the wetland area/outflow stream downstream of the North Dam on Tail Lake;
- The tundra and vegetation around the perimeter of Tail Lake and along both sides of the Tail Lake access road;
- The shoreline around Tail Lake and the potential for erosion of this shoreline from rising water level within Tail Lake thawing the frozen marine clays in the shoreline; and
- Usage of facility by wildlife.

5.2 Activities at the Tailings Dam Facility

The following are critical activities typically conducted at or near the tailings management system where special precautions need to be taken to protect the adjoining terrestrial and aquatic environment:

- The discharge of treated waste water from Tail Lake
- The transport and discharge of tailings and treated sewage from the mill to the tailings containment area
- The maintenance of a sub-aqueous discharge in Tail Lake (keeping tailings below water at all times)
- Construction and maintenance of the dams, roads and pipelines where risk of damage to the adjoining aquatic and terrestrial environment must be avoided; and
- Ongoing dewatering, cleaning and maintenance of the emergency tailings dump catchbasins to prevent damage to the surrounding tundra vegetation and release of contaminants to watersheds outside Tail Lake.

5.3 Environmental Concerns

Key environmental concerns associated with the critical activities listed in Section 4.2 are summarized as follows:

- Uncontrolled release of any seepage from Tail Lake or the catchbasins into the receiving environment causing harm to the aquatic environment;
- The slumpage or erosion of the Tail Lake shoreline resulting in high Total Suspended Solids in Tail Lake which in turn do not settle and thus prevent planned releases of supernatant;
- Physical impacts on the shoreline and surrounding tundra from slumpage and erosion of the permafrost;
- Improper management of the annual supernatant discharge from Tail Lake resulting in the potential failure to meet downstream discharge water quality commitments designed to protect the downstream aquatic life;
- Wildlife use of the facility
- Environmental damage resulting from a failure of the dam; and
- Environmental damage resulting from a rupture or leak in the tailings and reclaim water pipelines or from overtopping of an emergency dump catchbasin.

5.4 Sensitive Periods

Key sensitive time periods in relation to the activities in these areas are as follows;

- Spring runoff;
- All non winter months
- Year Round

5.5 Environmental Protection Procedures

Employees conducting work in this area need to consult the Emergency Response and Contingency Plan (Document S10a), the Tailings Management Plan (Document S10i) and the Water Management Plan (Document S10j) to ensure that procedures relating to a response to a possible accident and/or spill and the handling of tailings and tailings water are understood and followed.

In addition employees carrying out work in this area need to become familiar with the following procedures as appropriate. The following table provides where management measures are to be located within this EPP covering the listed key activities:

Activities	Impacts	Management Measures (See Sections 2 & Section 7 for details)
Construction phase	<ul style="list-style-type: none"> Noise Use of vehicles on tundra Accidental Spills/Leaks Solid Waste Management Unexpected historical finds 	<ul style="list-style-type: none"> Section 2.17; Section 7.2 Section 2.19 Section 2.2; Section 7.1 Section 2.4 Section 7.3
Moving of support equipment & personnel	<ul style="list-style-type: none"> Noise (helicopter) Use of tundra Accidental spills/Leaks 	<ul style="list-style-type: none"> Section 2.17; Section 7.2 Section 2.19 Section 2.2; Section 7.1
Operational Phase	<ul style="list-style-type: none"> Placement of water pumps Placement of generators Generation of tailings Accidental spills/leaks Generation of solid wastes Noise generation Abstraction of water Discharge of used water Erosion/sediment Damaged to tundra Loss of topsoil Loss of aquatic life 	<ul style="list-style-type: none"> Section 2.16 Section 2.16 Section 2.10 Section 2.4; Section 7.1; Section 7.6 Section 2.17; Section 7.2; Section 7.5 Section 2.14; Section 2.16 Section 2.9 Section 2.9; Section 7.11 Section 2.9; Section 2.19 Section 2.9; Section 2.19 Section 2.9; Section 2.19
Closure of Facility	<ul style="list-style-type: none"> Loss of topsoil Accidental spills/leaks Solid waste generation Loss of vegetation Loss of aquatic life 	<ul style="list-style-type: none"> Section 2.9; Section 2.19 Section 2.2; Section 7.1; Section 7.6 Section 2.4; Section 7.10; Section 7.6 Section 2.9; Section 2.19 Section 7.10; Section 7.11