

**APPENDIX B**  
*Operation and Surveillance Plan*  
*(OMS)*

# OPERATION, MAINTENANCE & SURVEILLANCE PLAN

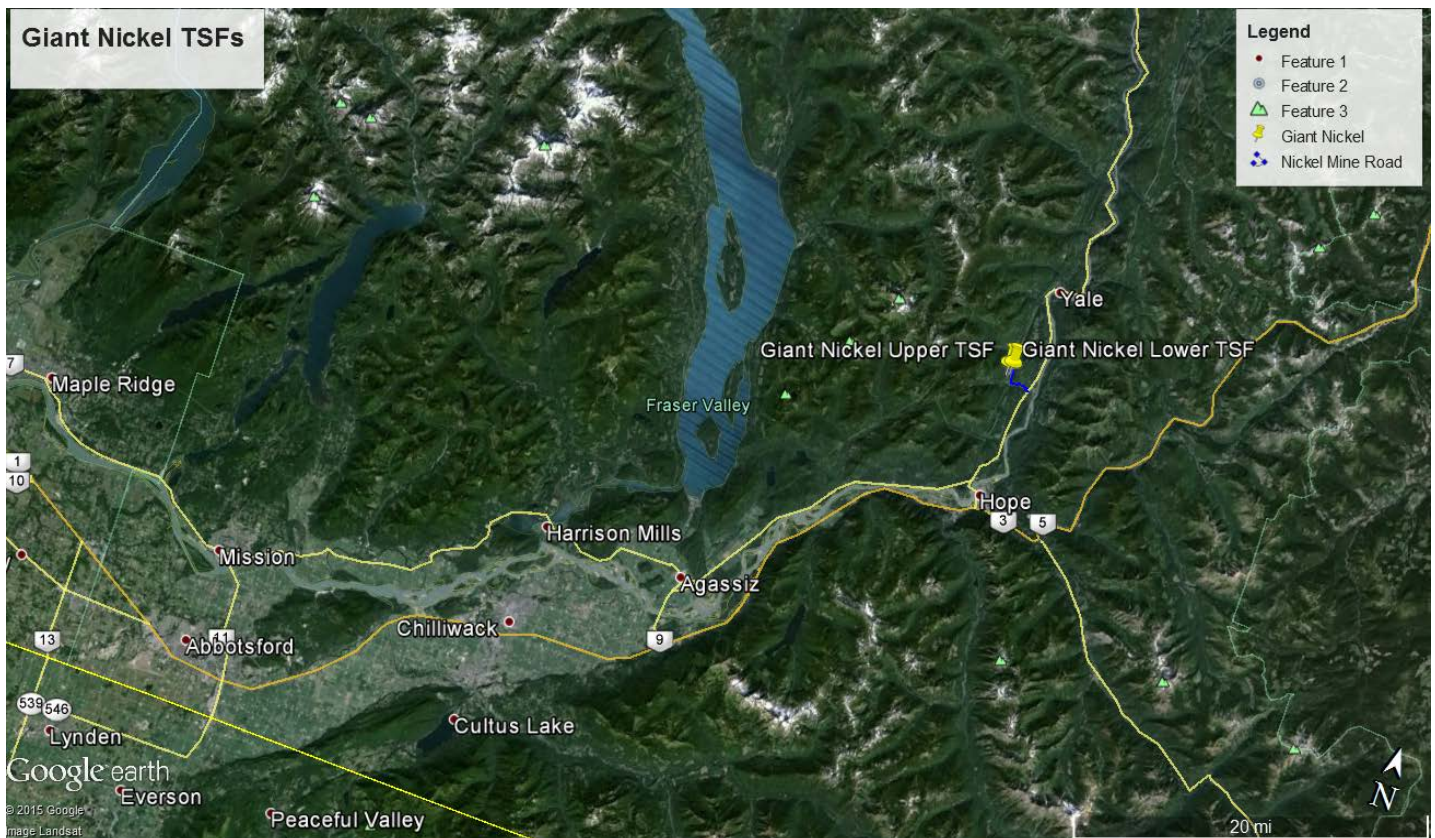
Dam Name: Giant Nickel Tailings Storage Facility Water Licence No.: N/A

Owner's Name: Barrick Gold Inc.

Phone #: (250) 292-8295

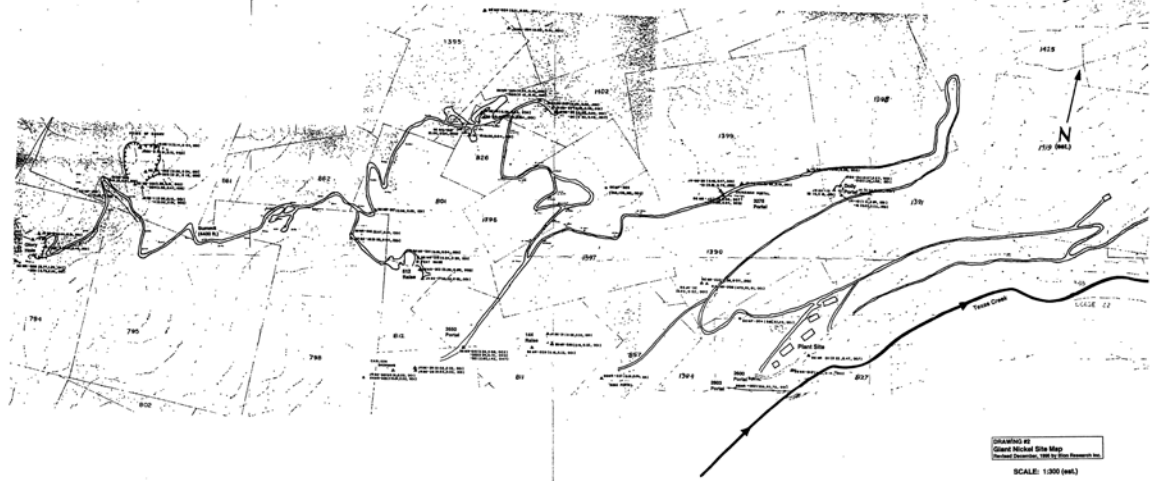
Stream Name: Texas Creek Reservoir Name: Giant Nickel Tailings Storage Facility

Dam Location: **Latitude:** 49°29'01.19"N **Longitude:** 121°27'24.65"W





Location of the Giant Nickel Tailings Storage facilities





Giant Nickel Upper and Lower Tailings Storage Facilities

**LIST INDIVIDUALS WHO ARE RESPONSIBLE FOR:**

<u>Name</u>	<u>Title</u>	<u>Phone #</u>
Operation: <u>Robbin Harmati</u>	<u>BC Properties Closure Manger</u>	<u>(604)575-4049</u>
Maintenance: <u>Gary Douglas</u>	<u>Operations Manager</u>	<u>(250)292-8294</u>
Inspections: <u>As Above 4 times/Year</u>		<u>as above</u>
Instrumentation: <u>not applicable</u>		

**PHYSICAL DESCRIPTION:**

Dyke 1(one) Upper tailings

Height: 17 meters Dam Type: Cross Valley Earthen Embankment

Length: 700 meters Crest Width: \_\_\_\_\_

Dyke 2 (two) Lower tailings

Height: 13 meters Dam Type: Cross Valley Earthen Embankment

Length: 675 meters Crest Width: \_\_\_\_\_

Reservoir Capacity: 184653 m3 Reservoir Area: 14.25 Ha

Spillway Capacity: Open Channel Design Flood Inflow: 623 mm

Watershed Area: Dogwood Valley Purpose of Dam: Tailings Containment

Consequence Classification: Very High

**ACCESS TO DAM:** (describe road access to dam from nearest center, attach map to this Plan)

The property can be accessed by travelling north from Hope, BC, along Highway 1 to Nickelmine Road. Travel is then by gravel road 4.5 km to the tailings area.

**LIST SIGNIFICANT STRUCTURES DOWNSTREAM OF DAM:** (i.e., access road, railroad, subdivision etc.)

- 40 structures
- Highway 1
- CNR Bridge and rail line

**LIST ALL HYDRAULIC WORKS:** (i.e., spillway, outlet, stoplogs, gates, valves etc.  
(include capacity, dimensions, locations etc.))

Channel Spillway

---

**LIST PROCEDURES FOR RESERVOIR OPERATION:** (i.e., how reservoir level is controlled? what is the anticipated reservoir level for any given time of year? when are the drawdown and filling periods? what are the operation procedures during floods?)

Currently the reservoir of the upper and lower TSF are being mechanically dewatered to permanently remove any ponding. It is expected that the dewatering will be complete by the end of July.

**LIST ALL ITEMS REQUIRING ROUTINE MAINTENANCE:** (include type of maintenance to be performed, scheduling of maintenance, record keeping, etc.)

Removal of brush is completed as required.

---

**LIST ALL INSTRUMENTATION, FREQUENCY OF MONITORING, AND METHOD OF RECORD KEEPING:** (i.e., seepage measurement weir, reservoir level gauge, piezometers, etc.)

Water samples collected 4 times per year

---

**LIST OF EQUIPMENT TO BE PERIODICALLY TEST OPERATED:** (i.e., gates, valves, hoists, etc. include frequency of test operation)

Not Applicable

---

**LIST ALL COMPONENTS REQUIRING ROUTINE VISUAL INSPECTIONS:** (include schedule) (e.g. weekly, monthly, quarterly, annually etc.)

Spillway and slopes surrounding storage facility are visually inspected a least 4 times per year.

---

- 1) Late April/Early May
- 2) June
- 3) Late July/Early August
- 4) Late September/Early October

**ANNUAL FORMAL INSPECTIONS BY OWNER:** *(include; time of year when performed, special items to be examined, reviewed, and/or test operated)*

Formal Inspections are completed every one (1) year and Formal Dam Safety Reviews are complete every five (5) years by a qualified Engineer  
Inspections take place usually in the early fall months

**ATTACH THE FOLLOWING INFORMATION TO THIS PLAN:**

- *All dam design plans including as-built, if available.*
- *A location map showing the dam location relative to major roads and/or communities.*
- *All past inspection reports.*
- *An inspection checklist.*
- *A log showing repairs done and operating problems.*