



Effective January 1, 2004

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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN

WATER LICENCE APPLICATION FORM

Application for: (check one)

☒ **New** ☐ **Amendment** ☐ **Renewal** ☐ **Assignment**

LICENCE NO:

(for NWB use only)

1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE

Echo Bay Mines Ltd.
9818 Edmonton Int'l Airport
Edmonton, AB T5J 2T2

Phone: 780-890-8797
Fax: 780-890-8814
e-mail: mike.tansey@kinross.com

2. ADDRESS OF CORPORATE OFFICE IN CANADA (if applicable)

Kinross Gold Corporation
52nd Floor, Scotia Plaza
40 King Street West
Toronto, ON M5H 3Y2

Phone: _____
Fax: _____
e-mail: _____

3. LOCATION OF UNDERTAKING (describe and attach a topographical map, indicating the main components of the Undertaking)

Lupin Mine, Nunavut. Located on the west shore of Contwoyto Lake, approximately 285 km S.E. of the community of Kugluktuk, Nunavut.

Latitude: 65° 46'05"N Longitude: 111° 14'45"W NTS Map No. 76E/14 Scale _____

4. DESCRIPTION OF UNDERTAKING (attach plans and drawings)

This application is for cancellation of the current Type "A" water licence, to be replaced by a Type "B" water licence, which will be sufficient for reduced water use at the mine during the reclamation activities in progress.

5. TYPE OF PRIMARY UNDERTAKING (A supplementary questionnaire must be submitted with the application for undertakings listed in "bold")

- | | |
|---|---|
| <input checked="" type="checkbox"/> Industrial | <input type="checkbox"/> Agricultural |
| <input type="checkbox"/> Mining and Milling | <input type="checkbox"/> Conservation |
| <input type="checkbox"/> Municipal (includes camps/lodges) | <input type="checkbox"/> Recreational |
| <input type="checkbox"/> Power | <input type="checkbox"/> Miscellaneous (includes exploration/drilling) |
| | (describe): |

Reclamation of tailings disposal area, demolition of all mine infrastructure, waste disposal.

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings

6. WATER USE

- ☒ To obtain water
☐ To modify the bed or bank of a watercourse
☐ To alter the flow of , or store, water
☐ To cross a watercourse
- ☐ To divert a watercourse
☐ Flood control
☐ Other (describe): _____

7. QUANTITY OF WATER INVOLVED (cubic metres per day including both quantity to be used and quality to be returned to source)

Water use will be limited to 109,500 cubic metres per year or less, to be returned to source following suitable treatment and storage methods required to reduce contaminant levels associated with the sewage effluent.

8. WASTE (for each type of waste describe: composition, quantity (cubic metres per day), methods of treatment and disposal, etc.)

- ☒ Sewage (109,500 cu.m. per year)
☐ Solid Waste
☐ Hazardous
☐ Bulky Items/Scrap Metal
- ☐ Waste oil
☐ Greywater
☐ Sludges
☒ Other (describe): Remediation of tailings containment area

Sewage waste effluent will be deposited in sewage containment ponds and released to the environment during the summer, as per prior practice. Approximately 1240 cubic metres of solid waste recovered from tailings containment area (tailings pipe, structures, etc) will be transported to Lupin minesite and disposed of in current mine landfill.

9. PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING (give name, mailing address and location; attach if necessary)**Land Use Permit**

- DIAND Lease 76E 14-1-9 ☒ Yes ☐ No If no, date expected _____
- Regional Inuit Association ☐ Yes ☐ No If no, date expected _____
- Commissioner ☐ Yes ☐ No If no, date expected _____

10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION MEASURES (direct, indirect, cumulative impacts, etc.)

Refer to "2005 Abandonment and Restoration Plan, Lupin Tailings Containment Area", submitted to Nunavut Water Board June 29, 2005. It is believed that there will be no adverse environmental impacts from the operation that cannot be mitigated with known technology.

NIRB Screening ☐ Yes ☒ No If no, date expected: Not necessary. Water use less than 300 cubic metres per day (109,500 cu.m. per annum).

11. INUIT WATER RIGHTS

Will the project or activity substantially affect the quality, quantity, or flow of water flowing through Inuit Owned Lands and the rights of Inuit under Article 20 of the Nunavut Land Claims Agreement? **NO**

If yes, has the applicant entered into an agreement with the Designated Inuit organization to pay compensation for any loss or damage that may be caused by the alteration. If no compensation agreement has been made, how will compensation be determined?

12. CONTRACTORS AND SUB-CONTRACTORS (name, address and functions)

- *BGC Engineering, 840 - 7th Avenue SW, Calgary, AB T2P 3G2 Ph: (403) 250-5185 Attn: Jim Cassie*
Geotechnical inspections of tailings containment dams.
- *Holubec Consulting, 1117 Notley Crescent, Oakville, ON L6M 1H4 Ph: (905) 825-8793 Attn: Igor Holubec*
Design of containment dams; design of saturated granular zone cover for tailings remediation.
- *Golder Associates, 1000, 940 - 6th Avenue S.W. Calgary, AB T2P 3T1 Ph: (403) 299 5600 Attn: Bill Liu*
Assessment of gravel material properties for tailings cover; Thermal analyses of covered tails and interaction between ponds and cells; Assessment of pore water expulsion potential of covered tailings; Climate and hydrology study Lupin TCA.
- *Golder Associates, 1000, 940 - 6th Avenue S.W. Calgary, AB T2P 3T1 Ph: (403) 299 5600 Attn: Cindy Robinson*
Ecological risk assessment of covered tailings.
- *Robinsons Enterprises Ltd., 350 Old Airport Road, Yellowknife, NT X1A 2P4 Ph: (867) 873-6271 Attn: Marvin Robinson*
Load, haul and place esker gravel on exposed tailings cells

13. STUDIES UNDERTAKEN TO DATE (list and attach copies of studies, reports, research, etc.)

Studies provided to Nunavut Water Board during the term of this licence:

- 2005 Abandonment and Restoration Plan, Lupin Tailings Containment Area, Kinross Gold Corporation, June 2005; including:
 - Golder Assoc.; *Studies Related to Water Licence Requirements and in Support of Reclamation Planning (Lupin Mine)*; Dec 2004a;
 - Golder Assoc.; *Ecological Risk Assessment for Lupin Mine Tailings Containment Area*; Dec 2004b;
 - Golder Assoc.; *2004 Dam Safety Review, Perimeter Tailings Dams*; Dec 2004c
 - Holubec Consulting; *Lupin Operation – Closure Plan for Tailings Containment Area*; Jan 2005;
- Golder Assoc.; *Lupin Gold Mine Environmental Effects Monitoring Study Design*, Dec 2004
- Golder Assoc.; *Lupin Gold Mine Environmental Effects Monitoring Program Historical Information Report*; Dec 2003;
- BGC Engineering ; Annual Geotechnical Inspections of tailings dams (2000 to 2004);
- Monthly and Annual Lupin Surveillance Network Program Reports.

14. THE FOLLOWING DOCUMENTS MUST BE INCLUDED WITH THE APPLICATION FOR THE REGULATORY PROCESS TO BEGIN

Supplementary Questionnaire (where applicable: see section 5) ___ Yes **X** No If no, date expected: only if requested

Inuktitut/English Summary of Project ___ Yes **X** No If no, date expected Aug 30, 2005

Application fee \$30.00 (Payee Receiver General for Canada) ___ Yes **X** No If no, date expected Aug 30, 2005

Water Use fee (see Section 9 of the *NWT Waters Regulations*; Payee Receiver General for Canada)
___ Yes **X** No If no, date expected Aug 30, 2005

15. PROPOSED TIME SCHEDULE

___ Annual (or) **X** Multi Year Refer to 2005 Lupin TCA A&R Plan for project schedule.

Start Date: **Ongoing**

Completion Date: **September 2011**

Michael Tansey

Reclamation Manager, Lupin



Aug 9, 2005

Name (Print)

Title (Print)

Signature

Date

For Nunavut Water Board use only

APPLICATION FEE Amount: \$ _____ Pay ID No.: _____

WATER USE DEPOSIT Amount: \$ _____ Pay ID No.: _____