Lupin Mines Incorporated

A wholly owned indirect subsidary of Elgin Mining Inc.

Lupin Mine Site

Nunavut, Canada

Discharge Procedure:
Tailing Containment Area and Sewage Lakes Disposal Facility

(Care and Maintenance)

March 2012

Lupin Mines Incorporated
Elgin Mining Inc.
#201 - 750 West Pender Street
Vancouver, BC V6C 2T7

Document Control

Revision No	Date	Details	Author	Approver
1.0	20/03/12	Reformatted to Lupin Mines standard. Document re-write for readability and clarity. Added figures to illustrate sampling locations. Address comments from EC (2009)	S. Hamm	P. Downey

Table of Contents

Figures

1 Introduction

Lupin Mines Incorporated (LMI), a wholly owned indirect subsidiary of Elgin Mining Inc. (Elgin), has prepared this Discharge Procedure for Tailing Containment Area and Sewage Lakes Disposal Facility (the Procedure) to support activities occurring under Water Licence Number 2AM-LUP0914, Part E.

An annual review of the Procedure takes place and revisions are submitted as necessary with the annual report. The current Type A water licence 2AM-LUP0914 (Water Licence) for the Lupin Gold Mine (Lupin or the Lupin Mine) is valid until March 31, 2014 and has been kept in good standing.

1.1 Project and Company Information

Elgin is a Canadian based company focused on the exploration and development of the Lupin Mine and Ulu Gold Project, both located in Nunavut, Canada.

Elgin purchased LMI, which owns the Lupin Mine, from MMG Resources Ltd. in July 2011. The Lupin site was an operational underground gold mine from 1982 to 2005 with temporary suspensions of activities between Jan 1998 and April 2000, and again between Aug 2003 and March 2004. The mine resumed production in March 2004 until 2005. Since 2005, the site has remained in care and maintenance.

An exploration program is currently underway at the Lupin site under water licence 2BE-LEP1217. All camp infrastructure required for the exploration program currently exists at the Lupin Mine site, which has previously been screened by the Nunavut Impact Review Board under file 99WR053 and approved by the Nunavut Water Board under water licence 2AM-LUP0914.

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Project:	Lupin Mine, Nunavut
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Effective date: 30 March 2012

Distribution List:

Patrick Downey	Chief Executive Officer
Peter Tam	Chief Financial Officer
Michele Jones	Manager, Corporate Affairs
Vivian Park	Manager, Exploration
Sharleen Hamm	Manager, Environment
Karyn Lewis	General Administration

Additional copies of this Procedure are available from General Administration.

This Procedure will be posted in key locations at the site, and all employees and contractors will be made aware of its contents.

1.2 Site Location

The Lupin Mine is located in Kitikmeot Region, Nunavut, 400 km north of Yellowknife, Northwest Territories and 285 km southeast of Kugluktuk. The geographic center of that property is 65° 45'29" N / 113° 13'10W. It is on the western shore of Contwoyto Lake, approximately 60 km south of the Arctic Circle.

1.3 Environmental Policy- Key Components

LMI looks to our employees, contractors and managers to adopt and grow a culture of environmental excellence. Together we achieve this by:

- Promoting environmental stewardship in all tasks. Nothing is too important that it cannot be done in a clean and responsible manner. We strive towards maintaining a zero-incident work place.
- Recognizing that we have a shared responsibility as stewards of the environment in which we operate. We will not walk away from a non-compliant act.
- Identifying, managing and mitigating environmental, business and social risks in an open, honest and transparent manner.
- Planning our work so it is done in the cleanest possible manner and executing work according to plan.
- Continually improving environmental and operational performance by setting and reviewing achievable targets.
- Providing appropriate and necessary resources in the form of training, personnel and capital, including that required for closure planning and reclamation.
- Managing our materials and waste streams, maintaining a high degree of emergency response preparedness and minimizing our operational footprint to maintain environmental protection at all stages of project development.
- Seeking to understand, learn from and mitigate the root causes of environmental incidents and near misses when they do occur.
- Employing systems and technology to achieve compliance, increase efficiency and promote industry best practices in development, operations and environmental stewardship.

1.4 Purpose and Scope

This Procedure is designed to provide the necessary information to prepare for and execute compliant discharges from both the tailings containment area (TCA) and the sewage lakes disposal facility.

2 Tailings Containment Area

2.1 Pre Discharge

The following is a list of procedural items related to preparation for water discharge from the TCA at the Lupin mine under the Water Licence, commencing no earlier than July 15:

- **May**
  - Inspect the portable air compressor to make sure it is working correctly. The compressor is needed to start the vacuum in the siphons.
  - Transport the air compressor to Dam 1A.
- **June**
  - Inspect Syphons
    - Check for holes in pipe, coupling integrity, plugged inlets and outlets.
    - Ensure that a vacuum can be created in the pipe to induce siphon flow.
    - Correct any problems so that the siphon process can be started by 15 July.
    - Test flow meter at an adjacent instream location to confirm meter is working properly.
    - By 14 June, install the flow meter probes in the siphons and check to ensure that the meter is working.[1]
  - Inspect Immersion Probes
    - Ensure that they function correctly.
    - Calibrated at least once per year. Maintain records of calibration procedures and results.
  - Contact Analytical Lab
    - Calculate the number and types of sample bottles that will be required for the sampling of the Monitoring Program Stations.
    - Order bottles from analytical lab. Request an empty cooler be sent to site each week.

[1] Flow meters can be calibrated annually by the manufacturer prior to discharge. Calibration to MMER specs is necessary. Spare flow meters may be obtained directly from the manufacturer(s) or supplier(s) as a back-up.

        - Order at least four large coolers to have on site before prior to discharge.
    - Contact Bioassay Lab
        - By 15 June, contact bioassay lab order the 10-litre pails required for the 96-hour Rainbow Trout and Daphnia toxicity pass/fail test.
    - Collect Pre-discharge Sample
        - By June 14, sample Pond 2 for the 96-hour Rainbow Trout and Daphnia toxicity pass/fail tests.
        - The samples must be taken the morning of plane day, as there is a 3-day limit between taking the sample and start of analysis.
        - Sample point is internal station 102, located approximately 100 m upstream from the siphon intake.
        - UTM coordinates: 7289875N, 486196W.
        - Inform lab when samples are shipped.
        - Results (a 'pass') must be received prior to commencing discharge.

- **July**
    - July 5: provide ten days notice to the AANDC inspector prior to the first discharge from the TCA.
    - July 7: commence daily pH measurements with the portable pH meter in Pond 2, near the siphon intake. pH MUST be in the range of 6.0 to 9.5 or discharge cannot commence (it will typically measure in the high 7's to low 8's).
    - Notify the Environment Canada MMER enforcement officer prior to discharge from the TCA.

2.2 Discharge

The following is a list of procedural items related to water discharge from the TCA at the Lupin mine under the Water Licence, commencing no earlier than July 15:

- **July 15**
    - Measure pH in Pond 2 by the siphon intakes. If the pH is between 6.0 to 9.5 and the results from the 96-hour trout and daphnia bioassays are a pass, start the siphons.
    - Record the date and time that the siphons were started, the pH reading from the portable meter, and the flow volume from each siphon in the Discharge Syphons Log. Sign (legibly) the log.
    - Enter all information in the Discharge Syphons Log in the Discharge Syphons Spreadsheet.

- Collect water samples at LUP-10 in accordance with the document *Sampling Procedure: Tailings Containment Area and Sewage Lakes Discharge.*
- If field pH measurement is < 6.0 or > 9.5, the siphons must be shut down IMMEDIATELY and the Environment Canada MMER enforcement officer notified IMMEDIATELY.

3 Sewage Lakes Disposal Facility

3.1 Pre Discharge

The following is a list of procedural items related to preparation for water discharge from the sewage lakes disposal facility at the Lupin mine under the Water Licence, following ice melt from syphons:

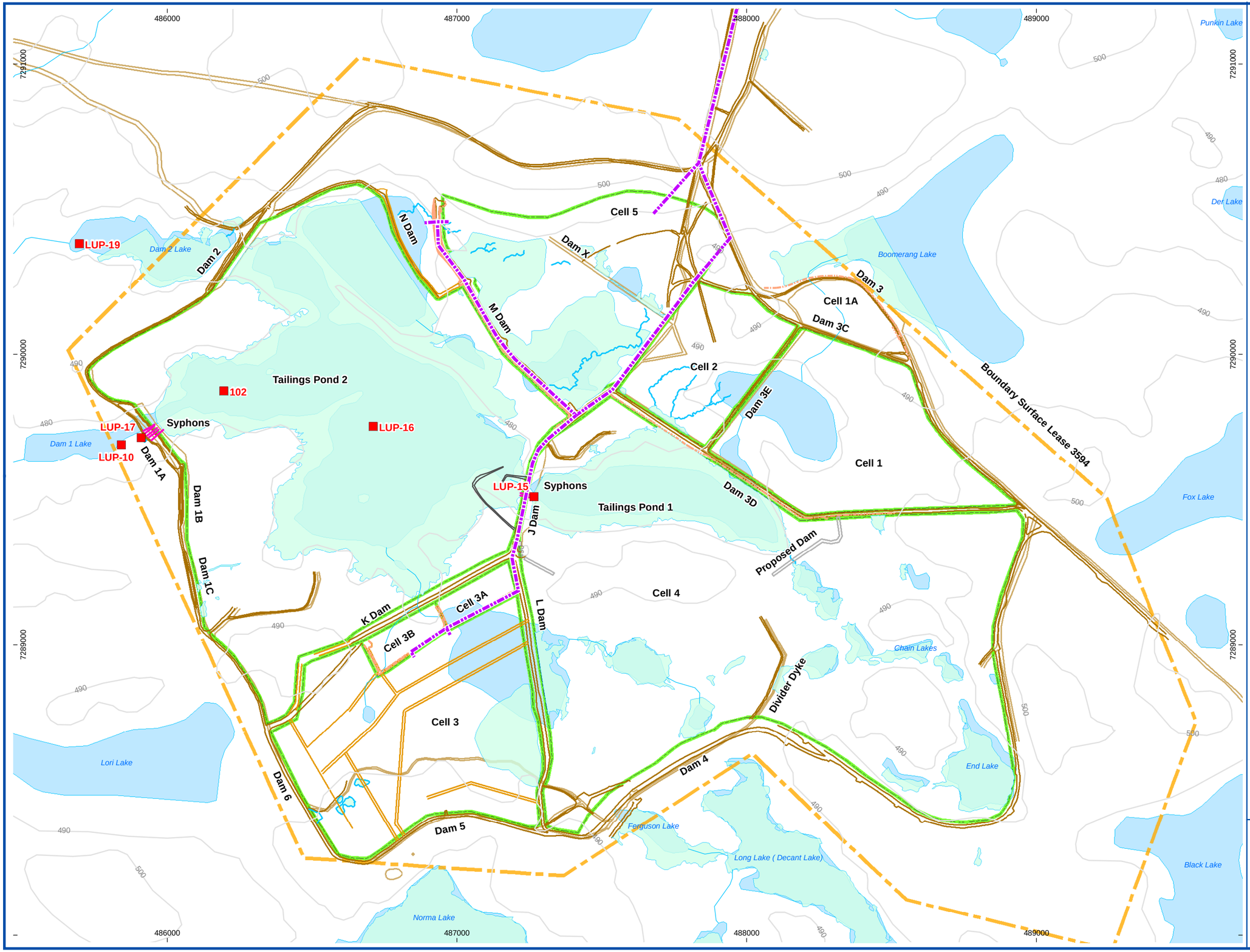
- **10 days prior to discharge**
  - Provide notice to the AANDC inspector prior to the first discharge from the sewage pond
- **5 days prior to discharge**
  - Take pH measurements with the portable pH meter in the lower sewage pond, near the siphon intake, as soon as ice is off the pond.
  - pH must be in the range of 6.0 to 9.5 or discharge cannot commence (it will typically measure in the high 7's to low 8's).
  - Readings must be taken daily for five days prior to start of discharge (see below) to ensure that pH is within limits.

3.2 Discharge

The following is a list of procedural items related to water discharge from the sewage lakes disposal facility at the Lupin mine under the Water Licence:

- Measure pH on the pond-side of the dam 2 by the siphon intakes. If the pH is between 6.0 to 9.5, start the siphons.
- Record the date and time that the siphons were started, the pH reading from the portable meter, and the flow volume from each siphon in the Discharge Syphons Log. Sign (legibly) the log.
- Enter all information in the Discharge Syphons Log in the Discharge Syphons Spreadsheet.
- Collect water samples at LUP-14 in accordance with the document *Sampling Procedure: Tailings Containment Area and Sewage Lakes Discharge.*
- If field pH measurement is < 6.0 or > 9.5, the siphons must be shut down IMMEDIATELY.
- Continue taking daily pH measurements in the sewage pond on the siphon intake side.

  Once the pH returns to within the allowable limits, discharge may be resumed.



Legend

- Water Body 50k Topo
- Building
- Site Features
- Tanks
- Fuel Storage Containment Area
- Berm Tank Farm
- Berm
- Slope Break
- Roads
- Contour (10m)
- Fuel Pipe
- Proposed Dam
- Road
- Dykes
- Water -Stream, Creek
- Cell Areas
- Boundary Surface Lease 3594
- Water Body Mine
- Tailings Line
- Siphons
- Monitoring Program Station Locations

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Map Sources/Notes:
Topographic features from 1:50,000 goverment topographic data.
Site Layout based on drawing by Morrow Environmental titled "Site Plan", 2005. File A053017R00.

Thermistor locations from map by MMG titled "Thermistor Location Figure 7" file Figure 7 Thermistors.dwg and 2006 Lupin

Coordinate System: NAD_1983_UTM_Zone_12N
NTS Map Sheets 076E11 and 076E14

0 100 200 400 600 Meters

1:12,500

Approved By: SH Prepared By: PW
Project No.: LUP Date Revised: 30 Mar 2012
File Name: Lup-12-16-01-DischSampProc-TailingsArea-B.mxd

Project: **Lupin Gold Mine**
Location: Kitikmeot Region, Nunavut, Canada
Discharge and Sampling Procedures

Mine Tailings Containment Area Sample Locations

Lupin Mines Incorporated

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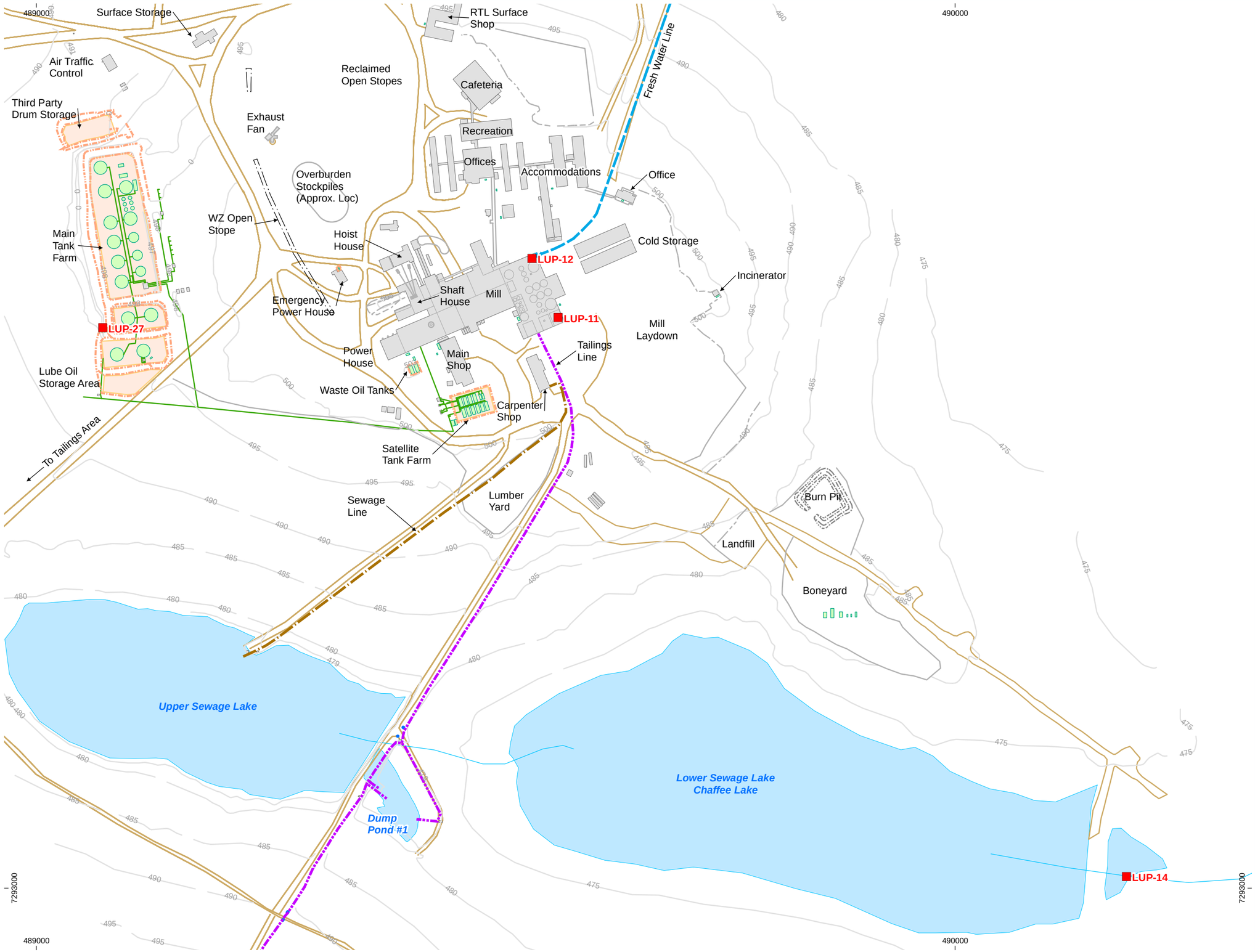
Figure: **1**
Rev: 120330



Legend

- Contour 5m
- Water Body 50k Topo
- Building
- Site Features
- Tanks
- Fuel Storage Containment Area
- Berm Tank Farm
- Berm
- Slope Break
- Roads
- Fuel Pipe
- Tailings Line
- Water Pipeline (8 in Diam)
- Sewage Pipeline (6 in Diam)
- Monitoring Program Station Locations

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Map Sources/Notes:
Topographic features from 1:50,000 goverment topographic data.
Site Layout based on drawing by Morrow Environmental titled "Site Plan", 2005. File A053017R00.

Coordinate System: NAD_1983_UTM_Zone_12N

0 100 200 Meters

1:4,000

Approved By: SH Prepared By: PW
Project No.: LUP Date Revised: 30 Mar 2012
File Name: Lup-12-16-02-DischSampProc-SewageLakes-B.mxd

Project: **Lupin Gold Mine**
Location: Kitikmeot Region, Nunavut, Canada

Discharge and Sampling Procedures

Lupin Mine Site Sewage Lakes Sample Locations

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Figure: **2**
Rev: 120330