SCIENTIFIC RESEARCH LICENCE APPLICATION
LAND, FRESHWATER & MARINE BASED RESEARCH

NRI strongly recommends that applicants review the following documents prior to submitting an application: *Scientific Research Licencing Guidelines* and *Negotiating Research Relationships in Inuit Communities: A Guide for Researchers.*
For more information about the Nunavut Research Institute (NRI) please visit our web site www.nri.nu.ca

IMPORTANT
This application fulfills the requirements for the NIRB environmental screening.
Please be advised that your application will not be processed until the application form, project summary, and maps are received.

SECTION 1: APPLICANT INFORMATION

1a. Project Title **Lupin Mine Environmental Effects Monitoring Study**

1b. Project Number

Please indicate if applicant has submitted any previous application(s) to NRI related to this project proposal?	Yes	No X
If yes, please indicate the previous NRI licence number:		
Please indicate if applicant has submitted any previous application(s) to NIRB related to this project proposal?	Yes	No X
If yes, please indicate the previous NIRB project number(s):		

2. Applicant's full name and mailing address:

Dave Vokey		
Lupin Mines Inc.	Phone:	778 372-3272
Suite 201-750 West Pender Street	Fax:	
Vancouver, BC V6C 2T7	Email:	dvokey@elginmining.com

3. Field Supervisor's name and mailing address:

Dave Vokey	Phone:	778-372-3272
Health Safety & Environment	Fax:	
Elgin Mining Inc.	Email:	dvokey@elginmining.com
Lupin Mine, NU		

4. Other Personnel list (name, position, affiliation)

Tamara Darwish, Fisheries Discipline Lead, Golder Associates	Lasha Young, Project Manager, Golder Associates
Barbra Fortin, Aquatic Biologist, Golder Associates	Colleen Prather, Water Quality Specialist, Golder Associates

SECTION 2: AUTHORIZATION NEEDED

1. Indicate all authorizations associated with the project proposal:

	Regional Inuit Association (RIA)
	Nunavut Water Board (NWB)
	Nunavut Planning Commission (NPC)
	Department of Indian And Northern Development (DIAND)
x	Department of Fisheries and Oceans (DFO)
	Community Government & Services (CG&S)
x	Nunavut Research Institute (NRI/GN)
	Department of Culture, Language, Elders, and Youth (CLEY/GN)
	Canadian Launch Safety (CLS)
x	Environment Canada (EC)
	Department of Environment (GN)
	Department of National Defense (DND)
	Hamlet
	Parks Canada (PC)
	Canadian Wildlife Service (CWS)
	Other (please specify): _____

2. List the active permits, licences, or other rights related to the project proposal and their expiry date:

Water License 2AM-LUP0914 (March 31 2014 expiry); LUP N2011C0026 (December 11, 2013 expiry)

3. Have you applied for all authorizations required to conduct the project proposal activities?

X YES ☐ **NO**

SECTION 3: PROJECT PROPOSAL DESCRIPTION

1. Indicate the activities related to the project proposal:
We will be using all existing infrastructure at the Lupin Mine

	Temporary camp (to be removed at end of field season)
	Permanent camp (to remain for life of authorization)
	Construction of recreational or safety cabin
	Temporary fuel storage (to be removed at end of field season)
	Permanent fuel storage (to remain for life of authorization)
	Placement of structures for life of permit (other than camp or cabin – i.e. scientific instruments)
	Placement of permanent structures (other than camp or cabin – i.e. scientific instruments)
	Air surveys (i.e. geophysical, wildlife)
x	Use of aircraft/watercraft/land vehicle for personnel drop-off and pick-up to project location
x	Use of on-site mechanized vehicles (i.e. atv, snowmobile, truck, zodiac)
	Sewage or grey water disposal via sump
x	Hazardous waste storage or disposal
	Solid waste disposal
	Chemical storage
	Explosives storage
	Soil testing
	Soil disposal/ soil storage
	Incineration of combustible wastes and removal of non-combustible wastes
	River/ stream/ lake crossing or work/ bridge
	Drainage alteration
	Geoscientific sampling by diamond drilling
	Geoscientific sampling by soil sampling
	Geoscientific sampling by trenching
	Geoscientific sampling by borehole core
	Blasting
	Channeling
	Excavation
	Hydrological testing
	Abandonment and restoration
	Site restoration (fertilization/ grubbing/ scarification/ spraying/ recontouring)
x	Research
x	Ecological survey
	Harvesting
	Removal of vegetation for scientific purposes
x	Other: **Fish and benthic invertebrate sampling**

2. Personnel

Total No. of personnel on site = (A)	**6**	Total No. of days on-site = (B)	**12**	**Total No. of Person days (A) × (B) = 72**

3. Timing

Period of operation: **1 August 2013** *to* **30 September 2013**

Proposed term of authorization: **1 August 2013** *to* **30 September 2013**

Please outline the phases of the proposed project (construction/ operation/ decommissioning) including the timing and scheduling of each phase.

There will be no construction or decommissioning required for the data collection portion of the Project. The Project consist of fish and benthic invertebrate sampling for Phase 4 Environmental Effects Monitoring (EEM) requirements under the Metal Mining Effluent Regulations (MMER) (Metal Mining Effluent Regulations, November 18 2012 Environment Canada 2012). Lupin Mine is currently in care and maintenance and will be through the duration of the Project.

4. Location(s) of data collection:

Location Name	**Region** North Baffin, South Baffin, Kivalliq, Kitikmeot	**Co-ordinates** Lat (degree / minute), Long (degree / minute)	**NTS Map Sheet #**	**Land Status** Crown, Commissioners', Inuit Owned
Seep Creek	**Kitikmeot**	65°44'8.23"N 111°23'41.92"W	**76E11**	**Crown**
Seep Creek Ponds	**Kitikmeot**	65°44'6.87"N 111°25'20.82"W	**76E11**	**Crown**
Fingers Lake	**Kitikmeot**	65°42'29.02"N 111° 9'38.36"W	**76E11**	**Crown**
Fingers Creek	**Kitikmeot**	65°44'0.17"N 111° 5'39.10"W	**76E11**	**Crown**
Unnamed Lake	**Kitikmeot**	65°41'13.68"N 111° 3'32.79"W	**76E11**	**Crown**
Unnamed Creek	**Kitikmeot**	65°42'13.03"N 111° 3'54.89"W	**76E11**	**Crown**

If the project proposal includes a **camp**, please provide the coordinates of the camp airstrip location
Lat (degree/minute) 65°46'00"N Long (degree/minute) 111°14'41"W
NTS Map Sheet # (if different from above) **76E14**

The Nunavut Impact Review Board may require additional location information in a subsequent Project Specific Information Requirement (PSIR) submission. This may take the form of a digital Geographic Information Systems (GIS) file.

SECTION 4: NON-TECHNICAL PROJECT PROPOSAL DESCRIPTION

Please attach a non-technical description of the project proposal, no more than 500 words, in English and Inuktitut (+Inuinnaqtun, if in the Kitikmeot). The project description should outline the following:

- Project Title
- Researcher's Name and Affiliation
- Project Location
- Timeframe
- Project Description
  - purpose
  - goals & objectives
  - method of transportation
  - any structures that will be erected (permanent / temporary)
  - restoration / abandonment plans
- Methodology
  - collection protocol
  - collection mechanisms
  - indicate why specific communities or individuals were selected for your research
- Data
  - short term & long term use of data
  - other uses of data
- Reporting
  - How will the research results be communicated to the individual participants, communities, regional and Nunavut organizations?
  - Will the research result in a publication?

SECTION 5: MATERIAL USE

1. List equipment (including drills, pumps, aircrafts, vehicles etc.):

Equipment type and number	Size – dimensions	Proposed use
Boat	14 foot with 15 hp motor	To access study locations
Boat	18 foot with 75 hp motor	To access study locations
Argo	3.5 m long X 1.8 m wide	To access study locations
Kubota RTV 1100	3.3 m long X 1.7 m wide, 1125 kg	To access study locations

2. Detail fuel and hazardous material use:

Fuel	Number of Containers and Capacity of Containers	Total Amount of Fuel (in Litres)	Proposed Storage Methods
Diesel	n/a	100	Diesel dispensed from Tank farm directly to Kubota
Gasoline	14-25 L containers	350 L	Storage in appropriate leak proof containers for boats and argo
Aviation fuel – Jet B	12-205 L drums	2200 L	Lined berm.
Propane	N/A		
Other	N/A		
Hazardous Materials and Chemicals		**Total Amount of Hazardous Materials and Chemicals (in Litres)**	
10% neutral buffered formalin	2 X 4 L containers	8 L	Storage in leak proof jugs; formalin used to preserve samples that will be kept in leak proof Nalgene containers and stored in coolers.
Ethanol	2 X 4 L containers	8 L	Storage in leak proof jugs; ethanol used to clean sampling supplies.
Nitric Acid	10 X 1mL and 10 X 5 mL	60 mL	Supplied by ALS laboratory. Stored and packaged in leak proof vials to be added to water sample—also in leak proof bottle
Sulfuric Acid	10 X 1 mL	10 mL	Supplied by ALS laboratory. Stored and packaged in leak proof vials to be added to water sample—also in leak proof bottle
Hydrochloric Acid	10 X 1 mL	10 mL	Supplied by ALS laboratory. Stored and packaged in leak proof vials to be added to water sample—also in leak proof bottle
Sodium hydroxide	10 pellets- in bottle	10 pellets	Supplied by ALS laboratory. Stored and in leak proof water sampling bottle

3. Detail daily water consumption rates

Not applicable, will be using all existing infrastructure at the Lupin Mine

Daily amount (in Litres)	Proposed water retrieval methods	Proposed water retrieval location
n/a	n/a	n/a

4. Have you applied for a Class A License with the Nunavut Water Board?

☐ **YES** **X NO**

(Existing Class A WL)

SECTION 6: WASTE DISPOSAL AND TREATMENT METHODS

1. List the types of waste:
Not applicable, will be using all existing infrastructure at the Lupin Mine

Type of waste	Projected amount generated	Method of Disposal	Additional treatment procedures
Sewage (human waste)	n/a	n/a	
Greywater	n/a	n/a	
Combustible wastes	n/a	n/a	
Non-Combustible wastes	n/a	n/a	
Overburden (organic soil, waste material, tailings)	n/a	n/a	
Hazardous waste	n/a	n/a	
Other:			

2. Will you be incinerating combustible waste, removing all solid waste, and removing the ash generated from incineration? At Camp incinerator

X YES ☐ **NO**

SECTION 7: COMMUNITY INVOLVEMENT & REGIONAL BENEFITS

1. List the community representatives that have been contacted and provide the minutes of the meetings if available:

Community	Name	Organization	Date Contacted
Kugluktuk	L Torretti	KIA	Mar 19 2013

2. How will the proposed project benefit Nunavut?

The proposed Project will determine if there is any effect from the effluent being discharged from the Lupin Mine on fish in the area exposed to effluent (Contwoyto Lake).

4. Describe and attach documentation regarding community support or concerns for the proposed project:

No community support has been requested, nor concerns sought. Discussion with L Torretti (KIA) was to inform KIA of the up-coming project and Research Permit application, and is not considered to be consultation.

5. Is there a traditional knowledge component to this research project? If yes, please explain:

This Project is a very specific scientific requirement under the Metal Mining Effluent Regulations and does not have a traditional knowledge component in its design. Lupin is planning to engage a local hunter as a bear monitor and assist with the data collection. The hunter may provide TK to the scientists that may provide them with a better understanding of their work.

SECTION 8: GENERAL QUESTIONS

1. Do you give NRI permission to publish project information in the Nunavut Research Institute Annual Compendium of Research Undertaken in Nunavut?

X YES ☐ **NO**

3. In addition to the application form, applicants are required to submit additional information in an electronic format to the Manager, Research Liaison, cfilion@nac.nu.ca. Please check that the following have been submitted to NRI:

[X] **Project Summary** -in English and Inuktitut (+Inuinnaqtun, if in the Kitikmeot)
[X] **NTS Maps** of the project. Figure 2.2 Lupin Site Plan (identifies study areas in the Project Description)

Applicant:

Signature	Title	Date
	Sr. HSE Coordinator	March 26, 2013