

# **APPENDIX A**

## **Schefferville Area Iron Ore Mine EPP**





SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL

Version: 1.0

Date: 14 June 2010

# **Schefferville Area Iron Ore Project**

## **Construction and Operation Activities**

**FINAL**

## **Environmental Protection Plan**

Labrador Iron Mines  
220 Bay Street  
Suite 700, Toronto, ON M5J 2W4

14 June 2010



## TABLE OF CONTENTS

	Page
<b>1.0 Introduction .....</b>	<b>1</b>
1.1 Purpose of the Environmental Protection Plan.....	4
1.2 Environmental Protection Plan Organization.....	4
1.3 Roles and Responsibilities .....	5
1.4 Environmental Orientation .....	7
<b>2.0 Construction and Operations Overview .....</b>	<b>8</b>
2.1 Construction of the Schefferville Area Iron Ore Mine (James and Redmond Properties).....	8
2.2 Operation of the Schefferville Area Iron Ore Mine (James and Redmond Properties) .....	9
<b>3.0 Regulatory Requirements and Commitments .....</b>	<b>16</b>
3.1 Approvals, Authorizations and Permits.....	16
3.2 Environmental Compliance Monitoring.....	18
3.3 Rehabilitation of Construction Work Sites .....	21
3.4 Reporting.....	21
3.4.1 Internal Communication .....	21
3.4.2 External Communication.....	22
<b>4.0 Environmental Protection Procedures .....</b>	<b>23</b>
4.1 Surveying.....	25
4.2 Buffer Zones .....	27
4.3 Laydown and Storage Areas.....	28
4.4 Clearing Vegetation.....	29
4.5 Grubbing and Disposal of Related Debris.....	31
4.6 Overburden .....	33
4.7 Excavation, Embankment and Grading (including cutting and filling) .....	34
4.8 Erosion Prevention and Sediment Control.....	35
4.9 Water Supply (Plant Operations, Camp) .....	36
4.10 Trenching.....	37
4.11 Watercourse (Stream) Crossings.....	38
4.12 Exploration Drilling, Water Well Drilling and Pump Tests.....	42
4.13 Pumps and Generators.....	44
4.14 Dewatering Work Areas/Trenches and Site Drainage.....	45



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

4.15	Equipment Installation, Use and Maintenance .....	46
4.16	Storage, Handling and Transfer of Fuel and Other Hazardous Material.....	47
4.17	Propane .....	50
4.18	Waste Disposal .....	51
4.19	Sewage Disposal .....	52
4.20	Hazardous Waste Disposal .....	53
4.21	Vehicle Traffic.....	54
4.22	Dust Control .....	55
4.23	Noise Control.....	56
4.24	Civil Works.....	57
4.25	Mine, Open Pit and Mine Road Construction and Maintenance .....	58
4.26	Processing Activities.....	59
4.27	Installation of Pre-fabricated Buildings.....	60
4.28	Process Washwater Treatment and Monitoring.....	61
4.29	Site Water Management - Settling Ponds including Sediment Control Ponds .....	64
4.30	Drilling and Blasting.....	67
4.31	Caribou .....	69
<b>5.0</b>	<b>Contingency Plans .....</b>	<b>73</b>
5.1	Fuel and Hazardous Material Spills .....	74
5.2	Wildlife Encounters .....	77
5.3	Forest Fires .....	79
5.4	Discovery of Historic Resources .....	81
<b>6.0</b>	<b>Environmental Protection Plan Control Revisions .....</b>	<b>82</b>
<b>7.0</b>	<b>Contact List .....</b>	<b>83</b>
<b>8.0</b>	<b>Reference Material .....</b>	<b>85</b>
<b>9.0</b>	<b>Signature Page .....</b>	<b>86</b>



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

### **LIST OF FIGURES**

	<b>Page</b>
Figure 1.1 Project Location.....	2
Figure 1.2 LIM Property Holdings.....	3
Figure 2.1 Project Features .....	10
Figure 2.2 James and Silver Yard Infrastructure.....	11
Figure 2.3 Silver Yard Features.....	12
Figure 2.4 James Features.....	13
Figure 2.5 Redmond Features.....	14
Figure 2.6 Work Camp Features.....	15

### **LIST OF TABLES**

	<b>Page</b>
Table 3.1 Applicable Permits/Approval/Authorizations for Construction and Operations Activities for the Schefferville Area Iron Ore Project .....	16
Table 3.2 Environmental Compliance Standards .....	19
Table 4.1 Recommended Minimum Buffer Zone Requirements for Activities near Watercourses .....	27
Table 4.2 Proposed Mitigation Measures for Caribou.....	71

### **LIST OF APPENDICES**

Appendix A	List of Abbreviations and Acronyms
Appendix B	Controlled Copy Distribution List
Appendix C	Revision Request Form
Appendix D	Revision History Log
Appendix E	Site Check List Form
Appendix F	Background Information on Caribou in Western Labrador



## **1.0 INTRODUCTION**

The Schefferville Area Iron Ore Project (the Project) is being developed by Labrador Iron Mines Limited ("LIM"), which is a wholly owned subsidiary of Labrador Iron Mines Holdings Limited, a public company listed on the Toronto Stock Exchange. This EPP has been prepared to address mine construction and operations activities; exploration and the construction and operation of the spur line have been addressed under separate cover.

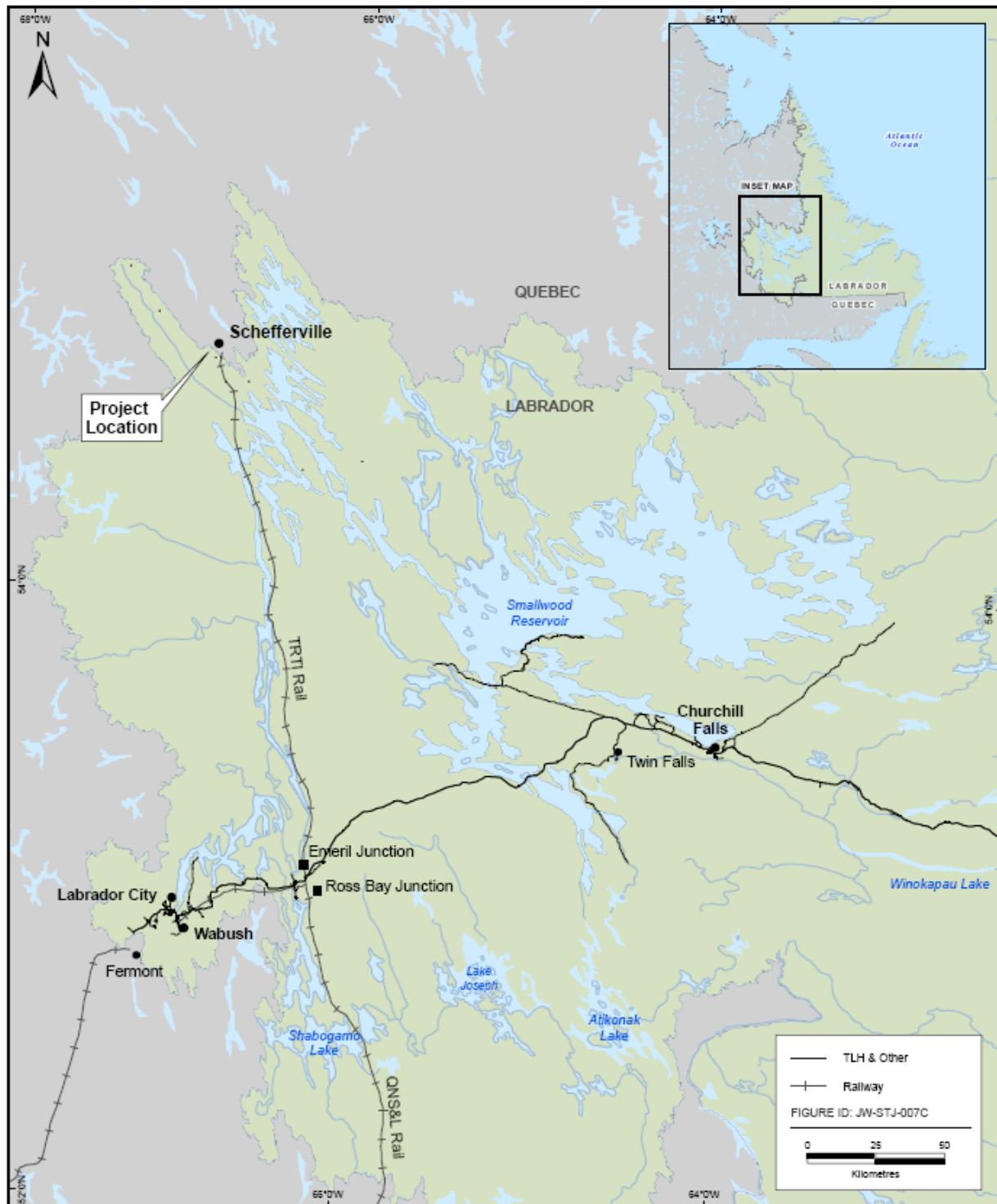
The Project involves the development of the James and Redmond deposits and the ongoing exploration and evaluation of other mineral licenses in the area, including Houston, Knob Lake, Howse, Sawyer Lake, Astray Lake and Kivivik, which are all located in Labrador. James, Redmond, Houston and Knob Lake are located within 10 kilometres of the former Iron Ore Company of Canada (IOCC) rail yard (called Silver Yard), which is approximately three kilometres west of Schefferville, Québec. It is LIM's intention to initially mine and beneficiate the James and Redmond deposits, commencing in 2010.

In general, there is extensive land disturbance in the Project area resulting from past exploration and/or historical IOCC mining activities. Evidence of past exploration and mining activities include the presence of flooded abandoned pits, trenches, access roads, a former rail line railbed and stockpiles.

The proposed initial mine development area for the Project including the James and Redmond deposits has a resource base to provide for three to four years of production at a starting rate of between 1 and 2 million tonnes per year and increasing to up to 3 million tonnes per year by Year 4. Ongoing exploration is being conducted on the James and Redmond Properties, as well as LIM's other properties and, pending the positive results of the exploration programs for these areas and the confirmation of data, other adjacent deposits may proceed as satellite projects to the currently proposed operation and will provide for up to an estimated 20 years of continuous mine life.

Construction and operations activities, at LIM's Properties are the subject of this Environmental Protection Plan (EPP). The Project location is shown on Figure 1.1, and property locations are shown on Figure 1.2.

**Figure 1.1 Project Location**



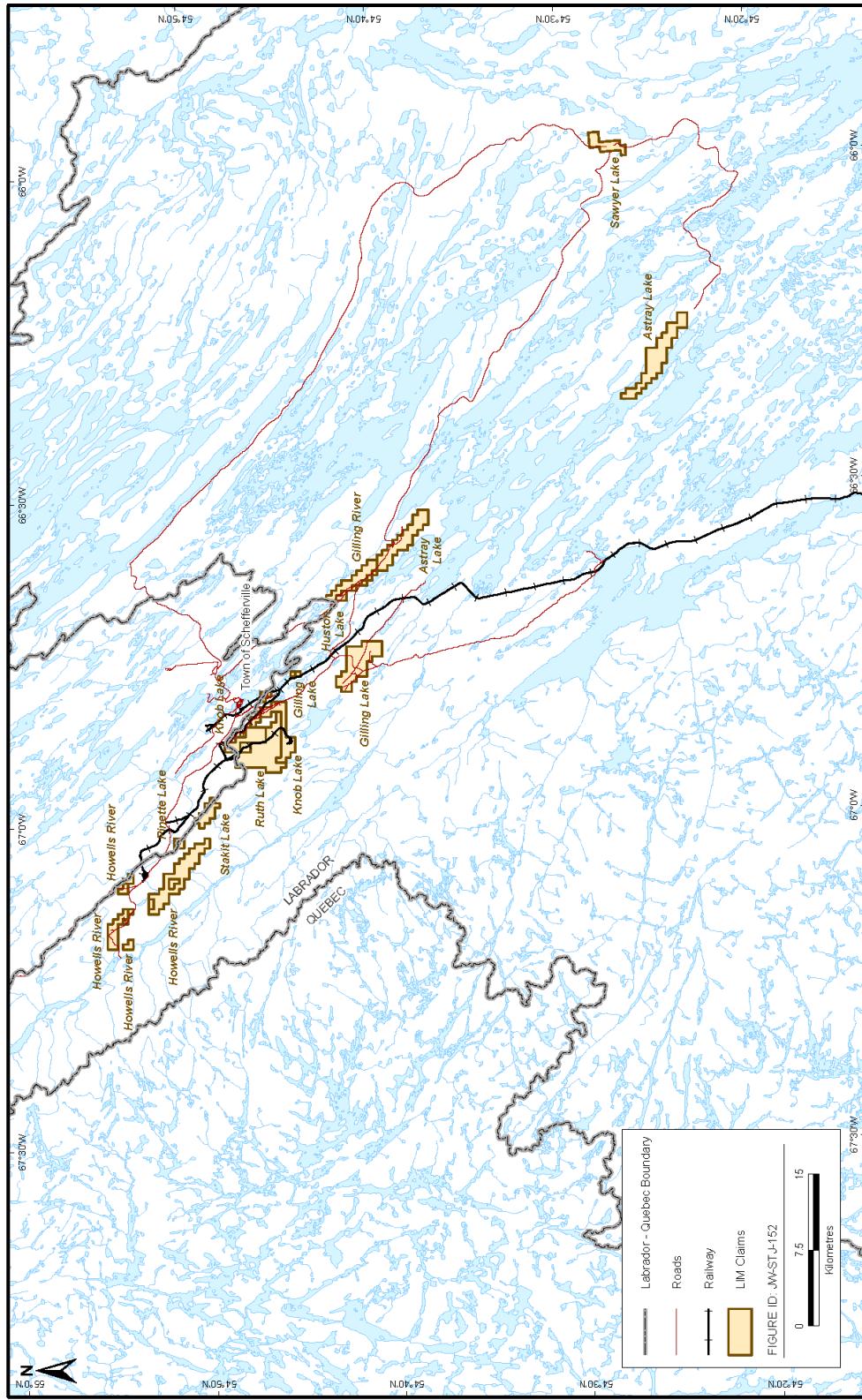
**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

Version: 1.0

Date: 14 June 2010



**Figure 1.2 LIM Property Holdings**





## 1.1 Purpose of the Environmental Protection Plan

This EPP outlines practical procedures required for all personnel (i.e., LIM employees, contractors and suppliers) to reduce or eliminate potential adverse environmental effects associated with the construction and operations work in Newfoundland and Labrador. The objectives of the EPP also include:

- confirm commitments to reduce environmental effects are met;
- document environmental concerns and appropriate protection measures;
- provide a reference document for personnel when planning and/or conducting specific activities;
- provide direction for accidental events;
- communicate changes in the program through the revision process;
- provide a reference to and instructions for LIM to understand applicable legal and other requirements;
- include a quick reference for both personnel and regulators to monitor compliance and recommend improvements; and
- provide direction at the corporate level for ensuring commitments made in policy statements are implemented and monitored.

Any deviation from the procedures and commitments outlined in the EPP must be discussed with, and approved by LIM.

## 1.2 Environmental Protection Plan Organization

This EPP has been developed for specific activities to be conducted in support of the construction and operations work carried out on LIM's Properties. It provides instructions for addressing both planned and unplanned activities/events associated with the construction and operations work. This EPP contains the following sections:

- **Section 1.0** introduces the EPP. It outlines the EPP purpose and organization, roles and responsibilities and environmental orientation.
- **Section 2.0** provides a description of the undertaking.
- **Section 3.0** lists the permits, approvals and authorizations that may be required for the undertaking, and provides an overview of compliance monitoring.
- **Section 4.0** describes environmental concerns and environmental protection procedures for planned construction and operations activities.
- **Section 5.0** outlines the contingency plans for potential unplanned and accidental events.
- **Section 6.0** describes procedures for revising the EPP.
- **Section 7.0** contains a list of key Project and regulatory contacts.
- **Section 8.0** lists references cited in the EPP, as well as a number of sources of further information.
- **Section 9.0** contains a signature page for employee and contractor sign-off.
- **Appendix A** is a list of abbreviations and acronyms.



- **Appendix B** is a Controlled Copy Distribution List.
- **Appendix C** is a Revision Request Form.
- **Appendix D** is a Revision History Log.
- **Appendix E** is a sample Site Check List Form.
- **Appendix F** is background information on caribou in western Labrador.

### 1.3 Roles and Responsibilities

LIM will:

- provide final approval for the EPP and any subsequent revisions;
- monitor and inspect the work being carried out; and
- liaise with relevant government agencies and community interest groups as required.

The designated LIM Vice President (VP) of Environment and Permitting will:

- distribute the EPP;
- review revision requests;
- conduct a review of the EPP on an as-needed basis;
- distribute revisions to controlled distribution representatives, identified in Appendix B (Controlled distribution representatives are LIM employees who will maintain copies of the EPP document); and
- maintain document control;

The designated LIM Labrador Site Manager will:

- be LIM's representative on-site responsible for environmental protection and will report any issues or developments related to environment to LIM's Vice President of Environment;
- hold an environmental orientation session for contractors and their personnel, and any other personnel to be involved in Schefferville area activities on an as-needed basis;
- confirm LIM workers and LIM contractors/sub-contractors and their staff onsite are familiar with the EPP and its procedures and maintain a master file of all EPP orientation efforts and signature sheets;
- implement the EPP onsite and confirm that all workers implement the EPP;
- confirm LIM workers and LIM contractors/sub-contractors in the field review revisions;
- communicate with LIM VP of Environment and Permitting about proposed work activities so that all applicable approvals, authorizations and permits can be obtained;
- monitor or designate a representative to monitor construction and operation activities for compliance with the EPP, and all regulatory requirements and commitments;
- report to LIM VP Environment and Permitting any incidents of environmental non-compliance; and
- in the event of an emergency, contact the appropriate reporting agency as indicated in the EPP immediately, as well as the LIM VP Environment and Permitting.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

The contractors, subcontractors, LIM representatives, and site personnel will:

- familiarize themselves with the EPP and any revisions;
- sign that they have read, understood, and accept the conditions of the EPP prior to being approved to conduct work (see Signature Page in Section 9.0);
- implement the EPP commitments;
- confirm all personnel and subcontractors comply with the EPP, all requirements of the contract and with all applicable laws and regulations;
- maintain a training record (record of names and dates when training was administered including the signature page in Section 9.0 of the EPP) and provide updated files on a monthly basis to LIM's VP of Environment;
- maintain regular contact with the LIM VP Environment and Permitting, including, but not limited to:
  - immediately reporting concerns to the LIM Labrador Site Manager and/or LIM VP Environment and Permitting (LIM's Environment Team) of any aspect of the EPP; and
  - immediately reporting any spills or other event that may have an effect on the environment to LIM's Environment Team (Labrador Site Manager, VP Environment and Permitting) and the appropriate regulatory contacts (Environment Canada etc.);
- obtain all applicable approvals, authorizations and permits required to conduct the work and provide copies to the LIM Environment Team;
- implement any conditions outlined in approvals, authorizations and permits;
- carry out clean-up, reclamation or restorative measures as directed by the LIM Environment Team and/or appropriate government agency; and
- contribute feedback to the LIM Environmental Team any changes/comments they feel would improve the quality of the EPP.



#### 1.4 Environmental Orientation

Through orientation and ongoing awareness training throughout the undertaking, LIM will confirm that all personnel are competent to do their jobs properly. Workers will understand their roles and responsibilities, as well as the potential environmental effects of the overall project and their specific work activities. All workers will receive an orientation from an immediate superior prior to the start of any new activity and thereafter on an as-needed basis. All new personnel arriving at the site during the construction and operations phases will also receive an orientation, to be given by the LIM Labrador Site Manager. The orientation will include a presentation on environmental protection procedures to be applied to all work. All necessary precautions will be taken during the work program to reduce the potential for spills. To achieve this, employees will receive orientation in spill response and reporting procedures and the **Environmental Emergencies 24-Hour Report Line** will be clearly posted in all work areas.



## 2.0 CONSTRUCTION AND OPERATIONS OVERVIEW

This EPP will cover the activities associated with the mine construction and operations including the extraction of iron ore by re-developing open pit mines at James North, James South, Redmond 2B and Redmond 5 deposits, beneficiation at the Silver Yard area and operation of a 4.4 km rail spur between the Silver Yard area and Schefferville.

The Project will operate under current provincial and federal regulations, environmental protection standards, and industry best practices.

### 2.1 Construction of the Schefferville Area Iron Ore Mine (James and Redmond Properties)

Construction of the Schefferville Area Iron Ore Mine is scheduled to be completed in 2010 and includes:

- Site development, including:
  - Clearing vegetation and grubbing overburden
  - Storage/disposal of overburden, soil, and related debris
  - Vehicle movement including heavy equipment
  - Upgrading of site roads and limited new road construction
  - Site preparation for semi-mobile building installation at Silver Yard and the work camp
  - Building installation, erection, and placement at Silver Yard and the work camp
  - Generators
  - Biodisk
  - Power-line and switchyard installation
  - Installation of water lines and pipes
  - Transportation of workers to and from site
  - Concrete production and placement
  - Transportation and storage of fuel
- Work camp
- Water supply
- Surface water management
- Sewage treatment
- Waste rock and overburden management

Re-establishment of the 4.4 km spur line is addressed in an activity-specific EPP. Operations of the spur line will also be addressed under separate cover in an activity specific EPP.

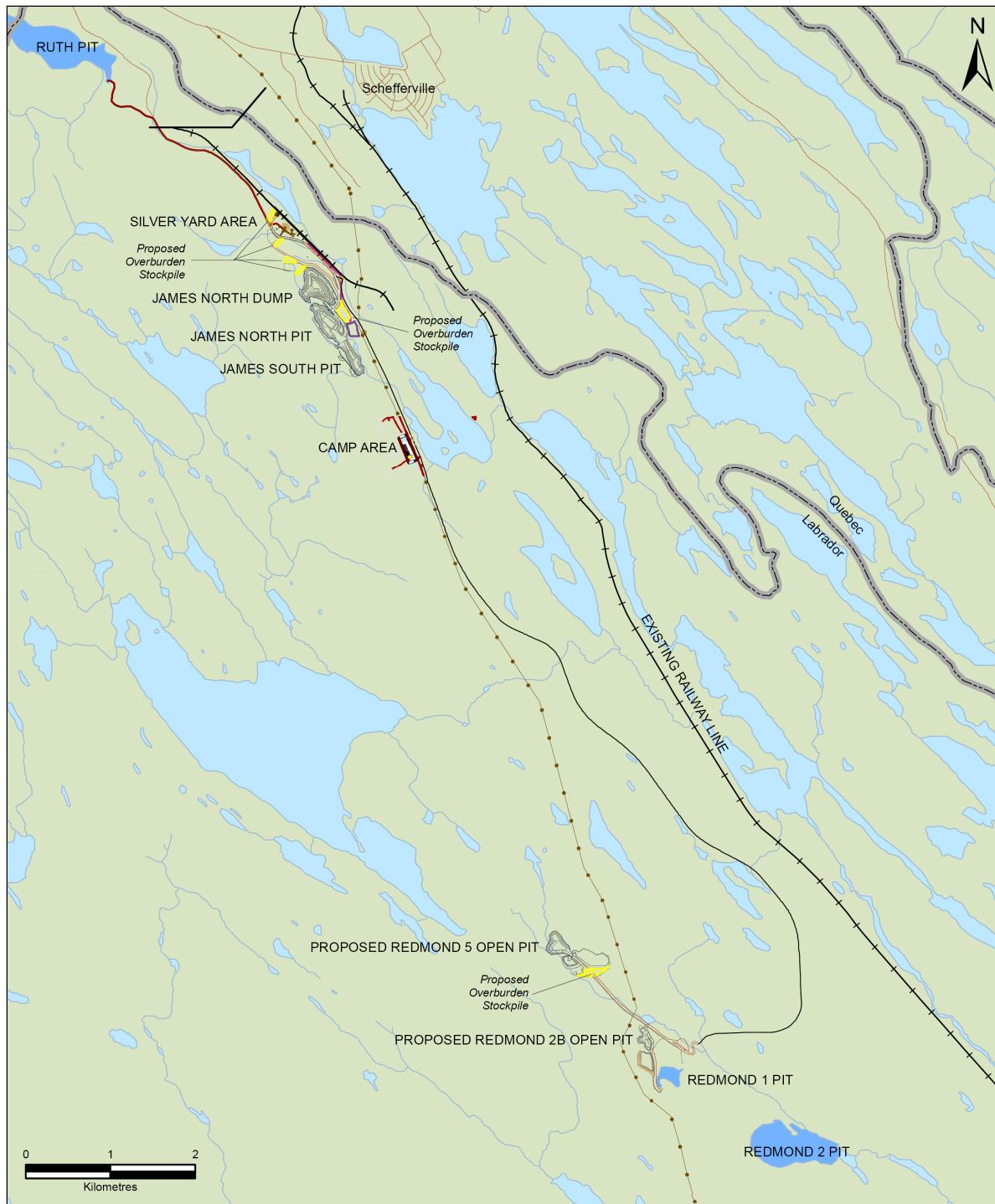


## 2.2 Operation of the Schefferville Area Iron Ore Mine (James and Redmond Properties)

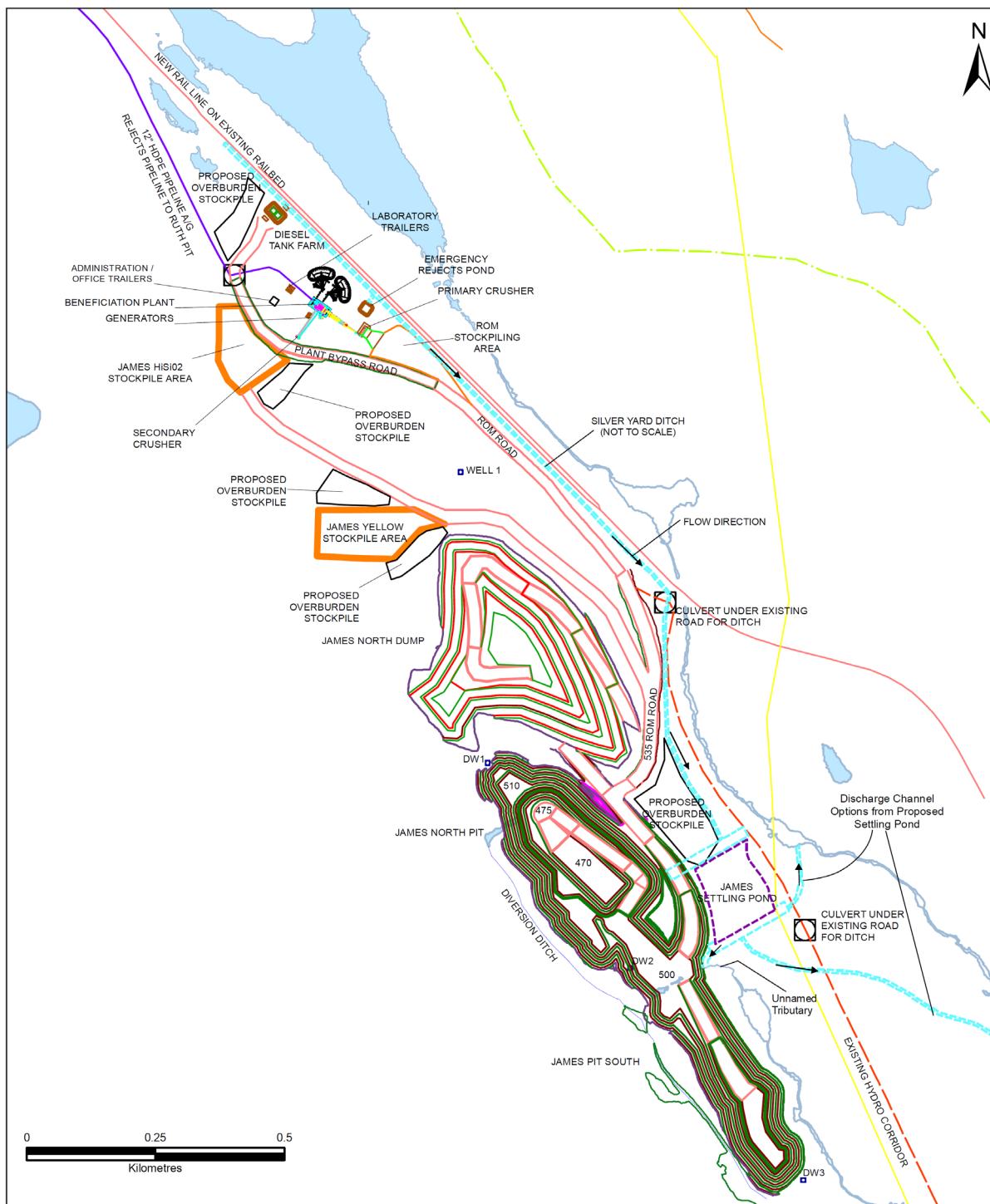
The life of the first phase of the Project (James and Redmond) is estimated to be five years. Major features of Project operations are shown in Figures 2.1, 2.2, 2.3, 2.4, 2.5, and 2.6 and include:

- Mining to be carried out using conventional open pit mining methods, employing drilling and blasting operations;
- Ore will be beneficiated by crushing, washing and screening at the Silver Yard area. No chemicals will be used in the beneficiation process. The beneficiation building will house a primary crusher, tumbling scrubber, secondary crusher, primary screening equipment, secondary screening equipment, filtration equipment, and various chutes, conveyors, and pumps. The beneficiation plant will be designed to process 10,000 tonnes per day (tpd) of iron ore, however during operation, the initial processing rate will be 3,000 tpd per pit over a period of approximately 212 days per year;
- Other buildings at the Silver Yard will include: site offices, laboratory, maintenance shed, and warehouse facilities;
- The camp will have approximately 70 single rooms with their own bathroom within two dormitories. The kitchen /living room area will be able to feed more than 100 people on a sequence. Two generators will be installed: a 450 KW primary generator and another one of 250 KW. Both will follow the noise level requirements for a camp. A biodisk system will be installed for sewage treatment and will be emptied every year with a “pumper truck” coming from Labrador City;
- Subsequent to the washing and screening process, reject fines will be pumped via pipeline to be deposited in Ruth Pit, a flooded historical open pit, which will act to remove suspended solids; and
- A 4.4 km spur line previously operated and abandoned will be re-established, and a siding track will be laid at the Silver Yard area. This spur line will facilitate transportation of processed ore to Schefferville and subsequent transportation to market.

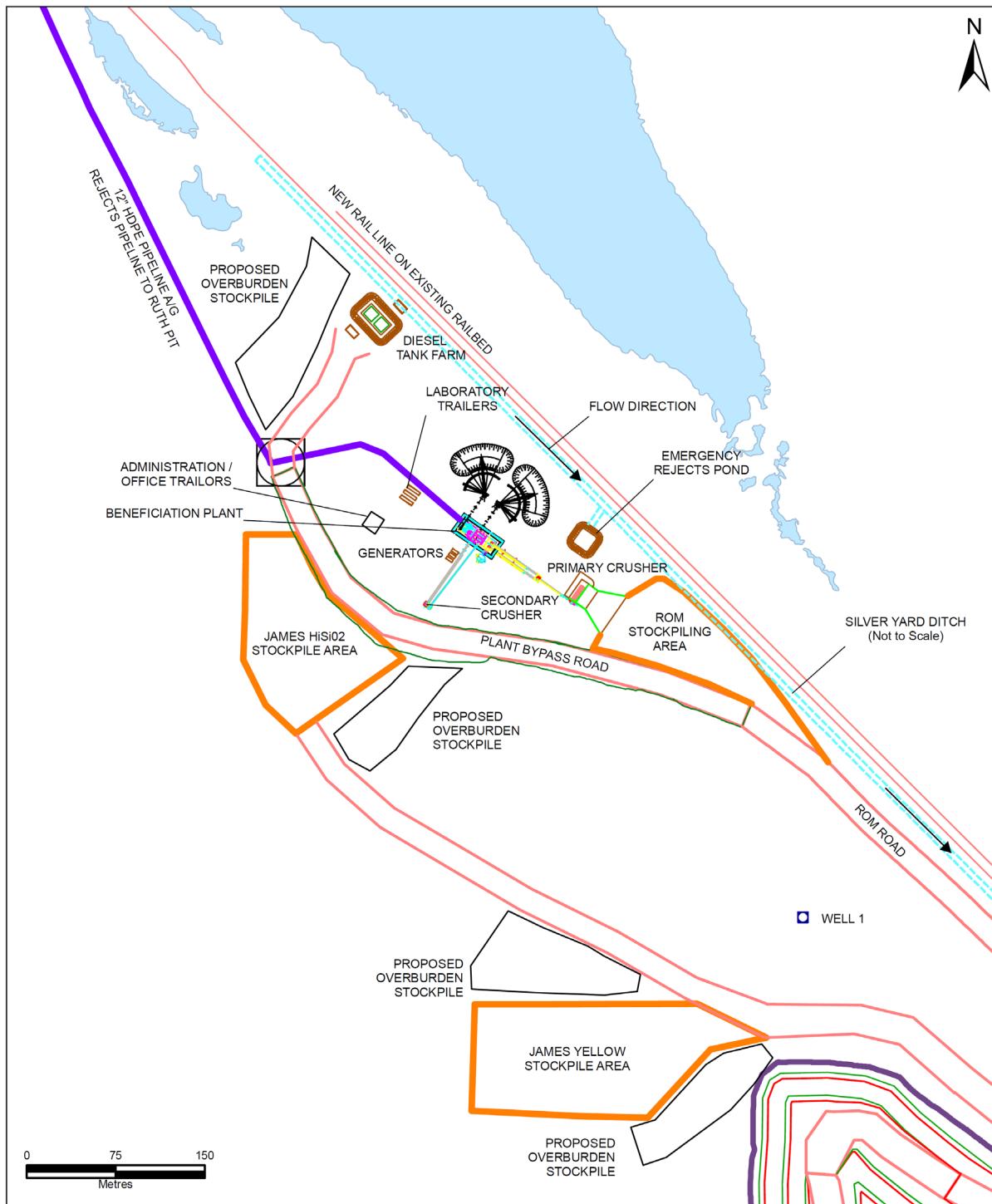
**Figure 2.1 Project Features**



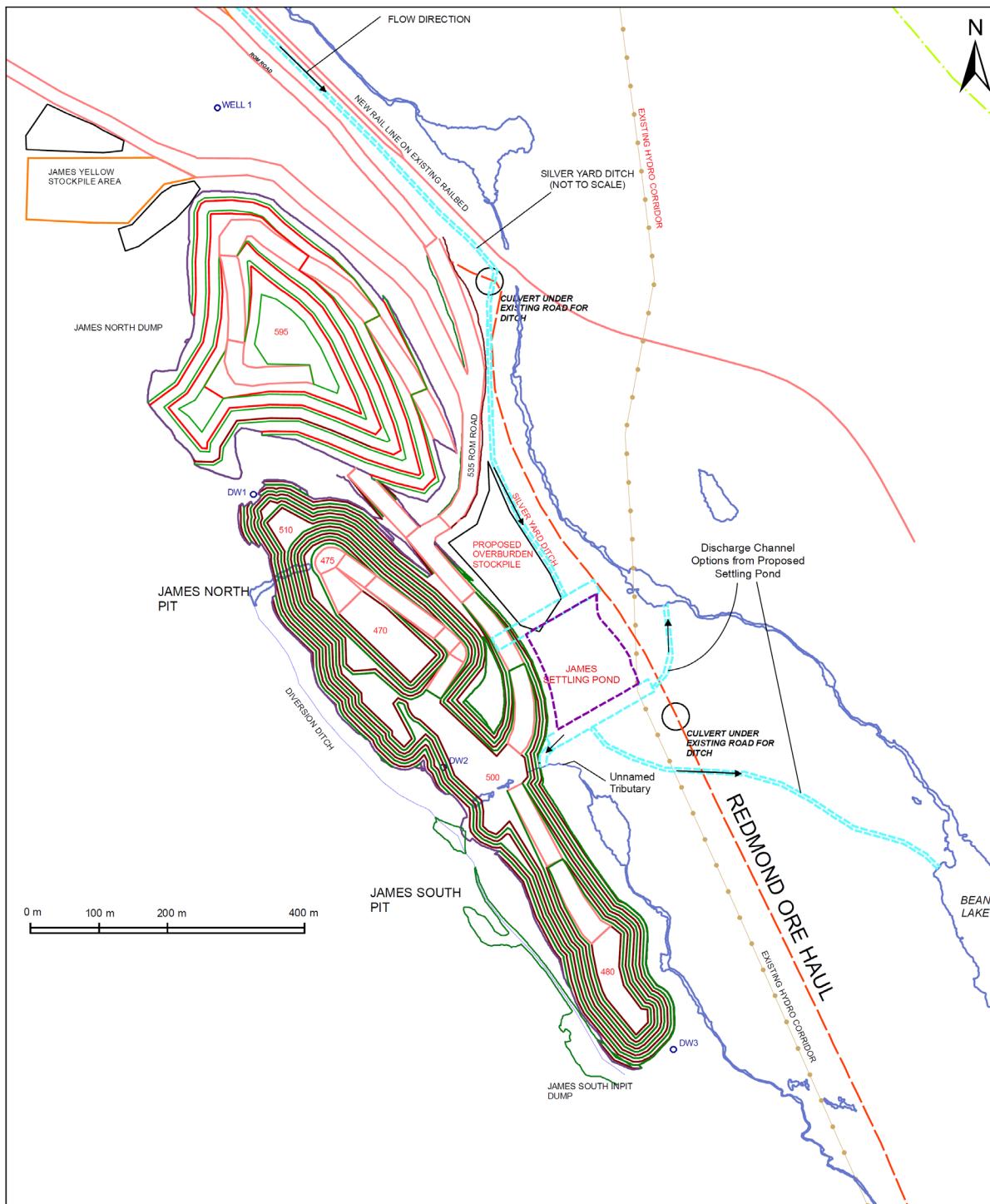
**Figure 2.2     James and Silver Yard Infrastructure**



**Figure 2.3** Silver Yard Features



**Figure 2.4      James Features**



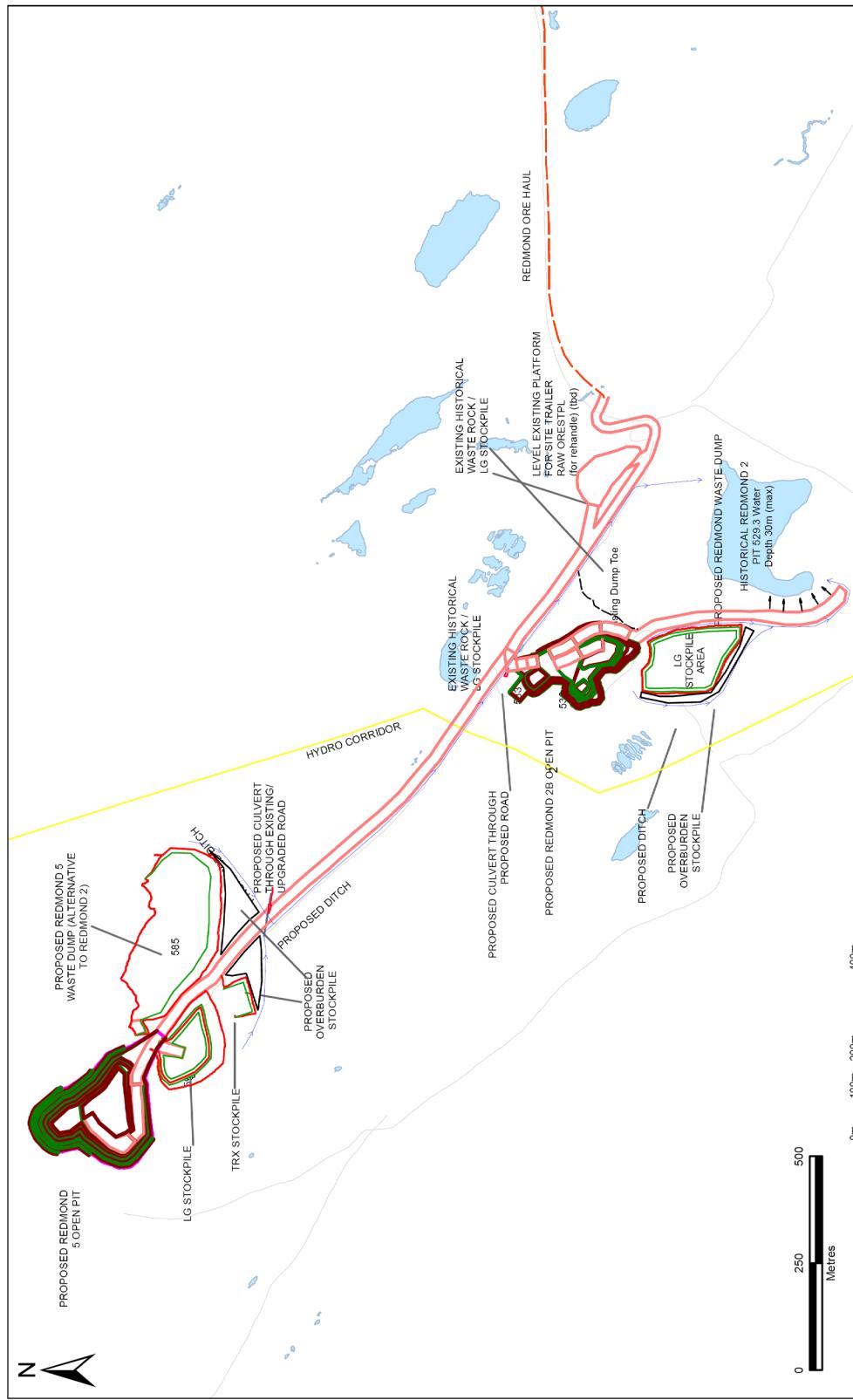
**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

Version: 1.0

Date: 14 June 2010



**Figure 2.5 Redmond Features**



**Figure 2.6 Work Camp Features**





**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

### **3.0 REGULATORY REQUIREMENTS AND COMMITMENTS**

#### **3.1 Approvals, Authorizations and Permits**

Several approvals, permits and authorizations may be required for construction and operations activities. Conditions or expiry dates attached to these permits should be considered as elements of this EPP and all personnel should be familiar with and adhere to all relevant permits and approvals.

The permits, approvals, and authorizations for construction and operations are listed in Table 3-1.

**Table 3.1 Applicable Permits/Approval/Authorizations for Construction and Operations Activities for the Schefferville Area Iron Ore Project**

Department/Agency	Applicable Legislation	Approval/Certificate/Permit	Project Element
<b>Federal Government Requirements</b>			
Fisheries and Oceans Canada	<i>Fisheries Act</i>	<i>Contingency: Fisheries Act S35(2) Authorization for works in fish bearing waters</i>	Culvert replacement (only if required)
		Letter of Advice regarding protection of fish habitat	Establishment of groundwater flow to unnamed tributary during mine operations
Transport Canada	<i>Transportation of Dangerous Goods Act, 1992</i>	Permit to store, handle and transport dangerous goods	Storage, handling and transportation of fuel and chemicals
<b>Provincial Government Requirements</b>			
Department of Natural Resources, Forestry Branch	<i>Forestry Act</i>	<ul style="list-style-type: none"><li>• Contingency: Cutting permit</li><li>• Contingency: Permit to Burn</li></ul>	Clearing (only if required)
Department of Natural Resources, Mines Branch, Mineral Lands Division	<i>Mineral Act</i>	Mining Lease	Operation of mine
		Surface Rights Lease	Operation of mine
		Development Plan	In place prior to construction of mine
		Rehabilitation and Closure Plan	In place prior to construction of mine
		Financial Assurance	In place prior to construction of mine
Department of Environment and Conservation, Pollution Prevention Division	<i>Environmental Protection Act</i>	Industrial Processing Works Certificate of Approval	Mine operations
		Approval of MMER Emergency Response Plan	Reject fines water discharge
		Approval of Emergency Spill Response Plan	Construction and Operations
		Approval of Environmental Protection Plan	Construction and Operations
		Certificate of approval for storage and handling of gasoline and associated products	Storage, handling and transportation of fuel and chemicals



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

<b>Department/Agency</b>	<b>Applicable Legislation</b>	<b>Approval/Certificate/Permit</b>	<b>Project Element</b>
Department of Environment and Conservation, Water Resources Management Division	<i>Water Resources Act</i>	Real-time Water Monitoring Memorandum of Understanding (MOU)	Water quantity/water quality
		Certificate of environmental approval to alter a body of water: <ul style="list-style-type: none"><li>• Fording</li><li>• Site Drainage</li><li>• Culvert Installation</li><li>• Other works within 15 m of a body of water</li></ul>	Activities within 15 m of a body of water (as required)
		Water Use Licence	Water utilization
		Non-domestic well permit	Process water supply
Department of Environment and Conservation, Wildlife Division	<i>Wildlife Act and Regulations</i>	Authorization to control nuisance animals	Construction and operations activity
		Approval of Caribou Mitigation Strategy and Monitoring Program	Construction and operations activity
Department of Works, Services and Transportation	<i>Dangerous Goods Transportation Act, 1995 and Regulations</i>	Compliance standard; no permit required	Storage, handling and transportation of fuel
	<i>Rail Services Act</i>	<i>Rail Services Act</i> Approval	Construction and Operation of spur line
Government Service Centre	<i>Environmental Protection Act</i>	Certificate of Approval for a Sewage/Septic System	Operation of sewage treatment system (Biodisk)
		Approval for Storage and Handling of Gasoline and Associated Products	Storage, handling and transportation of fuel
		Fuel tank registration	Storage, handling and transportation of fuel
		Fuel storage permit (propane)	Storage of propane
		Approval for used oil storage tank system	Temporary storage of used oil till offsite disposal at licensed facility by contractor
		Food Establishment License	Operation of cafeteria and dining facilities
		Building Accessibility Design Registration	Construction and operation of buildings
Department of Health		Approval for Operation of Lunchroom/Washroom Facilities	Operation of cafeteria, dining room, and washrooms



### 3.2 Environmental Compliance Monitoring

#### Site Inspections

Site inspections will be completed before, during, and within seven (7) days after any site disturbances related to construction and operations activities performed by LIM, or contractors on behalf of LIM. Site inspections will be conducted by trained personnel and details recorded on the Site Check List Form located in Appendix E. For site inspections conducted prior to any construction or operations activity, details including vegetation, general terrain/topography, and drainage patterns will be recorded. Photographs should be taken during each site inspection. The required frequency of site inspections performed during construction and operations activities will be determined by the LIM VP of Environmental and Permitting (or designate) and will depend on the duration and type of activity being performed.

These regular site inspections will aid in the implementation of the environmental protection measures that are specified in this document and that will be specified in the applicable contracts and other relevant permits, approvals and authorizations.

Any environmental issues or concerns should be reported to the LIM Labrador Site Manager and the LIM VP of Environment and Permitting.

#### Monitoring

Monitoring will also confirm that all construction and operations activities comply with applicable regulatory requirements and that mitigation measures are being employed effectively.

The LIM Labrador Site Manager and local environmental staff will:

- be responsible for environmental compliance monitoring on-site; and
- instruct the contractor on the environment-related general, special, and technical clauses to be implemented as part of the contract(s).

Compliance monitoring will be required for various activities during construction and operations. Monitoring of site run-off at the construction and operation sites will be conducted as per provincial requirements. Other federal and provincial government compliance standards that apply to the construction and operations activities include but are not limited to those listed in Table 3.2. Personnel will comply with all relevant approvals, authorizations, permits and legislation.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**Table 3.2 Environmental Compliance Standards**

Legislation/ Guidelines	Activity Requiring Compliance	Responsible Agency	Comment
<b>Federal Regulations</b>			
<i>Fisheries Act,</i> S36(3), Deleterious Substances	Run-off from the site to receiving waters	Environment Canada	<p>The deposit of any material into waters frequented by fish or to an area that may enter waters frequented by fish must be non-deleterious to fish (i.e., must be non-acute lethally). All materials that may enter waters frequented by fish must comply with the Act. There will be no work below the high water mark of any surface water features.</p> <p>The proponent will be subject to the <i>Metal Mining Effluent Regulations</i> (MMER), as administered under the <i>Fisheries Act</i>. MMER regulate the deposit of mine effluent and other waste matter produced during mine operating into natural, fish-bearing water bodies.</p>
<i>Migratory Birds Convention Act and Regulations</i>	Mortality of migratory birds, and any species under federal authority.	Canadian Wildlife Service, Environment Canada	<p>CWS should be notified about the mortality of any migratory bird in the project area, including passerine (songbirds), seabird and waterfowl species. Harmful substances (e.g., oil, wastes, etc.) that are harmful to migratory birds must not be deposited into waters that are frequented by them.</p> <p>Nests, eggs, nest shelters of migratory birds must not be disturbed or destroyed. Although the proposed work is planned along an previously developed and existing cleared corridor and no further clearing is planned, and all activities will be completed prior to nesting season, certain activities such as clearing will be avoided, where possible, during the nesting period for migratory birds in the region (from May to around mid-July). As well, efforts will be taken to complete any clearing in these areas, if required, outside of the breeding season. Should additional clearing be required, and it is not possible to undertake clearing outside of the breeding season and a nest is found, the following mitigative actions will be taken:</p> <ul style="list-style-type: none"><li>• the nest site and neighbouring vegetation should be left undisturbed until nesting is completed; and,</li><li>• construction activities should be minimized in the immediate area until nesting is completed.</li></ul> <p>The best approach will be identified based on the circumstances and in compliance with the MBCA.</p>



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

Legislation/ Guidelines	Activity Requiring Compliance	Responsible Agency	Comment
			During the past four years of baseline data collection at the Project area, and as identified in the EIS, no SARA species have been identified within the project area. However, should any federally list species at risk (endangered, threatened, or special concern) be identified in the project area and considered to be at risk for potential impacts as a result of Project activities (disturbed or incidental mortality), LIM's VP of Environment, or designate will contact CWS at (709) 772-7456.
<i>Transportation of Dangerous Goods Act and Regulations</i>	Handling and transporting of dangerous goods.	Transport Canada	If the materials are transported and handled fully in compliance with the regulations, a permit is not required. A Permit of Equivalent Level of Safety is required if a variance from the regulations is necessary.
<i>Canadian Environmental Protection Act</i>	Activities that have the potential to interact with the environment and human health.	Environment Canada	CEPA provides framework for setting environmental quality objectives, guidelines and codes of practice, pollution prevention plans, regulation of toxic substances, controlling pollution of other wastes and environmental emergency plans
<i>Species at Risk Act</i>	Mortality of endangered species or other species under federal authority.	Environment Canada	Measures must be taken to avoid or lessen adverse effects on species at risk and that effects are monitored. Mitigation measures must be consistent with recovery strategies and action plans for species.
<b>Provincial Regulations</b>			
<i>Environmental Protection Act, Part IV</i>	Schefferville Area Iron Ore Project	Pollution Prevention Division, NLDOEC (PP-NLDOEC)	All waste material shall be considered, prior to disposal, for reuse, resale or recycling. All waste materials shall be disposed at an approved waste disposal site.
<i>Environmental Protection Act, Part VI</i>	Schefferville Area Iron Ore Project	PP-NLDOEC	All activities are subject to the <i>Air Pollution Control Regulations</i> . Materials as stipulated in the Regulations cannot be burned in the open.
	Storage, handling and disposal of gasoline and other fuels.	PP-NLDOEC	Petroleum storage and handling is subject to the <i>Storage and Handling of Gasoline and Associated Products Regulations</i> . Refer to Section 5.1 of the EPP for the Fuel and Hazardous Material Spills Contingency Plan.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

Legislation/ Guidelines	Activity Requiring Compliance	Responsible Agency	Comment
	Disposal of used oil.	PP-NLDOEC	The storage and disposal of used oil is subject to the <i>Used Oil Control Regulations</i> .
	Handling and storage of hazardous materials.	Occupational Health and Safety Division, Department of Government Services	Activities involving the use of designated hazardous materials are subject to <i>Workplace Hazardous Materials Information System</i> . WHMIS outlines procedures for handling hazardous materials and provides details on various hazardous materials.
<i>Water Resources Act</i>	Site drainage	PP-NLDOEC	All waters discharged must comply with the <i>Environmental Control Water and Sewage Regulations</i> .
<i>Dangerous Goods Transportation Act and Regulations</i>	Transporting fuel to the site.	Department of Works, Services and Transportation	Transporting goods considered dangerous to public safety must comply with regulations.
<i>Historic Resources Act</i>	Construction and operation activities.	Cultural Heritage, Archaeology Section, Department of Tourism, Culture and Recreation	All archaeology sites and artifacts are considered the property of the Crown and must not be disturbed. Any archaeology materials encountered must be reported to the Provincial Archaeology Office.

### **3.3 Rehabilitation of Construction Work Sites**

Once construction activities have ceased in an area, rehabilitation procedures will commence in non-operational areas. Overall mine development rehabilitation and closure will be addressed under separate cover with accompanying financial assurance in the Rehabilitation and Closure submission to NLDNR.

### **3.4 Reporting**

#### **3.4.1 Internal Communication**

Environmental performance and issues during construction and operation activities associated with the Project will be communicated internally as required. The LIM Labrador Site Manager is responsible for communicating LIM policies and procedures and legal and other requirements to workers. Workers will communicate all environmental incidents to LIM's Labrador Site Manager as per the LIM Emergency Call Out and Reporting



Procedures. EPP orientation and sign-off for new staff/contractors onsite will also be conducted by LIM's Labrador Site Manager prior to start of work.

### **3.4.2 External Communication**

When required, LIM, through the VP of Environment and Permitting, will report on environmental issues relating to construction and operations activities for the Project to the Newfoundland and Labrador Department of Environment and Conservation (NLDOEC). Issues, which may be communicated include, but are not necessarily limited to:

- dust;
- erosion;
- historic resources;
- wildlife encounters of note; and
- permits and authorizations.

Any spills of petroleum products or other hazardous materials will be reported immediately to the:

**Environmental Emergencies 24 Hour Report Line (Coast Guard Traffic Centre, St. John's)**  
(St. John's: **709-772-2083** or Other Areas: **1-800-563-9089**)

The *Fisheries Act* requires all spills to be reported, regardless of size. Any spills in ditches or on roadways that may enter waterways must also be reported.

Additionally, if construction or operation activities requires removal of any merchantable timber, the Newfoundland and Labrador Department of Natural Resources, Forest Resources Branch, will be contacted by LIM.

Instruction in Health and Safety issues is provided under separate cover as part of LIM's existing Health and Safety (H&S) program.



#### **4.0 ENVIRONMENTAL PROTECTION PROCEDURES**

This Section provides a description of environmental protection procedures for the following anticipated construction- and operations-related activities:

- 4.1 Surveying
- 4.2 Buffer Zones
- 4.3 Laydown and Storage Areas
- 4.4 Clearing Vegetation
- 4.5 Grubbing and Disposal of Related Debris
- 4.6 Overburden
- 4.7 Excavation, Embankment and Grading (including cutting and filling)
- 4.8 Erosion Prevention and Sediment Control
- 4.9 Water Supply (Plant Operations, Camp)
- 4.10 Trenching
- 4.11 Watercourse (Stream) Crossings
- 4.12 Exploration Drilling, Water Well Drilling and Pump Tests
- 4.13 Pumps and Generators
- 4.14 Dewatering Work Areas/Trenches and Site Drainage
- 4.15 Equipment Installation, Use and Maintenance
- 4.16 Storage, Handling and Transfer of Fuel and Other Hazardous Material
- 4.17 Propane
- 4.18 Waste Disposal
- 4.19 Sewage Disposal
- 4.20 Hazardous Waste Disposal
- 4.21 Vehicle Traffic
- 4.22 Dust Control
- 4.23 Noise Control
- 4.24 Civil Works
- 4.25 Mine, Open Pit and Mine Road Construction and Maintenance
- 4.26 Processing Activities
- 4.27 Installation of Pre-fabricated Buildings
- 4.28 Process Washwater Treatment and Monitoring
- 4.29 Site Water Management - Settling Ponds, Including Sediment Control Ponds
- 4.30 Drilling and Blasting
- 4.31 Caribou



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

When required, this EPP will be revised to include new or amended environmental protection procedures so that construction and operations activities conducted for the Project are completed properly and that the significant environmental aspects of the site are well managed.



## 4.1 Surveying

### Potential Environmental Concerns

Surveying activities could potentially disturb wildlife species, vegetation and historic resources.

### Environmental Protection Procedures

#### Vegetation Removal

- a) Width of survey lines will be limited to that which is necessary for line of sight and unobstructed passage.
- b) Whenever possible, cutting lines to the boundary between treed and open areas will be avoided.
- c) Trees and shrubs will be cut flush with the ground wherever possible.
- d) Cutting of survey lines will be kept to a minimum. Where possible, alternate areas not requiring cut lines will be used.
- e) All trees not exactly on transit lines shall be left standing.
- f) When surveying the site limit, areas that will be cleared require a modified adherence to the above, except trees, shrubs and areas to be saved or left natural as noted on the plans or marked in the field.
- g) No attempt to harass or disturb wildlife will be made by any worker (refer to Section 5.2).
- h) Vehicles will yield the right-of-way to wildlife.
- i) There will be no cutting in areas designated as sensitive without notification and approval of the LIM Labrador Site Manager
- j) Any historic resource discoveries will be reported to the Provincial Archaeology Office within the Culture and Heritage Division, Newfoundland and Labrador Department of Tourism and Recreation (see Section 5.4, Discovery of Historic Resources Contingency Plan).
- k) All sites where surface disturbances are planned or may occur will be inspected and monitored prior to, during, and after the work as described in Section 3.2 (Environmental Compliance Monitoring).

#### Traversing

- a) All-terrain vehicles (ATVs) will not be allowed off the right-of-way except as approved by the LIM Labrador Site Manager. The use of ATVs will be restricted to designated trails, thus minimizing ground disturbance. ATV use will comply with the *Motorized Snow Mobile and All-Terrain Vehicle Regulations*, 1996 under the Motorized Snow Mobile and All-Terrain Vehicle Act and the Environmental Guidelines for Stream Crossings by All-Terrain Vehicles issued by the NLDOEC.
- b) No attempt to harass or disturb wildlife will be made by any worker.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

- c) No motorized vehicles will enter the areas designated as sensitive without notification and approval of the LIM Labrador Site Manager.

**Establishing Targets, Permanent Benchmarks and Transponder Locations**

- a) In normal ground conditions a 15 mm x 400 mm long rebar is driven approximately 350 mm into the surface with an 8-lb sledgehammer. When bedrock or a large boulder is encountered less than 300 mm below the ground surface, a 15 mm x 150 mm long rebar is cemented in a hole drilled in the rock. The rebar will be set into the rock a minimum distance of 80 mm.
- b) No attempt to harass or disturb wildlife will be made by any worker.
- c) Access to sensitive areas is to be approved by the LIM Labrador Site Manager.
- d) Iron bars and sledgehammers are to be used to establish benchmarks.
- e) Access by heavy equipment to sensitive areas such as wetlands will not be conducted without prior approval of the LIM VP Environment and Permitting, and only be through established right-of-ways.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

## **4.2 Buffer Zones**

### **Potential Environmental Concerns**

Buffer zones are boundaries of undisturbed vegetation maintained along water bodies. Without adequate buffer zone vegetation, streams, ponds and lakes can potentially become laden with silt from run-off. Vegetation also provides cover for fish.

### **Environmental Protection Procedures**

As much as possible, a minimum buffer zone of 15 m of undisturbed natural vegetation is to be maintained between work areas and water bodies. If this buffer zone cannot be maintained around waterbodies, the LIM VP of Environment will be notified and a permit will be obtained from NLDOEC, Water Resources Management Division under Section 48 of the *Water Resources Act*. Where possible, additional buffer widths will be maintained according to the guidelines shown in Recommended Minimum Buffer Zone Requirements for Activities near Watercourses in Table 4.1.

**Table 4.1 Recommended Minimum Buffer Zone Requirements for Activities near Watercourses**

<b>Activity</b>	<b>Recommended Buffer Width</b>
Development around watercourses in urban or other developed area	15 m depending upon site specific considerations
Resource roads or highways running adjacent to water bodies	20 m + 1.5 X slope (%)
Piling of wood and slash Grubbing	30 m
Placement of Site Trailers Fuel storage	100 m
Source: Gosse et al. 1998.	



#### 4.3 Laydown and Storage Areas

##### Potential Environmental Concerns

Areas will be required for storing and maintaining equipment and supplies during construction and operations activities associated with the Project. Potential erosion and run-off of sediment into nearby water bodies must be prevented.

##### Environmental Protection Procedures

- a) Existing laydown and storage areas will be used, where feasible.
- b) Any new laydown, maintenance or storage areas required for construction and operations activities will only be established within the claim boundaries.
- c) Establishing any new laydown or storage areas will follow the procedures for vegetation clearing (Section 4.4), grubbing and debris disposal (Section 4.5), and erosion prevention (Section 4.8).
- d) External storage areas will be placed on level terrain and kept free of ponding or run-off.
- e) Drainage from areas of exposed soil will be controlled by grade or ditching and directing run-off away from water bodies.
- f) Water quality monitoring of run-off may be required by NLDOEC Pollution Prevention Division to ensure no adverse effects on the receiving environment.
- g) Laydown and storage areas no longer required for construction and operations activities will be rehabilitated.
- h) Fuel will be stored, handled and transported according to Section 4.16.



#### 4.4 Clearing Vegetation

##### Potential Environmental Concerns

Vegetation clearing (e.g., trees, shrubs, etc.) may be required. Potential concerns include stockpiling vegetation in or near watercourses and, or potential scheduling of clearing in bird-nesting areas during nesting periods.

##### Environmental Protection Procedures

- a) Clearing activities will comply with the requirements of all applicable permits, including the Permit to Burn.
- b) Clearing or removal of trees will be kept to a minimum.
- c) Nests, eggs, nest shelters of migratory birds must not be disturbed or destroyed. Although the proposed work is planned along an previously developed and existing cleared corridor and no further clearing is planned, and all activities will be completed prior to nesting season, certain activities such as clearing will be avoided, where possible, during the nesting period for migratory birds in the region (from May to around mid-July). As well, efforts will be taken to complete any clearing in these areas , if required, outside of the breeding season.
- d) Should additional clearing be required, and it is not possible to undertake clearing outside of the breeding season and a nest is found, the following mitigative actions will be taken:
  - the nest site and neighbouring vegetation should be left undisturbed until nesting is completed; and
  - construction activities should be minimized in the immediate area until nesting is completed.

The best approach will be identified based on the circumstances and in compliance with the MBCA.

- e) During the past four years of baseline data collection at the Project area, and as identified in the EIS, no SARA species have been identified within the project area. However, should any federally list species at risk (endangered, threatened, or special concern) be identified in the project area and considered to be at risk for potential impacts as a result of Project activities (disturbed or incidental mortality), LIM's VP of Environment, or designate will contact CWS at (709) 772-7456.
- f) Clearing will consist of cutting to within 15 cm of the ground and disposing of all standing trees, as well as removing all shrubs, debris and other vegetation from the area. These materials will be stacked clear of on-going activities for future rehabilitation. The *Environmental Protection Guidelines for Ecologically Based Forest Resource Management* (DFRA 1998) will be observed.
- g) In the event that usable or merchantable timber is removed during vegetation clearing, the Newfoundland and Labrador Department of Natural Resources (DNR), Forest Resources will be contacted by the LIM VP of Environment.



- h) Disposing of cleared un-merchantable timber, slash and cuttings by burning will comply with the *Forest Fire Regulations, 1996* (amended 2002) under the *Forestry Act*, Environmental Code of Practice for Open Burning and the Permit to Burn (from the Newfoundland and Labrador Department of Natural Resources). At no time will a fire be left unattended.
- i) Slash and any other material or debris related to construction or operations activities will not be permitted to enter any watercourse, and will be piled above spring flood levels and retained for final rehabilitation efforts.
- j) Chain saws or other hand-held equipment will be used in clearing vegetation except where alternative methods or equipment is approved by LIM, such as mechanical harvesters. The use of mechanical clearing methods, such as bulldozers, will not be permitted except where it can be demonstrated that there is no merchantable timber, and where the resulting terrain disturbance and erosion will not result in the loss of topsoil or the sedimentation of nearby waterbodies.
- k) As much as possible, a minimum 15 m buffer zone of undisturbed vegetation will be maintained between the development area and all other waterbodies (Section 4.2). If a 15 m buffer of vegetation cannot be maintained around waterbodies, the LIM VP of Environment will be notified and a permit will be obtained from NLDOEC, Water Resources Management Division under Section 48 of the *Water Resources Act*. Where possible, additional buffer widths will be maintained according to the guidelines in the Recommended Buffer Zones Requirements for Activities Near Watercourses, shown in Table 4.1.
- l) Timber shall be felled inward toward the work area to avoid damaging any standing trees within the immediate work area.
- m) Workers will not destroy or disturb any features indicative of a cultural or archaeological site. Such features should be avoided until a report has been made to the Provincial Archaeology Office and clearance to proceed has been received.
- n) There are several wetlands in the work area. LIM is aware of the value of wetlands and will attempt to avoid such disturbance of wetlands outside of the work areas where feasible.
- o) All sites where surface disturbances are planned or may occur will be inspected and monitored prior to, during, and after the work as described in Section 3.2.



#### 4.5 Grubbing and Disposal of Related Debris

##### Potential Environmental Concerns

The principle concerns associated with grubbing and disposal of related debris are the potential adverse effects on freshwater ecosystems and water quality through the release of sediment into watercourses, as well as the potential for disturbing historic resources.

##### Environmental Protection Procedures

- a) Grubbing of the organic vegetation mat and/or the upper soil horizons will be restricted to the minimum area required.
- b) The organic vegetation mat and upper soil horizon material that has been grubbed will be spread, in a manner to cover inactive exposed areas or retained for use in rehabilitation efforts.
- c) Nests, eggs, nest shelters of migratory birds must not be disturbed or destroyed. Although the proposed work is planned along an previously developed and existing cleared corridor and no further clearing is planned, and all activities will be completed prior to nesting season, certain activities such as clearing will be avoided, where possible, during the nesting period for migratory birds in the region (from May to around mid-July). As well, efforts will be taken to complete any clearing in these areas, if required, outside of the breeding season.
- d) Should additional clearing be required, and it is not possible to undertake clearing outside of the breeding season and a nest is found, the following mitigative actions will be taken:
  - the nest site and neighbouring vegetation should be left undisturbed until nesting is completed; and
  - construction activities should be minimized in the immediate area until nesting is completed.The best approach will be identified based on the circumstances and in compliance with the MBCA.

- e) During the past four years of baseline data collection at the Project area, and as identified in the EIS, no SARA species have been identified within the project area. However, should any federally list species at risk (endangered, threatened, or special concern) be identified in the project area and considered to be at risk for potential impacts as a result of Project activities (disturbed or incidental mortality), LIM's VP of Environment, or designate will contact CWS at (709) 772-7456.
- f) If grubbing or disposal of debris is to occur within 15 m of a wetland (defined as bodies of water showing on a 1:50,000 map, per the *Water Resources Act*), a permit for work will be obtained from Water Resources Management Division under Section 48 of the *Water Resources Act*.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

- g) Any surplus of such material will be stored or stockpiled for site rehabilitation and revegetation purposes. Topsoil and organics should be stored in low (1 to 2 metres high) stable piles (Gosse et al. 1998). The location of the stockpiles will be recorded and accessible for future rehabilitation purposes.
- h) Measures will be implemented to reduce and control runoff of sediment-laden water during grubbing, and the re-spreading and stockpiling of grubbed materials. Where grubbed materials are re-spread or stockpiled, as many stumps and roots as possible will be left on the ground surface to maintain soil cohesion, dissipate the energy of runoff and promote natural revegetation. Erosion control measures will be implemented in areas prone to soil loss (Section 4.8).
- i) The length of time that inactive grubbed areas will be left exposed to the natural elements will be minimized to prevent unnecessary erosion. Mitigations such as the placement and maintenance of silt curtains will be used to prevent erosion from exposed areas.
- j) Grubbing activities will adhere to the buffer zone requirements outlined in Section 4.2.
- k) Water quality monitoring of run-off may be required by NLDOEC Pollution Prevention Division to ensure no adverse effects on the receiving environment.
- l) During grubbing, grubbed material will not be pushed into areas that are to be left undisturbed. Grubbing material will be buried with 60 cm of soil cover.
- m) Discovery of historic resources will be handled according to the procedures outlined in Section 5.4.
- n) LIM is aware of the value of wetlands and will attempt to avoid such disturbance of wetlands outside of the work areas where feasible.



#### 4.6 Overburden

##### Potential Environmental Concerns

The principal concern associated with the placement of overburden is potential siltation of the aquatic environment, pertaining to water quality and substrate, as well as loss of habitat and displacement of wildlife.

##### Environmental Protection Procedures

- a) Overburden storage areas will be located at least 50 m from any waterbody on well drained soil (Gosse et al. 1998).
- b) If required, collection ditches and settling ponds will be used to manage surface runoff from overburden stockpiles.
- c) Overburden will be stored in stable piles and sloped to prevent pooling of surface water pending use in site rehabilitation efforts.



#### 4.7 Excavation, Embankment and Grading (including cutting and filling)

##### Potential Environmental Concerns

The principal environmental concern associated with excavation, embankment and grading are the potential impacts on aquatic ecosystems and water quality due to runoff of sediment-laden water.

##### Environmental Protection Procedures

Work will be conducted with the minimum amount of disturbance necessary. All works within 15 m of waterbodies or watercourses will strictly follow the requirements outlined in the acquired watercourse alteration approvals from the NLDOEC and Fisheries and Oceans (DFO). Work will be conducted in a manner that controls potential sedimentation of watercourses and waterbodies in or adjacent to the work areas as outlined in the following procedures. No work below the high water mark of any surface water feature will be conducted without the prior notification and assessment by the LIM VP of Environment and Permitting.

- a) During excavation, embankment and grading activities, excavated materials will be sorted into separate stockpiles (i.e., topsoil, overburden, bedrock) for later rehabilitation purposes and to prevent mixing.
- b) Excavation, embankment and grading within 15 m of a stream crossing will be done in such a manner that erosion and sedimentation of watercourses and waterbodies is minimized and strictly follows the requirements outlined in the acquired watercourse alteration approvals from the NLDOEC and DFO.
- c) A buffer zone of undisturbed vegetation will be maintained between Project activities and all watercourses, as per Section 4.2 (Buffer Zones).
- d) Water quality monitoring of run-off may be required by NLDOEC Pollution Prevention Division to ensure no adverse effects on the receiving environment.



## 4.8 Erosion Prevention and Sediment Control

### Potential Environmental Concerns

Eroded material could potentially cause siltation in water bodies and, subsequently, potentially decrease suitable habitat for aquatic and terrestrial animals.

### Environmental Protection Procedures

- a) All work relating to the construction and operations activities for the Project will be conducted according to the conditions set out in the permits and/or approvals and authorizations from the NLDOEC.
- b) Primary means for controlling erosion is avoiding activity that contributes to erosion. The disturbance of new areas will be minimized.
- c) Drainage ditches will be stabilized if required (e.g., lining with vegetation or rock, terracing, interceptor swales, installation of rock check dams) to reduce soil erosion. Any such measures will be properly maintained following installation.
- d) All areas of exposed erodible soil will be stabilized by back-blading, grading and/or compacting to meet engineered slope requirements.
- e) If an environmental inspection reveals that silt is entering any waterbody, further mitigative measures will be implemented, such as temporary drainage ditches, siltation control (settling) ponds, ditch blocks/check dams or sediment dam traps, to intercept run-off. The necessary or appropriate measures will be determined in the field.
- f) All work and laydown and storage areas will be monitored for erosion and appropriate repair action taken as necessary.
- g) Existing or new siltation control structures used in this work will be monitored by the contractor for excessive accumulation of sediment. The contractor will remove accumulated sediment from control structures to gain full effectiveness of the systems. Effluent from control structures will be released to flow overland for appropriate filtration prior to entering any waterbody.
- h) Water quality monitoring of run-off may be required by NLDOEC Pollution Prevention Division to ensure no adverse effects on the receiving environment.
- i) The contractor will be required to remove excess water from siltation control systems prior to excavation of sediment. Trucks will be equipped with liners to prevent loss of wet sediment during transport.



#### **4.9 Water Supply (Plant Operations, Camp)**

##### **Potential Environmental Concerns**

Environmental concerns related to water supply include potential detrimental effects to the habitat (and populations) in and around the potentially affected waterbody. Although groundwater quality is such that potential use as a possible water source may be considered in the future, current potable water will be supplied to the site by truck or as bottled water.

##### **Environmental Protection Procedures**

- a) The water intakes must have an appropriate screen to prevent damage to fish. Guidelines for the screening of water intakes are provided by DFO (1995).



#### 4.10 Trenching

##### Potential Environmental Concerns

Where excavation for the trenching programs is undertaken, potential runoff of sediment-laden water could result in effects on freshwater fish habitat and water quality.

##### Environmental Protection Procedures

The following measures are employed to minimize the potential impacts of trenching.

- a) The topsoil and excavated overburden and bedrock are stored in separate stockpiles for later use during rehabilitation.
- b) Any material unsuitable for future rehabilitation is disposed of in a disposal area approved by the LIM Labrador Site Manager.
- c) Dewatering of trenches will make use of measures to minimize and control the release of sediment laden water through the use of filtration through various measures, including but not limited to erosion control devices, settling ponds, straw bales, geotextile or other devices. Dewatering water will be directed to the settling pond system prior to discharge.
- d) Water quality monitoring of run-off or discharges may be required by NLDOEC Pollution Prevention Division to ensure no adverse effects on the receiving environment.



#### 4.11 Watercourse (Stream) Crossings

Currently, there are no plans to install new watercourse crossings. This section of the EPP is included in the event culverts are required for stream crossings.

##### Potential Environmental Concerns

Although all water crossings required are currently in place, the potential environmental concerns associated with stream crossings and culvert installations include potential direct disturbances to or mortality of fish, and potential loss of fish habitat resulting from sedimentation and removal of habitat and stream bank vegetation. An evaluation of soil erosion potential will be conducted at each of the stream crossings. This assessment of potential erosion risk will assist in the development of specific erosion stabilization methods and effective sedimentation control practices on a site-specific basis.

##### Environmental Protection Procedures

No work below the high water mark of any surface water feature will be conducted without the prior notification and assessment by the LIM VP of Environment and Permitting. Stream crossings will be constructed in compliance with the required Permit for Culvert Installation from NLDOEC, Water Resources Management Division and any approvals required from NLDOEC and DFO.

The following measures will be implemented to minimize the potential impacts of stream crossings, if stream crossings are required:

- a) Between September 15 and June 15 (sensitive fish life stages), stream crossing activities will be undertaken under the direct supervision of the LIM Labrador Site Manager.
- b) Avoid the entry of deleterious substances including, but not limited to, materials such as sediment and fuel to watercourses and waterbodies during watercourse crossing work.
- c) A minimum buffer of undisturbed natural vegetation must be left between the access road and the bank of any watercourse that it parallels. The buffer width will be determined through the formula:

$$\text{Buffer width (m)} = 20 \text{ m} + 1.5 \times \text{slope (\%)} \text{ (Gosse et al. 1998)}$$

- d) In those locations within fish habitat, where culverts are required, application will be made to NLDOEC and DFO. The culverts used will be sized to handle the 1-in-25 year return period flood and will be constructed in accordance with the Environmental Guidelines for Culverts from the NLDOEC, Water Resources Management Division.



The following measures will also be implemented:

- i) install culvert(s) in accordance with good engineering and environmental practices;
- ii) unless otherwise indicated, all work should take place in dry conditions, either by the use of cofferdams or by diverting the stream;
- iii) installation of cylindrical culverts shall be counter sunk only where necessary to protect fish habitat such that the culvert bottom is one-third the diameter below the streambed in the case of culverts less than 750 mm outside the diameter; for culverts greater than 750 mm outside diameter, the culvert bottom shall be installed a minimum of 300 mm below the streambed;
- iv) in multiple (gang) culvert installations, install one culvert at an elevation lower than the others;
- v) the natural low flow regime of the watercourse will not be altered;
- vi) a culvert will not be installed before site specific information such as localized stream gradient, fish habitat type and species present have been evaluated. Culverts are to be installed using the guidelines provided in Gosse et al. (1998);
- vii) riprap outlets and inlets to prevent erosion of fill slopes;
- viii) use culverts of sufficient length to extend a short distance beyond the toe of the fill material;
- ix) use backfilling material that is of a texture that shall support the culvert and limit seepage and subsequent washing out;
- x) align culverts such that the original direction of stream flow is not significantly altered;
- xi) remove fill and debris from the culvert area to a location above the peak flow level to prevent its entry into the stream;
- xii) fill material shall not be removed from streambeds or banks; except when installing a culvert when removal of material is necessary for a flat foundation;
- xiii) minimize and restrict the use of heavy equipment in and near watercourses; where possible, an excavator will be used from shore rather than a bulldozer in the watercourse. Where it is absolutely necessary to do so, instream work will be performed by rubber tired vehicles (Gosse et al. 1998) only and will only be done with prior notification of LIM's VP Environment and Permitting, in compliance with NLDOEC, and with approvals from and DFO;
- xiv) as required, cofferdams of non-erodible material shall be used to separate work areas from the watercourse when excavating for culverts and footings, and



- xv) cofferdams shall be removed upon completion of the construction phase and the streambed returned as closely as possible to its original condition.
- e) When fording any watercourse, the *Environmental Guidelines for Fording* from NLDOEC, Water Resources Management Division 1992 will be applied in conjunction with the following:
  - i) areas of spawning habitat will be avoided;
  - ii) crossings shall be restricted to a single location and crossings made at right angles to the watercourse;
  - iii) equipment activity within the watercourse shall be minimized by limiting the number of crossings;
  - iv) all equipment will be mechanically sound to avoid leaks of oil, gasoline and hydraulic fluids;
  - v) no servicing or washing of heavy equipment will occur adjacent to watercourses; temporary fuelling, servicing or washing of equipment in areas other than the main fuel storage site will not be allowed within 30 m of a watercourse except within a refuelling site approved by LIM, where conditions allow for containment of accidentally spilled fuels; remove from the work area and properly dispose of all waste oil, filters, containers or other such debris in an approved waste disposal site;
  - vi) stabilize the entire fording area using vegetation mats, corduroy roads or coarse material (125 mm diameter or greater), and the ford area is not natural bedrock, or is easily disturbed by fording; when the substrate of the ford area is not subject to easy disturbance by fording, or coarse material is not easily available within the lease boundaries, fording under existing substrate conditions may occur under the direction of the LIM Labrador Site Manager;
  - vii) fording activities will not decrease the depth of the watercourses to less than 20 cm; where the existing depth is less than 20 cm, that depth shall be maintained;
  - viii) fording activities will be halted during high flow periods;
  - ix) stabilize all bank sections which contain loose or erodible materials; if banks must be sloped for stabilization, no material shall be deposited within the watercourse; sloping shall be accomplished by back-blading and the material removed shall be deposited above the high water mark of the watercourse;
  - x) all fording activities will comply with specific requirements and conditions detailed in the acquired approvals from the NLDOEC and DFO;



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

- xi) to enable work in the dry, the flow of water must be diverted around the work area during the installation of a culvert (Gosse et al. 1998), and
- xii) culverts should be marked to indicate their position under the snow.



#### 4.12 Exploration Drilling, Water Well Drilling and Pump Tests

##### Potential Environmental Concerns

The environmental concerns with ongoing exploration drilling, water well drilling and pump tests in and around the construction and development areas are potential surface disturbances, disposal of drilling fluids and cuttings, potential siltation, generation of dust, noise and the potential impacts on terrestrial habitats, air quality, aquatic ecosystems and historic resources.

##### Environmental Protection Procedures

- a) Potential drilling sites in sensitive areas should be inspected prior to any drill site preparation by the LIM Labrador Site Manager, whenever possible.
- b) Vegetation will be cleared following the procedures detailed in Section 4.4.
- c) Waste oil will be removed from the drill site and properly disposed of.
- d) Water applications will be used to control dust where necessary. The use of water for dust control or lubrication during drilling will be undertaken in such a manner that runoff will not enter watercourses.
- e) Water used throughout the drilling process will remain on the drill site. A Water Use Licence will be issued as part of the Approval for Exploration and Notice of Planned Mineral Exploration Work from the Newfoundland and Labrador Department of Natural Resources (NL DNR) Mines Branch. Every effort will be made to prevent turbid water from entering any watercourse.
- f) Cuttings from drill activities will not be removed from the site; they will remain in the immediate location of drilling activities.
- g) Drilling equipment will have muffled exhaust to minimize generated noise.
- h) Fuel will be stored, handled and transported according to Section 4.16.
- i) Garbage and solid waste will be removed from the drill site and deposited in an approved waste disposal area. Waste generated in Labrador will be disposed of at an approved NL facility.
- j) Due to the nature of drilling activities (i.e., quicksnaps and couplings) oil drops and leaks may occur and every attempt possible will be made to clean up the area. All rigs will be equipped with oil absorbent material in case of a leak or spill.
- k) During the winter season, snow machines are to be used to transport drill materials, core and personnel to and from the drill sites.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

- l) Drilling of water wells must be conducted in compliance with the *Water Resources Act* and Well Drilling Regulations, 2003.
- m) Abandoned exploration drill holes will be temporarily capped or indefinitely sealed with appropriate material depending on the timing to allow for any necessary downhole testing. When all test work on the hole has been completed, it is permanently sealed.



#### 4.13 Pumps and Generators

##### Potential Environmental Concerns

Water pumps, hoses and generators will be in-use at the Silver Yard and Camp locations. Generator locations are shown in Figures 2.1 and 2.4. Environmental concerns are associated with any potential accidental spills or chronic leaks contaminating waterbodies.

##### Environmental Protection Procedure

- a) To reduce fire hazards, fuel should not be stored immediately adjacent to generators, and the fuel storage area should be well ventilated. Fuel should not be stored within 100 m of waterbodies (Gosse et al. 1998).
- b) All fuel storage containers are to have spill trays beneath with a potential capacity of 110 percent of volume. They should also be in a covered and secured area.
- c) Drip pans are placed underneath pumps, nozzles and generators located near waterbodies.
- d) Hoses and connections on equipment located near waterbodies are inspected routinely for leaks and drips.
- e) All leaks are reported immediately to the LIM Labrador Site Manager, and in turn to the LIM VP Environment and Permitting.
- f) In addition to spill kits located at fuel storage tanks additional spill kits are located at designated central storage location(s). Personnel who deal with fuelling, fuel transfer and pumps and generators are trained in the use of the kits.

 <p style="text-align: center;"><b>SCHEFFERVILLE AREA IRON ORE PROJECT CONSTRUCTION AND OPERATIONS ACTIVITIES ENVIRONMENTAL PROTECTION PLAN FINAL</b></p>	<p style="text-align: center;"><b>Version: 1.0</b></p> <p style="text-align: center;"><b>Date: 14 June 2010</b></p>
--	---

#### **4.14 Dewatering Work Areas/Trenches and Site Drainage**

##### **Potential Environmental Concerns**

The major concern associated with site dewatering and drainage is potential siltation and direct fish mortality and/or habitat destruction for freshwater species. Dewatering of the mine via the use of perimeter dewatering wells will be controlled through the program outlined in the LIM-DFO Letter of Advice.

##### **Environmental Protection Procedures**

- a) Site water will be discharged to vegetated work areas to reduce any potential effects on watercourses.
- b) Discharged water will be encouraged to follow natural surface drainage patterns.
- c) Perimeter dewatering will be conducted and monitored in accordance with the LIM-DFO Letter of Advice. Additional water monitoring will be conducted under the Real Time Water Monitoring Memorandum of Understanding (MOU) program and *Metal Mines Effluent Regulations* (MMER) sampling.
- d) Monitoring of site run-off will be conducted as per federal and provincial requirements following effluent quality standards.
- e) If silt is entering any waterbody, filtration or other suitable measures, such as silt fences and dykes will be provided to remove silt from, and reduce the turbidity of, water pumped from work areas before discharging.
- f) If monitoring indicates regulated water quality standards are exceeded, LIM will develop additional protocols in consultation with the NLDOEC and Environment Canada.



#### 4.15 Equipment Installation, Use and Maintenance

##### Potential Environmental Concerns

A variety of vehicles and heavy equipment will be used. Environmental concerns associated with operating and using such equipment includes potential air emissions, accidental spills; and chronic leaks that may contaminate on-site water bodies.

##### Environmental Protection Procedure

- a) Equipment maintenance and fuelling activities will be performed at sites designated by the LIM Labrador Site Manager and in compliance with applicable regulations.
- b) Drip pans will be placed underneath pumps, fuel storage, and generators.
- c) Hoses and connections on equipment will be inspected routinely for leaks and drips.
- d) Only minor repairs and maintenance (e.g., lubrication) of 'non-mobile' equipment such as the cranes, flatbeds, shovel or drilling equipment will be performed on-site. All major repairs, where possible, are to be performed at an existing garage location outside of the project area.
- e) All leaks will be repaired and reported immediately to the LIM Labrador Site Manager.
- f) All fuel and other hazardous materials will be handled according to the procedures in Section 4.16.
- g) In addition to spill kits located at fuel storage tanks additional spill kits will be located at designated central storage location(s). Personnel who deal with fuelling, fuel transfer and pumps and generators will be trained in the use of the kits.



#### 4.16 Storage, Handling and Transfer of Fuel and Other Hazardous Material

Typical hazardous substances that may be used on site include, but are not necessarily limited to:

- petroleum, oil and lubricants;
- chlorinated and non-chlorinated solvents (e.g., cleaner-degreasers);
- flammable gases (e.g., acetylene);
- waste petroleum products (e.g., used engine oil);
- corrosives (e.g., battery acid); and/or
- glycol (e.g., antifreeze).

#### Potential Environmental Concerns

The primary concern with using hazardous substances is a potential uncontrolled release to the environment through spillage, and subsequent adverse effects on terrestrial and aquatic habitat and species, soil, groundwater quality, and human health and safety.

#### Environmental Protection Procedures

- a) The *Workplace Hazardous Materials Information System (WHMIS) Regulations* under the *Occupational Health and Safety Act* will apply to all handling and storage of hazardous materials. All relevant current Material Safety Data Sheets (MSDS) will be readily available for the site.
- b) All necessary precautions will be taken to prevent and reduce the spillage, misplacement or loss of fuels and other hazardous materials. In the event of a reportable spill on-land or a spill, regardless of size, in the freshwater environment, the **Environmental Emergencies 24-Hour Report Line** will be contacted.

St. John's: **709-772-2083** or Other Areas: **1-800-563-9089**

- c) A spill is defined as reportable, depending on the class and quantity of dangerous goods involved, which varies between applicable Regulations:
  - Reportable spill quantities for hazardous materials are listed in the *Transportation of Dangerous Goods Act: Clear Language Regulations – Part 8*.
  - A reportable hydrocarbon spill is defined as loss of gasoline or associated products in excess of 70 litres in the *Storage and Handling of Gasoline and Associated Products Regulations, 2003*.
  - A spill, regardless of size, that may enter the freshwater environment, must be reported according to the *Fisheries Act*.
- d) A copy of the LIM Contingency Plan (located in Section 5.1) for fuel and hazardous material spills will be readily available.



SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL

Version: 1.0

Date: 14 June 2010

- e) All fuel storage systems will be registered and comply with the *Storage and Handling of Gasoline and Associated Products Regulations*. Verification of the storage tank approval will be retained for LIM.
- f) Only workers who are qualified and trained in handling these materials as stated in the manufacturer's instructions and government laws and regulations will handle fuel and other hazardous materials.
- g) Operators will attend the entire refuelling operations.
- h) Fuel and other hazardous materials should be stored at least 100 m from any surface water (Gosse et al. 1998).
- i) Handling and fuelling procedures will comply with the *Storage and Handling of Gasoline and Associated Products* and any additional requirements put forth by the NLDOEC in order to limit potential contamination of soil or water.
- j) Fuel storage areas and non-portable transfer lines will be clearly marked or barricaded so that they are not damaged by moving vehicles. The markers will be visible under all weather conditions. Barriers will be constructed in compliance with the *Storage and Handling of Gasoline and Associated Product Regulations*.
- k) Waste oils, lubricants, and other used oil will be retained in a tank or closed container, and disposed of in accordance with the *Used Oil Control Regulations*. Spill trays will be used and substances will be stored in a secured area/shed.
- l) Fire and spill response materials will be kept nearby.
- m) Despite measures taken to reduce the potential for spills or leaks, should any soils be contaminated by petroleum hydrocarbons, they will be assessed and managed in accordance with the *Environmental Protection Act*. All storage tank systems will be inspected on a regular basis by the operator as per Section 18 of the *Storage and Handling of Gasoline and Associated Products Regulations*. This involves, but is not limited to, gauging or dipping, reconciliation of records and the proper maintenance of reconciliation records for a period of two years.
- n) Contracted fuel suppliers will, before transporting or positioning fuel or oil, have on file at LIM a copy of their fuel and hazardous material spills contingency plan which is required under *Storage and Handling of Gasoline and Associated Products Regulations* and which is acceptable to LIM. The fuel and hazardous material spills contingency plan for LIM is provided in Section 5.1.
- o) Transportation of hazardous and dangerous materials shall be conducted in accordance with provincial, territorial and federal transportation regulations. Transportation documents shall be retained in a retrievable filing system and stored for the duration of the undertaking.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

- p) Smoking will be prohibited within 10 m of a fuel storage area.
- q) Fuelling or servicing of mobile equipment will be conducted in designated areas and should not occur within 100 m of any body of water (Gosse et al. 1998).
- r) Drum storage areas will not be located within 100 m of a water body (Gosse et al. 1998). Drums containing hydrocarbon or other hazardous materials will be transported, stored, handled and disposed of such that spillage or leakage does not occur. Drums will be tightly sealed against corrosion and rust and surrounded by an impermeable barrier in a dry building with an impermeable floor or outside with appropriate spill containment (110%) and covers. LIM must approve the location of drum storage areas.
- s) Small quantities of hazardous material (drums, cans and other containers under 20-L volume) will be stored in a secure location protected from weather and freezing, as well as vehicle traffic.
- t) Where hazardous materials are to be stored outdoors, a designated area will be established, graded and fitted with an impermeable membrane covered with local soil and surrounded by an earth berm.
- u) Within thirty (30) days of decommissioning of a storage tank system, the system will be emptied of all products, the tank and associated piping will be removed (including any contaminated soil) and the area will be cleaned and the site restored.
- v) Decommissioning of any temporary storage tank system will be conducted according to the *Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products* (CCME 1994).
- w) Hazardous waste will be moved to an appropriate hazardous waste storage area (refer to Section 4.20 for disposal). These areas are constructed in compliance with all applicable federal and provincial legislation.



#### 4.17 Propane

##### Potential Environmental Concerns

There are currently no plans for propane storage or use at the Project areas, therefore, this information is provided for information purposes only.

There are potential risks associated with propane storage and use. It is a flammable substance and poses potential threat as an asphyxiate to human and animals. In the liquid form, propane could potentially cause frostbite on skin contact. Propane containers could potentially explode if exposed to heat or fire.

##### Environmental Protection Procedures

- a) Propane storage tanks will be installed as per manufacturer's specifications.
- b) Tank maintenance schedules will be set and followed.
- c) Tanks will be painted and free of corrosion and damages.
- d) Areas surrounding propane storage tanks will be well ventilated and free of any possible ignition sources, and combustible materials.
- e) Tanks will be grounded to avoid static accumulation.
- f) There are currently no plans for propane use or storage onsite. Propane is listed under Schedule 1 of the *Canadian Environmental Protection Act's (CEPA) Environmental Emergency Regulations*. The *Environmental Emergency Regulations* require any facility that has management, control, or ownership of any of the substances listed under Schedule 1 to fulfill specific reporting requirements. An Environmental Emergency Plan and other reporting requirements will be put in place by LIM (or the responsible contractor) if the quantity of propane stored on-site will exceed the established threshold quantities (4.5 tonnes) and containment capabilities, as required by CEPA's *Environmental Emergency Regulations*.



#### 4.18 Waste Disposal

##### Potential Environmental Concerns

Waste (e.g., domestic and industrial wastes, grey water, paper, cardboard and wood), if not properly controlled and disposed of, will be unsightly and could potentially cause human safety and health concerns. It could also attract wildlife leading to the potential for human-wildlife conflicts.

##### Environmental Protection Procedures

- a) All solid waste will be handled according to the provincial *Environmental Protection Act*.
- b) Waste will not be transported across the provincial boundary.
- c) Waste disposal will be managed by the Mine Contractor and will be transported offsite for disposal in Labrador.
- d) All solid waste materials shall be considered, prior to disposal, for reuse, resale, or recycling.
- e) Solid waste produced by site personnel and operations will be collected and disposed of at an approved facility.
- f) Waste accumulated on site prior to disposal will be confined, so that it does not pose an environmental or health hazard.
- g) Work areas will be kept clear of waste and litter to reduce the potential for attracting wildlife and reducing potential interactions with wildlife (see procedures in Section 5.2 for handling wildlife encounters).
- h) Any waste that may attract animals (i.e., food) will be stored in covered, wildlife-proof containers.
- i) Burning of waste is not permitted without appropriate permits.
- j) All hazardous wastes generated will be handled according to the procedures for handling fuel and hazardous materials (Section 4.16).



#### 4.19 Sewage Disposal

##### Potential Environmental Concerns

The release of untreated sewage is a potential concern to human health, drinking water quality, and freshwater and marine ecosystems. A portable toilet system will be used during mine construction. A permitted Biodisk system will be used during the mine operation period.

##### Environmental Protection Procedures

- a) The sewage from portable toilets will be delivered to a licensed contractor and is disposed in compliance with the Newfoundland and Labrador Department of Health guidelines, the *Lands Act*, Waste Management Regulations, 2003 under the *Environmental Protection Act* and the *Environmental Control Water and Sewage Regulations, 2003* under the *Environmental Protection Act*. The federal *Fisheries Act* also requires that any sewage effluent must be non-deleterious to fish upon disposal.
- b) Portable toilets will be located a distance of at least 25 m from any work site in a direction away from bodies of water and must be removed upon completion of construction activities.
- c) Sewage from facilities at Silver Yard will be processed using an LJ-30 rotating biological contractor (RBC) Biodisk. Treated effluent will be discharged to Ruth Pit (see Section 4.28, Washwater Treatment and Monitoring). This RBC is designed for a total flow of 8,200 litres per day and meets the requirements of the provincial *Environmental Control Water and Sewage Regulations* (23/09) under the *Water Resources Act*.
- d) Sewage from facilities at the work camp will be processed using a LJ-100 RBC Biodisk designed to handle a total flow of 22,620 litres per day and meets the requirements of the provincial *Environmental Control Water and Sewage Regulations* (23/09) under the *Water Resources Act*. Treated effluent will be transferred by gravity to a small settling pond (see Figure 2.6) and subsequently drain through an existing culvert into Bean Lake.



## 4.20 Hazardous Waste Disposal

### Potential Environmental Concerns

The primary concern with the use or disposal of a hazardous substance is the potential for an uncontrolled release to the environment through leakage or accidental spillage, and subsequent adverse effects on terrestrial and aquatic habitat and species, soil, groundwater quality, and human health and safety.

### Environmental Protection Procedures

- a) All hazardous waste will be handled according to the provincial *Environmental Protection Act*. Waste classified as "hazardous" or "special" that cannot be disposed of in regular landfill sites will be sent for disposal to a licensed hazardous waste management company.
- b) All necessary precautions will be taken to prevent and reduce the spillage, misplacement or loss of fuels and other hazardous materials. In the event of a spill on-land or in the freshwater environment, refer to the LIM Contingency Plan (Section 5.1).
- c) A copy of the LIM Contingency Plan will be present at hazardous material storage sites and fuel transfer locations.
- d) Hazardous waste materials will only be handled by workers who are qualified and trained in handling these materials as stipulated in government laws and regulations.
- e) Waste accumulated on site prior to disposal will be confined, so that it does not pose an environmental or health hazard.
- f) Waste material will not be disposed of on-site or in a body of water.
- g) Burning of waste is not permitted.
- h) Where hazardous waste materials are to be stored outdoors, a designated area will be established, graded and fitted with an impermeable membrane covered with local soil and surrounded by an earth berm.
- i) Waste oils, lubricants, and other used oil will be retained in an approved tank or closed container, and disposed of in accordance with the *Used Oil Control Regulations*.
- j) Any soil contaminated by small leaks of oil or grease from equipment will be disposed of according to the *Environmental Protection Act*.
- k) All hazardous wastes generated, by alternative treatments will be handled according to the procedures for handling fuel and hazardous materials (Section 4.16).



#### 4.21 Vehicle Traffic

##### Potential Environmental Concerns

Vehicular traffic can potentially result in fugitive dust, emissions and noise. LIM is committed to the proper operation and maintenance of its vehicles to reduce environmental effects. During 2010, very little impact will occur on the road because only a small tonnage will come from the Redmond deposit. For subsequent years, in order to minimize the effects of vehicular traffic on the general public, LIM will post notices indicating that heavy duty vehicles will be in the area and will instruct vehicle operators to yield the right-of-way to the public, pursuant to vehicular traffic regulations. In addition, LIM will provide training to mine workers on safe driving awareness, and monitor vehicle use.

##### Environmental Protection Procedures

- a) All vehicle and equipment use, including use of all-terrain vehicles (ATVs), will be restricted to designated routes within and between work, laydown, maintenance and storage areas.
- b) All vehicles and equipment will be properly maintained to meet emission standards.
- c) Travel in areas outside designated work areas will not be permitted.
- d) All vehicles and equipment will yield to wildlife (see procedures in Section 5.2 for handling wildlife encounters).
- e) All vehicles and equipment will yield to people, if present, and reduced speeds will be maintained on all roadways.
- f) Chasing and/or harassing wildlife with vehicles and equipment will not be permitted.
- g) Maintaining and refuelling vehicles will be restricted to designated areas (See Section 4.16).
- h) Heavy equipment (e.g., dump trucks and front-end loaders) will only be used in work areas.
- i) Access roads will be monitored for signs of erosion and appropriate action will be taken to repair roads, when necessary.
- j) As required, the contractor will implement dust suppression measures such as watering the roads.



#### 4.22 Dust Control

##### Potential Environmental Concerns

The environmental concerns associated with dust include potential human health effects and potential effects on aquatic ecosystems and vegetation.

##### Environmental Protection Procedures

- a) Dust from operating activities will be controlled using water. In the event of excessive dust, water will be applied to travel and work surfaces.
- b) Waste oil will not be used for dust control, but other agents such as calcium chloride may be used with the approval of the appropriate regulatory agencies.



#### 4.23 Noise Control

##### Potential Environmental Concerns

A variety of noises associated with Project activity can potentially cause negative effects on wildlife resources in terms of their distribution and abundance. Noises associated with heavy equipment use are temporary in nature and noises associated with drilling are considered long term, but localized.

##### Environmental Protection Procedures

Measures will be implemented wherever possible to minimize potential impacts arising from a variety of noise sources.

- a) Adherence to all permits, and approvals.
- b) All vehicles and generators will have exhaust systems regularly inspected and mufflers will be operating properly.



#### 4.24 Civil Works

##### Potential Environmental Concerns

Civil works includes compaction, construction of the concrete pads for conveyors, and construction of retaining walls. Due to concerns relating to the effects of concrete production on washwater released to the environment, it is LIM's preference to use pre-cast concrete and/or steel foundations (for the conveyors), thereby avoiding the effects that may result from concrete production on site. Liquid wastes may contain hazardous materials such as cement, concrete additives and form oil.

##### Environmental Protection Procedures

Measures will be implemented wherever possible to minimize potential effects arising from concrete production, including:

- a) Washwater from the cleaning of concrete trucks will be discharged either at the concrete manufacturer's place of business (assuming that the plant is in close proximity to the work site), or alternately, at a washwater settling pond for control and treatment, as appropriate. All such discharges will be of minimal volume and will not occur within the buffer zone of water bodies and watercourses or other environmentally sensitive areas.
- b) In the event that water from the closed settling system is released, it will be tested, prior to release, for parameters related to any concrete additives to be used in the production of concrete (e.g., total hydrocarbons, sodium hydroxide), pH and TSS. The water to be released will also meet the limits specified by NLDEC, and will adhere to those portions of the Fisheries Act that relate to fish habitat protection and pollution prevention. Release will be via runoff control procedures.
- c) The settling basin will be cleaned on an as required basis to ensure that the retention capacity is maintained at all times.
- d) Concrete additives, if required, will be stored in approved sealed containers.
- e) Settling basins will be provided to control run off from aggregate stockpiles.
- f) Wash down water will be contained in settling ponds prior to disposal.
- g) Regular inspections of equipment will be performed.
- h) Form work and concrete placement procedures will be implemented to prevent the spillage of concrete to any waterbody.
- i) Miscellaneous concrete equipment cleaning will involve minimal discharge volumes and will not occur within the buffer zone of water bodies and watercourses or other environmentally sensitive areas.



#### 4.25 Mine, Open Pit and Mine Road Construction and Maintenance

A ramp will be constructed in the open pit to provide access to the bottom of the pit. Existing on-site haulage roads will be upgraded. Construction of new haulage roads will be limited to within the new pit areas.

#### Potential Environmental Concerns

Erosion of road beds and siltation of watercourses may result from improperly constructed or upgraded roads. Road maintenance (e.g., snow clearing) activities may result in discharges to waterbodies. There will be no new roads constructed near watercourses.

#### Environmental Protection Procedures

- a) See environmental protection procedures for Buffer Zones (Section 4.2), Clearing Vegetation (Section 4.4), Grubbing and Disposal of Related Debris (Section 4.5), Overburden (Section 4.6), Excavation, Embankment and Grading (Section 4.7), Erosion Prevention and Sediment Control (Section 4.8), Equipment Installation, Use and Maintenance (Section 4.15), Vehicle Traffic (Section 4.21), Dust Control (Section 4.22), and Noise Control (Section 4.23).
- b) Snow clearing equipment will be inspected and maintained per Section 4.15.
- c) Salt will not be used on roads for ice removal.
- d) Roadbeds will be inspected on an annual basis for slumping and potholes.



## 4.26 Processing Activities

### Potential Environmental Concerns

The primary environmental concerns related to beneficiation are related to dust control and potential human health effects and potential effects on aquatic ecosystems and vegetation (see Section 4.22). There are also environmental concerns related to the noises associated with ore processing activities and potential impacts of wildlife distribution and abundance (see Section 4.23).

### Environmental Protection Procedures

Measures to control dust and minimize noise will be implemented whenever possible to minimize potential impacts arising from beneficiation activities.

- a) All machinery used in ore processing will have exhaust systems regularly inspected and mufflers will be operating properly to minimize exhaust output and noise.
- b) The primary mobile crushing plant at Silver Yard will not be enclosed, however a dust collection system will be in place to prevent any potential dust from being released into the environment. This system will be inspected and maintained regularly to minimize dust release, and is designed to meet the *Air Pollution Control Regulations* (39/04) under the provincial *Environmental Protection Act*.
- c) We could have dust at the primary crusher. A sprinkler system will be installed on the wings of the jaw crusher dump. Since, it is a wet process, no more dust suppression equipment is identified so far.
- d) Dust from ore processing activities will be minimized per standard environmental protection procedures for dust control (see Section 4.22).
- e) Noise from ore processing activities will be minimized per standard environmental protection procedures for noise control (See Section 4.23)
- f) Waste oil will not be used for dust control. Water or other agents such as calcium chloride may be used with the approval of the appropriate regulatory agencies.



#### 4.27 Installation of Pre-fabricated Buildings

##### Potential Environmental Concerns

It is not anticipated that any permanent structures will be erected for the mining and beneficiation operations at the Silver Yard area or at the work camp. Buildings at the Silver Yard area will include a workshop and laboratory, a warehouse, a small fuelling station nearby, and administration buildings including a mobile office, cafeteria facility and first aid station. Administration buildings will include washrooms connected to a sewage treatment system (see Section 4.19).

Camp accommodations will be constructed for workers at a previously developed site of a former ski hill, located in Labrador. Camp structures will consist of mobile to semi-mobile pre-fabricated modular trailers and will accommodate approximately 70 workers seasonally, from April to November on an annual basis. The camp will include a kitchen (with catering), dining room, laundry facilities, and a recreation area. All camp buildings will be connected to a sewage treatment system (see Section 4.19) (Figure 2.4).

The environmental concerns associated with the installation and operation of pre-fabricated buildings include potential disturbance of wildlife due to installation noise and human presence, and potential impacts on water quality due to domestic waste.

##### Environmental Protection Procedures

- a) Domestic sewage from administration buildings at Silver Yard and the work camp will be processed and discharged according to the Sections 4.19 and 4.28.
- b) Noise related to installation of pre-fabricated buildings will temporary and will be minimized per Section 4.23.
- c) All domestic waste will be controlled per environmental protection procedures in Section 4.18 (Waste Disposal).



## 4.28 Process Washwater Treatment and Monitoring

### Potential Environmental Concerns

The main environmental concerns associated with reject fines disposal are the potential impacts on freshwater ecosystems and water quality. There will be no use of chemicals in the beneficiation process and settling ponds and discharge pipe locations have been designed to reduce any suspended particulates, if present.

### Environmental Protection Procedures

#### *Water Discharge: Ruth Pit*

Clean water from direct precipitation and runoff will be diverted from contact with the mine workings, infrastructure, and waste where possible or practical.

- a) All water coming in contact with mine workings, infrastructure, or waste will be controlled and handled to ensure no free water release from the site during construction or production.
- b) Water that comes in contact with mine workings, infrastructure or waste ("mine effluent") will be controlled, monitored, and treated to ensure that any chemistry (TSS, hydrocarbons, pH, metals, etc.) is maintained below regulatory release requirements. Ruth Pit will function as a reject fines washwater settling pond to remove suspended fines.
- c) Current plans to upgrade the discharge area at Ruth Pit include the installation of a small dyke and spillway upstream of the existing culvert. If necessary, the existing culvert will be repaired or replaced to ensure operable. The spillway will control the release of water to the environment by insertion of stop logs or stop-valve arrangement. The following sources of water will be pumped to Ruth Pit from the project area:
  - i) Reject fines washwater from ore processing at the Silver Yard;
  - ii) Sewage from the Silver Yard will be treated using a LJ-30 RBC Biodisk (see Section 4.19). The treated grey water will be sterilized by UV disinfection and the resulting sterilized water will be pumped to Ruth Pit; and,
  - iii) The maintenance building will include a closed-circuit wash bay, which will be used for washing vehicles, haulage trucks, and explosive trucks. This facility will contain an oil-water separator to separate oil and sludge from the wash-water. Oil and sludge will be removed and disposed of by a licensed contractor. The wash-water will be pumped to Ruth Pit.
- d) Reuse and recycling of water will be maximized in the beneficiation plant and across the site to minimize the use and impact of clean water resources.



#### ***Water Discharge: James Pit Operation***

- a) During mining operations, the water management activities for the James North and James South areas are anticipated to include a combination of perimeter pit dewatering wells and in-pit sumps which will collect any groundwater infiltration and site stormwater to the pits and convey this water away from the pit. Where possible, ground surface stormwater will be diverted away from the mine workings. Water required for washwater and firewater at the Silver Yards area will be extracted from the pit perimeter dewatering wells and pumped to the Silver Yard storage tank. Water collected via pit perimeter wells and in-pit sumps will be pumped to the nearby James Settling Pond area (SP-1) and managed separately as described below.

The dewatering of the pit areas is expected to impact two existing springs on the James Property which flow to the Unnamed Tributary that flows from the James Property to Bean Lake. In order to preserve the flow in this tributary and to preserve downstream fish habitat, clean groundwater from the pit perimeter dewatering wells will be used to supplement inflow to the tributary via the James Settling Pond as detailed above (4-29 (e)). This arrangement has been designed based on ongoing consultation with DFO to ensure that the fish habitat in the tributary is maintained.

- b) Dewatering water, occasionally present within the pit, will be pumped into the settling pond and managed separately from the perimeter dewatering water.

#### ***Water Discharged: Redmond Pit Operation***

- a) Dewatering of Redmond Pit 2B and Redmond Pit 5, including perimeter dewatering wells, will be accomplished by pumping the water to historical Redmond Pit 2. Information obtained to date indicates that Pit 2 can accommodate the pit water from the operating pits (and a limited amount of waste rock disposal) without any overflow from Pit 2. There will be no discharge release from Redmond Pit operation.

#### ***Monitoring***

- a) LIM has entered into an MOU with the NLDOEC Real Time Water Monitoring Program.
- b) LIM has received approval for the Letter of Advice from DFO (May 31, 2010). Monitoring will be conducted in accordance with the Letter of Advice.
- c) Monitoring will also be conducted under the federal MMER program.
- d) As construction and site water management is started, all water releases will fall under the provincial *Environmental Control Water and Sewage Regulations*. Compliance with these regulations, particularly in regard to total suspended solids (TSS) will be verified by periodic monitoring.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

- e) Further monitoring requirements will be detailed in the Certificate of Approval (C of A) issued by Pollution Prevention Division of the NLDOEC. The details of these monitoring requirements will include: sampling stations; parameters to be monitored; a schedule for the monitoring; and a requirement to report the results.
- f) Throughout the construction and operation, the *Environmental Control Water and Sewage Regulations* and MMER will apply.



#### 4.29 Site Water Management - Settling Ponds including Sediment Control Ponds

##### Potential Environmental Concerns

The main environmental concerns associated with the settling pond are potential contamination of surrounding surface water and ground water, and associated effects on aquatic life.

##### Environmental Protection Procedures

###### *Silver Yard Settling Pond*

The Silver Yard Settling Pond will be constructed and operational prior to any processing or operations. It has been designed to serve two functions:

- a) The Pond is designed to receive the flush of water from the regular maintenance of the pumping/pipeline system. In order to complete regular Plant and/or pipeline maintenance (approximately once a week), the reject fines discharge pipeline to Ruth Pit will be flushed with clean water to push all reject fines washwater in the system to Ruth Pit. Once the pipeline is flushed and contains only clear water, the water will either be left in the pipe (typical for Plant maintenance under warm ambient temperatures) or the water will be released from the pipeline (as required for pump and pipeline maintenance or plant maintenance during freezing ambient conditions). The pipeline cannot be pumped dry; therefore, in order to clear the pipeline of water, it must be released to drain via gravity. The low point on the line is the Silver Yard Settling Pond and this clean water will be released into this pond prior to discharge to the environment.
- b) The pond is also designed to receive any emergency discharge from the pipeline during a power or pumping failure. The Beneficiation Plant will be interrupted during this event and therefore the volume of discharge to the pond should only be the volume of effluent in the pipeline. In this case, the washwater discharged into the pond will be the same quality as the washwater being deposited in Ruth Pit except that, due to the decrease in pumping pressure and pipeline velocities, some larger fines particles may settle in the pipeline and not be discharged with the washwater.

Treated discharge from the pond will be directed to an engineered stormwater collection ditch which extends across the north boundary of the site. The ditch conveys stormwater and discharge from the Silver Yard Pond east to cell 3 of the James Settling Pond (see Section 4.29(h)) for mixing with the in-pit dewatering from James Pit for treatment and subsequent discharge to James Creek or Bean Lake.



### ***James Settling Pond***

The James Settling Pond will be constructed and operational prior to any processing or operations.

- a) Three settling pond cells will be constructed using cut and fill earthworks, utilizing the silty sand overburden for core material and waste rock for erosion control and flow conveyance. Cells 1 and 2 measure approximately 24 m by 100 m in plan (water area) with an average water depth of 2 m.
- b) The inlets will be constructed of rock-lined ditches and rip-rap lined dispersion channels to evenly distribute the flow across the width of the cell.
- c) The outlet is designed to collect and convey the discharge flow via a constant head tank arrangement. The constant head tank will divert water discharge to the Unnamed Tributary within the range of flow required to maintain the naturally existing flows in this tributary (4 to 8 m<sup>3</sup>/min) as per consultation with DFO. This flow path will be monitored real time and an alarm system will be set up to warn mine personnel if the flow in the tributary is too low. In the event that flow through the constant head tank system is disrupted, backup systems to supply water to the tributary will include pump systems to convey water from cells 1 and 2 or nearby James Creek to supplement the flow in the tributary to maintain the flow range required (4 to 8 m<sup>3</sup>/min).

In addition to water flow, the real time monitoring of the outflow from the James Settling Pond will include specific conductance, dissolved oxygen level, pH, turbidity, and water level.

- d) The remainder of the discharge from Cells 1 and 2 will be conveyed via an engineered channel and ditch to either James Creek or directly to Bean Lake.
- e) Cell 3 will be constructed to approximately 100 m by 40 m and will receive water from the in-pit sumps (from James North and South) and from the stormwater ditch from the Silver Yards area. The inlet construction will be similar to Cells 1 and 2, however the outlet will be a simple discharge channel to combine with the discharge from Cells 1 and 2 for conveyance to James Creek or Bean Lake.
- f) The options for discharge to either James Creek or directly to Bean Lake will be confirmed via detailed route surveying during construction.

### ***Redmond 2 Pit***

The Redmond 2 Pit will be prepared for use as a settling pond prior to any processing or operations.

- a) Redmond 2 Pit will be used as a settling pond for the dewatering wells for the Redmond 2b and Redmond 5 open pits and as a waste rock storage area for a portion of rock from these open pits. Redmond 2 Pit currently has no surface connection to nearby surface water bodies. LIM will maintain the non-



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

connectivity of Redmond 2 Pit to surface water bodies. Per Section 4.28(g), there will be no discharge from Redmond 2 into the surrounding water bodies.

***Sewage Wastewater***

- a) Sewage wastewater will be generated at Silver Yard and at the work camp. Each will have a separate aerated RBC Biodisk sewage treatment system. After treatment, grey water from Silver Yard will be pumped to Ruth Pit (Section 4.28(b, ii)). Grey water from the work camp treatment system will be pumped to a small settling pond on-site and then discharged to Bean Lake. See Section 4.19 for environmental protection measures associated with sewage wastewater.



#### 4.30 Drilling and Blasting

LIM's mining contractor will be responsible for the transportation, storage, and use of explosives.

##### Environmental Concerns

Potential environmental concerns associated with on-land blasting include destruction of vegetation outside construction zone, noise disturbances to wildlife, effects to fish and aquatic animals, disturbance of historic resources, dust generation, and the potential introduction of silt and ammonia into water bodies.

Environmental concerns related to drilling are potential surface disturbances, disposal of drilling fluids and cuttings, potential siltation, generation of dust, noise and the potential impacts on terrestrial habitats, air quality, aquatic ecosystems, and historic resources.

##### Environmental Protection Procedures

###### ***General Blasting Environmental Protection Procedures:***

- a) The contractor will conduct all blasting work in compliance with the appropriate permits and/or approvals and authorizations. All blasters will have a Blasters Safety Certificate and all blasting will be conducted in adherence to LIM's safe work procedures and the Occupational Health and Safety legislation.
- b) The contractor will obtain the appropriate approvals for all magazines for explosive.
- c) The contractor will handle, transport, store and use explosives and all other hazardous materials in compliance with all applicable laws, regulations, orders of the Newfoundland and Labrador Department of Government Service (NLDGS) and Newfoundland and Labrador Department of Natural Resources (NLDNR), and the Dangerous Goods Transportation Act.
- d) The contractor will use blasting patterns and procedures which minimize shock or instantaneous peak noise levels.
- e) The contractor will not blast in the vicinity of fuel storage facilities.
- f) The contractor will restrict use of explosives to authorized personnel who have been trained in their use.
- g) The contractor will ensure that there are separate magazines on site for explosives and for dynamite blasting caps.
- h) Where necessary, runoff from blasted areas will be monitored at discharge sites for parameters including, but not limited to, pH, total suspended sediment (TSS), total petroleum hydrocarbon (TPH), ammonia and iron, as required by the Pollution Prevention Division. The Certificate of Approval will outline the exact requirements for monitoring. Runoff from blasted areas will also be monitored by Acute Lethality Testing, if the discharge is captured under MMER (more than 50,000 L discharged in a single event). Discharge will be treated, if required, prior to entering a water body.



- i) All personnel must have been trained in the use of explosives and comply with safe blasting procedures established by LIM.
- j) The contractor will coordinate and schedule blasting activities to minimize the number of blasts required. In order to minimize the seismic effect, blasting patterns and procedures will be used to reduce the shock wave and noise.
- k) The contractor will store explosives and auxiliary materials as stipulated in relevant legislation and in compliance with their operations permit and this EPP. Licensed blasters under direct supervision of a professional engineer will undertake blasting.
- l) The contractor will use explosives in a manner that will minimize damage or defacement of landscape features, trees and other surrounding objects by controlling through the best methods possible (including time-delay blast cycles) the scatter of blasted material beyond the limits of activity.
- m) If birds or wildlife are detected in the area, described blasting will only proceed when wildlife have left the area, or when consultation with Wildlife Division has occurred.
- n) The contractor will take precautions if blasting is necessary within the vicinity of an archaeological site to ensure that blaster material and shock waves do not disturb any part of the site. If necessary, protective covering is applied to the site under the supervision of an archaeologist. Blasting is not undertaken in these areas without notifying the LIM Labrador Site Manager. Any historic resource discoveries will be reported to the PAO.

***Blasting in Close Proximity to Water Bodies Environmental Protection Procedures:***

- a) Drilling and blasting activities will be undertaken in a manner that ensures the magnitude of explosions is limited to that which is absolutely necessary. A blasting plan will be reviewed with one of the local DFO officers in advance of work in close proximity to water bodies.
- b) If birds, fish or wildlife are detected in the area, described blasting will only proceed when the birds, fish or wildlife have left the area or when consultation with Wildlife Division has occurred.
- c) Use of acoustic harassment devices or a ramp-up of detonation pressures to encourage fish to move away from blasting area.
- d) Use of bubble curtains and other acoustic absorbents, where feasible; to contain shock waves from blasting.
- e) Notification of area residents and fishers prior to blasting operations.

Drilling will be completed per the environmental protection procedures in Section 4.12.



#### 4.31 Caribou

##### Potential Environmental Concerns

Background information on caribou in western Labrador is provided in Appendix F.

##### Environmental Protection Procedures

The appropriate level of action for any encounter with a caribou is one that removes risk to the caribou and personnel with a minimal amount of disturbance to the caribou. Mitigation of disturbance may involve the potential for modification or adjustment of construction, mining and operational activities. All caribou management actions will be reported to the NLDOEC Wildlife Division (Wildlife Division).

In order to mitigate any potential effects of the Project on caribou, activities during the construction and operations of the Project will be planned with three main considerations:

- Any activity that may potentially affect caribou habitat will be implemented with appropriate mitigation regardless of whether caribou are actually present.
- In the event that caribou are observed by personnel, a set of procedures will be incorporated to reduce or eliminate disturbance and avoid encounters with caribou; and
- That the woodland caribou mitigation strategy will be employed by on-site personnel until such time that this plan is revised or replaced by mutual agreement between LIM and Wildlife Division. A joint review of the current mitigation strategy by LIM and Wildlife Division to be conducted annually at the end of Year 1 to accommodate the inclusion of any new data and to assess the strategy for appropriateness.

Note that LIM is firmly committed to ensuring no animals are disturbed, harmed, or killed as a result of this Project. LIM is also concerned that delays in Project activities could occur due to caribou or other wildlife being present and remaining within a certain distance, seemingly tolerant of the localized industrial activity. Therefore it is proposed that if caribou approach the Project, there be a progressive level of heightened awareness by Project personnel AND increased interaction with Wildlife Division, to ensure both objectives are met. Specific caribou mitigation and monitoring measures associated with the re-establishment of the spur line will include:

- An initial helicopter survey of a 20 km radius area around the proposed activity that would occur in early May 2010. All techniques (e.g., transect density, aircraft height, speed, study team composition) will be identical to that completed by Groupe Hémisphères and Jacques Whitford Stantec Limited (2009) the previous year – with the exception of the size of the area (i.e., 20 km radius versus 50 km radius). Representative(s) of the Wildlife Division will be invited to participate and in the event that caribou are observed, the Study Team will attempt to deploy satellite collars and collect tissue samples for genetic analyses – to assist in the identification of herd affiliation.



- Sightings as a result of this survey or reports of caribou, e.g., through co-ordination with Wildlife Division authorities and/or other stakeholders, within 20 km of Project infrastructure and activities will be described in a one-page update of mining activity and wildlife observations associated with this EPP. This update will normally be sent by LIM to the Wildlife Division in Wabush and Corner Brook on a bi-weekly basis (whenever Project activities are ongoing). However, if caribou are observed during the survey or thereafter within 20 km of the Project, reports will be sent immediately (i.e., same day) to the Wildlife Division. When caribou are known to occur within 20 km, a 5 km buffer around each area of activity will be monitored on a weekly basis by scanning for tracks or animals from road-accessible vantage points within this radius. Observations reported by personnel or others will also be recorded and investigated within this area. Reporting to the Wildlife Division would be increased to a weekly basis in this scenario. Note that if caribou are not seen within the 20 km radius during the aerial survey or otherwise, the 5 km buffer would be monitored on a bi-weekly basis (from road-accessible vantage points) over the course of the calving and post-calving period.
- If caribou are observed at a distance of less than 5 km from Project infrastructure and activities, LIM will issue an advisory of their proximity to personnel to be alert and that activities that would potentially disturb or otherwise harm these animals may need to be curtailed until these animals have left the area. Construction and operation of the Project involves the following activities: vegetation clearing, grubbing, grading and levelling; laydown and storage of equipment and material in existing areas; generators to support the activity; vehicle and heavy equipment use; handling and transfer of fuel and other hazardous material; waste disposal; sewage disposal; hazardous waste disposal; and vehicle traffic. None of these activities will be audible beyond a short distance (i.e., less than 1 km) and would not need to be delayed if caribou are within 5 km. The monitoring from road accessible vantage points will occur on a daily basis. **The Wildlife Division is to be contacted immediately at 1-709-637-2029 (Corner Brook) or 1-709-282-6881 (Wabush).**
- Should caribou be observed within 3 km of Project facilities and/or by site personnel, activities that would potentially disturb or otherwise harm these animals will be assessed and, if required, curtailed until these animals have left the area. Specifically, if in the event caribou approach to within sight of these work areas, activities will be delayed allowing the animals to proceed onwards beyond the work site. This mitigation will avoid any collisions with wildlife that may disturb or harm caribou or personnel. Note that blasting will not be required as part of the spur line.
- While caribou are within 5 km of Project infrastructure and activities, all sightings of caribou will be reported to the LIM Labrador Site Manager, and will be immediately communicated to all vehicle operators. Caribou will not be blocked from crossing mine-related roads or work areas. If caribou are crossing or attempting to cross the site roads, then traffic will stop and wait for them to cross. There will be no hunting or other harassment of these animals at any time. The monitoring from road accessible vantage points will occur on a daily basis and reported bi-weekly unless caribou are observed whereby the **Wildlife Division is to be contacted immediately at 1-709-637-2029 or 1-709-282-6881.**



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

Other mitigation measures to be implemented with Project activities are outlined in Table 4-2.

**Table 4.2 Proposed Mitigation Measures for Caribou**

<b>Project Activities</b>	<b>Mitigation Measures</b>
<b>Construction</b>	
Site Preparation (grubbing, excavating)	Clear vegetation in a pattern that does not leave a recognizable trail, where practical to reduce accessibility and visibility to humans and predators. These activities would be restricted to the physical footprint of the Project. Fire prevention and response procedures, training and equipment will be implemented.
Placement of Infrastructure (re-establishment of on-site roads)	The width, density and length of access roads lines will be minimized. Where possible, any new disturbance will be reduced by locating these facilities adjacent to existing areas of surface disturbance. Ensure that linear facilities such as rail lines and roads are separated by more than 100 m, where practical.
Placement of Equipment and Buildings	Fence hazardous construction areas.
Employment and Expenditures	Enforce a "no hunting and firearms" policy among all personnel. Use monitors to keep construction staff and management informed on the presence of caribou at the mine site as described above.
<b>Operation</b>	
Iron Ore Extraction (excavation – mechanical, blasting)	Note that caribou were not observed within a 20 km radius of proposed activities during the aerial survey of 26 April to 1 May 2010 (report in preparation). Therefore, a 5-km buffer will be monitored on a bi-weekly basis (from road-accessible vantage points) over the course of the calving and post-calving period (i.e., 28 May to 20 September). If caribou are observed at a distance of less than 5 km from Project infrastructure and activities, LIM will issue an advisory of their proximity to personnel to be alert and that activities that would potentially disturb or otherwise harm these animals may need to be curtailed until these animals have left the area.
Iron Ore Beneficiation (crushing, washing, screening, stockpiling, hazardous and mining waste disposal)	Fence hazardous construction areas. Fire prevention and response procedures, training and equipment will be implemented. Hazardous material handling procedures, training and response in the event of a spill will be implemented.
Stormwater and Wastewater Management	Ensure materials are handled and disposed consistent with federal and provincial regulations



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

<b>Project Activities</b>	<b>Mitigation Measures</b>
Transportation (on-site trucking, rail loading)	Personnel operating company vehicles will possess a valid driver's license, undergo employee orientation and safety training, and be briefed on potential for and strategies for avoiding wildlife-vehicle collisions. All mine access roads to be limited to Project personnel only. Speed limits of 50 km/hr (daylight) and 30 km/hr (darkness) and wildlife caution signs will be posted along mine roads and rail lines.
Operations	A "bear aware" waste management plan will be developed and implemented to reduce the likelihood of bears (predators) in the Project areas. Observations of caribou (and other wildlife) by staff will be recorded (including observer, time and location) and submitted to monitors and LIM management to determine appropriate mitigation/follow-up.
<b>Decommissioning</b>	
Removal of Facilities and Equipment	Personnel operating company vehicles will possess a valid driver's license, undergo employee orientation and safety training, and be briefed on potential for and strategies for avoiding wildlife-vehicle collisions. Enforce a "no hunting and firearms" policy among all personnel. Use monitors to keep staff and management informed on the presence of caribou at the mine site. Mine roads will be restricted to Project personnel only. Speed limits of 50 km/hr (daylight) and 30 km/hr (darkness) and wildlife caution signs will be posted along mine roads and rail lines.
Site Reclamation (grading, re-vegetation)	Reclamation techniques will emphasize the revegetation of the pre-disturbance vegetated areas of the site with local plants that would encourage growth of caribou winter forage. Fire prevention and response procedures, training and equipment will be implemented. Hazardous material handling procedures, training and response in the event of a spill will be implemented.

Throughout construction and operations, LIM will maintain liaison with the provincial Wildlife Division, and other stakeholders and officials regarding the movements of the George River Herd and/or possible woodland caribou sightings of caribou in the Project area. Through existing satellite collar monitoring and other monitoring activities (e.g., community networking, traditional knowledge programs, and incorporation of recent observations into Project planning), LIM will implement an advisory to mine management staff should any herds enter the Project area. Such caribou movements, observations and actions implemented by LIM would be recorded and reported to the Wildlife Division immediately.



## **5.0 CONTINGENCY PLANS**

Contingency plans to address accidents and unplanned situations have been developed, and will be modified as required throughout ongoing construction and operation phases.

Contingency plans have been developed for the following potential accidental and unplanned situations:

- Fuel and Hazardous Material Spills (Section 5.1)
- Wildlife Encounters (Section 5.2)
- Forest Fires (Section 5.3)
- Discovery of Historic Resources (Section 5.4)

Notwithstanding the existence of these contingency plans, a policy to implement preventative measures as the first line of defence against the possibility of accidents will be adopted.



## 5.1 Fuel and Hazardous Material Spills

### Potential Environmental Concerns

Fuel and hazardous materials can potentially be damaging to vegetation, soil, surface water, ground water, wildlife, aquatic organisms, historic resources and human health and safety.

### Environmental Protection Procedures

In case of a fuel or hazardous material spill, the following procedures will apply.

- a) The individual who discovers the leak or spill will make a reasonable attempt to immediately stop the leakage and contain the flow. Spill kits are located at fuel storage tanks and at designated central storage location(s).
- b) Spill location, type of fuel or hazardous material, volume and terrain condition at the spill site will be determined and reported immediately to the LIM Labrador Site Manager, who will report it immediately to Environment Canada (Item c).
- c) In the event of a reportable spill on-land or any spill regardless of size that may enter a waterbody frequented by fish must be reported immediately to the

**Environmental Emergencies 24 Hour Report Line**  
**709-772-2083 or 800-563-9089**

(Refer to Section 4.16 for the definition of reportable spills on-land versus in freshwater environments.)

Required pertinent information includes:

- i) name of reporter and phone number;
- ii) time of spill or leak;
- iii) time of detection of spill or leak;
- iv) type of product spilled or leaked;
- v) amount of product spilled or leaked;
- vi) location of spill or leak;
- vii) source of spill or leak;
- viii) type of accident - collision, rupture, overflow, other;
- ix) owner of product and phone number;
- x) if the spill or leak is still occurring;



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

- xi) if the spill or leaked product is contained, and if not, where it is flowing;
- xii) wind velocity and direction;
- xiii) temperature;
- xiv) proximity to waterbodies, water intakes, and facilities, and
- xv) snow cover and depth, terrain, and soil conditions.

d) The LIM Labrador Site Manager will act as the "On-Scene-Commander" for the purposes of cleaning up a fuel or hazardous materials spill. The LIM Labrador Site Manager will be familiar with spill clean-up procedures and mobilization procedures of the clean-up equipment. The LIM Labrador Site Manager will have full authority to take necessary and appropriate action without unnecessary delay.

The overall responsibility of coordinating a clean-up and maintaining this contingency plan current and up-to-date will be the LIM VP Environment and Permitting.

Staff will be trained on the procedures to follow in case of hydrocarbon spills as well as information related to general communication line. LIM will provide personnel a responsibilities list before the start of construction and operation activities.

A complete list of spill response equipment will be generated and distributed on-site before the start of construction activities.

e) In reaching decisions on containment and clean-up procedures, the following criteria will be applied:

- i) minimize danger to workers and public;
- ii) protect water supplies;
- iii) minimize pollution of watercourses;
- iv) minimize area affected by spill, and
- v) minimize the degree of disturbance to the area and watercourses during clean-up.

f) The LIM Labrador Site Manager will act in consultation with the regulating authorities to:

- i) assess site conditions and environmental impacts of various cleanup procedures;
- ii) assess potential for fuel recovery versus burning;
- iii) deploy on-site staff to mobilize pumps and empty 215-L drums or other appropriate storage containers to the spill site;



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

- iv) deploy on-site staff to build containment dykes and commence pumping contaminant into drums;
- v) apply absorbent as necessary;
- vi) dispose of all contaminated debris, cleaning materials and absorbent by burning, if appropriate, or by placing it in an approved land-fill site, and
- vii) take all necessary precautions to avoid the incident in the future.

g) The LIM Labrador Site Manager will be responsible for the preparation of a written report which will be sent (as soon as possible and no later than 30 days after the spill) to the LIM VP Environment and Permitting; and, from there to:

Kenneth Russell  
Manager of Operations  
Government Services  
Happy Valley-Goose Bay Regional Office

(709) 896-5709 (tel)  
(709) 896-4340 (fax)

and

Graham Thomas  
Environmental Emergencies Coordinator  
Environment Canada  
6 Bruce Street  
Mount Pearl, NL A1N 4T3

(709) 772-4285 (bus)  
(709) 687-5634 (cell)



## 5.2 Wildlife Encounters

### Potential Environmental Concerns

Wildlife encounters pose a potential risk for stress or injury to both the wildlife and site personnel. Control measures and environmental protection procedures have been put in place to reduce this potential risk to wildlife and humans.

As a protection measure, hunting, trapping or fishing by construction and operations personnel is not permitted on the site.

### Environmental Protection Procedures

#### Prevention

The operator is responsible to see that the following procedures are implemented:

- a) Site and working areas will be kept clean of food scraps and garbage.
- b) Waste will be collected for disposal in appropriate containers and routinely transferred to the local landfill.

Certain activities such as clearing will be avoided, where possible, during the nesting period for migratory birds in the region (from May to around mid-July). As well, efforts will be taken to undertake any required clearing in these areas outside of the breeding season. Should additional clearing be required, and it is not possible to undertake clearing outside of the breeding season and a nest is found, the following mitigative actions will be taken:

- the nest site and neighbouring vegetation should be left undisturbed until nesting is completed; and,
- construction activities should be minimized in the immediate area until nesting is completed.

The best approach will be identified based on the circumstances and in compliance with the *MBCA*. Should a nest of a birds listed in the CWS Occasional Paper Birds Protected in Canada under *Migratory Birds Convention Act* be encountered during the proposed work program, the Canadian Wildlife Service will be contacted.

#### Response Actions

All construction/operations personnel will abide by the following rules in the case of wildlife encounters:

- a) No attempt will be made by any worker at the project site to chase, catch, divert, follow or otherwise harass wildlife by vehicle or on foot.
- b) Equipment and vehicles will yield the right-of-way to wildlife.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

- c) No personal pets, domestic or wild, will be allowed on the site.
- d) All personnel should be aware of the potential for encounters with bears, wolves, caribou, moose, etc. and they will be instructed to immediately report any sightings to the LIM Labrador Site Manager. The LIM Labrador Site Manager will notify the LIM VP Environment and Permitting to report any wildlife sightings and to assess actions for follow-up.
- e) The LIM Labrador Site Manager will be responsible for all actions in response to nuisance animals (e.g., bears) in the project area and will advise the LIM VP Environment and Permitting for further action.
- f) Under provincial wildlife regulations, the displacement and release of any animal is the sole jurisdiction of the NLDOEC and is to be undertaken only under appropriate supervision.
- g) If the nest of any raptor or other bird is encountered during construction and operation activities, work in the vicinity of the nest is to be curtailed until the LIM VP Environment and Permitting is contacted and has had the opportunity to contact the Wildlife Division and appropriate mitigation is applied. This includes a 200 m buffer zone around any active raptor next during most of the year, extending to an 800 m buffer zone during the breeding season (March 31 to July 31).
- h) During the past four years of baseline data collection at the Project area, and as identified in the EIS, no SARA species have been identified within the project area. However, should any federally listed species at risk (endangered, threatened, or special concern) or provincially listed species under the Newfoundland and Labrador *Endangered Species Act* be identified in the project area and considered to be at risk for potential impacts as a result of Project activities (disturbed or incidental mortality), LIM's VP of Environment, or designate will contact CWS at (709) 772-7456.



## 5.3 Forest Fires

### Potential Environmental Concerns

Activities related to construction and/or operations could potentially result in a fire, which could spread to the surrounding area. Such events could potentially be damaging to vegetation and wildlife, air and water quality, human health and safety, and LIM assets.

### Environmental Protection Procedures

LIM or the contractor will take all precautions necessary to prevent fire hazards when working at the site. These include but are not limited to:

- a) Disposal of all flammable waste on a regular basis.
- b) LIM or the contractor making available, in proper operating condition, sufficient firefighting equipment to suit its labour force and fire hazards. Such equipment will comply with, and be maintained to the manufacturer's standards.
- c) LIM or the contractor ensuring that its personnel are trained in the use of such equipment.
- d) In the event of a forest fire, LIM or the contractor will take immediate steps to contain or extinguish the fire.
- e) LIM's Labrador Site Manager will appoint a supervisory staff member as "On-Scene-Commander" for fighting any forest fires.
- f) Fires should be reported immediately to:
  - i) the LIM Labrador Site Manager;
  - ii) Wabush Forestry Office 709-282-6881, and ultimately to the
  - iii) Forest Management Unit Office in Corner Brook **709-637-2408**.
- g) The following information will be provided:
  - i) name of the reporter and phone number;
  - ii) time of detection of the fire;
  - iii) size of the fire; and
  - iv) location of the fire.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

h) The police will also be notified immediately at:

**709-944-7602** (Lab West RNC Detachment).



## 5.4 Discovery of Historic Resources

### Potential Environmental Concerns

Historic resource material that is disturbed, destroyed or improperly removed from a site represents a potential cultural loss of information and history that could otherwise be handled and interpreted in an efficient and appropriate manner.

### Environmental Protection Procedures

- a) If suspected archaeological material is encountered, stop all work in the immediate area of the discovery until authorized personnel from LIM, having consulted with the Provincial Archaeologist, permit resumption of the work.
- b) Report the find immediately to the LIM Labrador Site Manager.
- c) Mark the site's visible boundaries. Personnel will not move or remove any artefacts or associated material unless the integrity of the material is threatened.
- d) The LIM Labrador Site Manager will report the find with the following information to the Provincial Archaeology Office, Culture and Heritage Division, Department of Tourism, Culture, and Heritage, St. John's, and comply with the instruction provided:
  - i) nature of the find;
  - ii) precise descriptive and map location and the time of the find;
  - iii) nature of the activity resulting in the find;
  - iv) identity of the worker(s) making the find;
  - v) present location of the material, if moved, and any protective measures initiated for the material and the site, and
  - vi) Extenuating circumstances.



## **6.0 ENVIRONMENTAL PROTECTION PLAN CONTROL REVISIONS**

Holders of controlled copies (i.e., those version which contain all of the up-to-date procedures) of the EPP are listed in Appendix B.

The EPP will be revised as necessary to reflect site-specific environmental protection requirements, and allow updates as work progresses. All EPP holders may initiate revisions by forwarding proposed revisions to the LIM Labrador Site Manager and/or the VP of Environment and Permitting. The following information will be provided on the Revision Request Form (see Appendix C) for all revision requests:

- section to be revised;
- nature of the revision;
- rationale for the revision (i.e., environment/worker safety), and
- who submitted the revision request.

Approval for revisions will be sought from LIM. When the LIM VP of Environment and Permitting receives approval for the revision request, details of the revision will be distributed to all EPP holders and will be documented in the Revision History Log (Appendix D). Each revision will be accompanied by:

- revision instructions;
- list of sections being superseded; and
- an updated Table of Contents indicating the status of each section in the EPP.

When EPP Holders receive a revision, they will, within two working days:

- read the text of the revision;
- check the control sheet to confirm that all the listed pages have been received;
- remove and destroy the superseded pages from their copy of the EPP;
- insert the revised pages in the proper place in their copy of the EPP;
- page check the EPP, using the updated table of contents to confirm the EPP is complete and current;
- enter the revision number and date entered on the Revision History Log;
- incorporate the revision into the area of responsibility, as appropriate, and
- confirm that their personnel are familiar with the revisions.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

## **7.0 CONTACT LIST**

### **LABRADOR IRON MINES LIMITED**

Linda Wrong, P.Geo.  
Vice President, Environment and Permitting  
Suite 700-220 Bay Street  
Toronto, Ontario M5J 2W4  
Tel. (416) 362-2435  
Cell (416) 660-2979  
Fax. (416) 368-5344

Frank Johnson  
Labrador Site Manager  
Tel. (418) 585-2223

### **ENVIRONMENTAL EMERGENCIES**

#### **24-HOUR REPORT LINE**

St. John's (709) 772-2083  
Other Areas 1-800-563-9089

### **ENVIRONMENT CANADA**

#### **ENVIRONMENTAL PROTECTION**

Mount Pearl, NL  
Environmental Assessment Coordinator  
Glenn Troke  
Tel. (709) 772-4087  
Fax. (709) 772-5097

Environmental Emergencies Coordinator  
Graham Thomas  
Tel. (709) 772-4285  
Cell (709) 687-5634

### **ENVIRONMENT CANADA**

Canadian Wildlife Service  
Kim Mawhinney,  
Manager  
Canadian Wildlife Service  
Mount Pearl, NL  
Tel. (709) 772-7456  
Fax. (709) 772-5097

Paul MacDonald  
P.O. Box 1116, Station C  
512 Lahr Blvd.  
5 Wing Goose Bay  
Happy Valley-Goose Bay, NL A0P 1C0  
Tel. (709) 896-6166

### **FISHERIES AND OCEANS CANADA**

Kathleen Simms  
Area Habitat Biologist - Labrador  
Happy Valley – Goose Bay, NL  
Tel. (709) 896-6151  
Fax: (709) 896-8419

### **DEPARTMENT OF GOVERNMENT SERVICES**

Regional Director  
Happy Valley - Goose Bay, NL  
Tel. (709) 896-5428  
Fax. (709) 896-4340

Kenneth Russell  
Manager of Operations  
Happy Valley - Goose Bay, NL  
Tel. (709) 896-5471  
Fax. (709) 896-4340



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**DEPARTMENT OF NATURAL RESOURCES**

**Forestry Branch**

Chuck Porter  
Conservation Officer  
Wabush, NL  
Tel. (709) 282-6881  
Fax. (709) 282-5352

**DEPARTMENT OF ENVIRONMENT  
AND CONSERVATION**

**Wildlife Division**

Kirsten Miller  
Biologist  
Corner Brook, NL  
Tel. (709) 637-2029

David Elliot  
Wildlife Biologist  
Happy-Valley Goose Bay, NL  
Tel. (709) 896-1181

**Pollution Prevention Division**

Stephen Dyke  
St. John's, NL  
Tel. (709) 726-2738

**Water Resources Management Division**

Clyde McLean  
Manager, Water Investigations Section  
St. John's, NL  
Tel. (709) 729-5713  
Fax. (709) 729-0320

Renee Paterson  
Real-Time Water Quality Coordinator  
St. John's, NL  
Tel. (709) 729-1159  
Fax. (709) 729-0320

**Wabush Forestry Office**  
Tel. (709) 282-6881

**Forest Management Unit Office**  
Corner Brook, NL  
Tel. (709) 637-2408

**ROYAL NEWFOUNDLAND CONSTABULARY**  
Booth Avenue  
Labrador City, NL  
Tel. (709) 944-7602



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

## **8.0 REFERENCE MATERIAL**

Canadian Council of Ministers of the Environment. 1994. Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Products.

Department of Environment and Conservation, Water Resources Management Division. Chapter 3A. Environmental Guidelines for Stream Crossings by All-Terrain Vehicles.

Department of Natural Resources. Estimated 1995. Environmental Guidelines for Construction and Mineral Exploration Companies.

DFRA (Department of Forest Resources and Agrifoods). 1998. Environmental Protection Guidelines for Ecologically Based Forest Resource Management (Stand Level Operations).

Gosse, M.M., A.S. Power, D.E. Hyslop, and S.L. Pierce. 1998. Guidelines for Protection of Freshwater Fish Habitat in Newfoundland and Labrador. Fisheries and Oceans, St. John's, NL. X + 105 pp., 2 appendices.

Stantec. February 27, 2009. Stage 1 Historic Resources Assessment – Labrador Iron Mines 2008 Exploration Activities Draft Report.



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**9.0 SIGNATURE PAGE**

**LABRADOR IRON MINES**

The undersigned certify that they have reviewed, and understand their role and responsibility regarding:

**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN**

As part of their Schefferville Area Iron Ore Project Safety Orientation.

---

Name (Printed)

representing

---

Company

---

Signature of above

---

Date

---

Name of Manager or Supervisor

---

Manager or Supervisor's Signature

---

Date



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

## **APPENDIX A**

### **LIST OF ABBREVIATIONS AND ACRONYMS**



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**LIST OF ABBREVIATIONS AND ACRONYMS**

ATV	– All-terrain Vehicle
CEPA	– <i>Canadian Environmental Protection Act</i>
CWS	– Canadian Wildlife Service
DFO	– Fisheries and Oceans Canada
H&S	– Health and Safety
IOCC	– Iron Ore Company of Canada
NLDNR	– Newfoundland and Labrador Department of Natural Resources
NLDOEC	– Newfoundland and Labrador Department of Environment and Conservation
EPP	– Environmental Protection Plan
LIM	– Labrador Iron Mines
MBCA	– <i>Migratory Birds Convention Act</i>
MMER	– Metal Mines Effluent Regulations
MSDS	– Material Safety Data Sheet
MOU	– Memorandum of Understanding
RBC	– Rotating Biological Contractor
SARA	– Species at Risk Act
tpd	– Tonnes per Day
VP	– Vice President
WHMIS	– Workplace Hazardous Materials Information System



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**APPENDIX B  
CONTROLLED COPY DISTRIBUTION LIST**



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**CONTROLLED COPY DISTRIBUTION LIST**

<b>Department or Organization</b>	<b>Individual or Location</b>
LIM Environment Team	Linda Wrong, VP Environment and Permitting (Toronto Office)
	Glenn Coyne, Labrador Site Manager (Schefferville Office)
LIM Toronto Office	Daniel Dufort, VP Operations
	Joanne Robinson, Senior Mining Engineer
LIM Montreal Office	Marc Duclos, VP Transportation



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**APPENDIX C  
REVISION REQUEST FORM**



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**SECTION TO BE REVISED:**

**NATURE OF REVISION:**

**RATIONALE FOR REVISION:**

(i.e., environment/worker safety, etc.)

**SUBMITTED BY:**

Please submit request to the LIM's Environment Team



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**APPENDIX D  
REVISION HISTORY LOG**



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

Version: 1.0

Date: 14 June 2010

## REVISION HISTORY LOG



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

**APPENDIX E  
SITE CHECK LIST FORM**



SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL

Version: 1.0

Date: 14 June 2010



**SITE CHECK LIST**

Please check one     
Before During After

**PROJECT:** \_\_\_\_\_ **HOLE/TRENCH:** \_\_\_\_\_

**PROPERTY:** \_\_\_\_\_

**PERMIT NUMBER:** \_\_\_\_\_ **DATE:** Start: \_\_\_\_\_ End: \_\_\_\_\_

**PROJECT GEOLOGIST:** \_\_\_\_\_ **CONTRACTOR:** \_\_\_\_\_

- Ensure that personnel have been trained in EHS protocols.
- Ensure personnel are equipped with personal protective equipment.

**SITE CONDITION :** \_\_\_\_\_

**SITE WORKED** Yes: \_\_\_\_\_ **OLD DRILL HOLES MAKING WATER:** Yes: \_\_\_\_\_

**PREVIOUSLY:** No: \_\_\_\_\_ No: \_\_\_\_\_

**COMMENTS:** \_\_\_\_\_

**INDICATIONS OF WILDLIFE** (tracks, nests, etc.): Yes: \_\_\_\_\_ No: \_\_\_\_\_

**COMMENTS (If Yes):** \_\_\_\_\_

**WATER MANAGEMENT:** Water Source (lake, creek): \_\_\_\_\_ Sump(s) Location: \_\_\_\_\_

**SEDIMENT RUN-OFF?:** \_\_\_\_\_

**COMMENTS:** \_\_\_\_\_

**NEARBY WATER COURSES:**

**PRESENCE OF SEDIMENTS?** Yes: \_\_\_\_\_ No: \_\_\_\_\_

**DRILL COLLAR SITE:** Casing Pulled: Yes: \_\_\_\_\_ Hole Grouted: Yes: \_\_\_\_\_

No: \_\_\_\_\_ No: \_\_\_\_\_

Making Water: Yes: \_\_\_\_\_ Capped: Yes: \_\_\_\_\_

No: \_\_\_\_\_ No: \_\_\_\_\_

**DRILL CUTTINGS DEPOSITED DOWN HOLE:** Yes: \_\_\_\_\_

No: \_\_\_\_\_

**COMMENTS:** \_\_\_\_\_

**SPILLS:** Reportable Spill-Date Occurred: \_\_\_\_\_ Type (oil, mud): \_\_\_\_\_

**COMMENTS:** \_\_\_\_\_

**SITE CONDITIONS AFTER WORK:** Site Cleared of all Garbage/Metal: Yes: \_\_\_\_\_

No: \_\_\_\_\_

**TRENCHES SLOPED:** Yes: \_\_\_\_\_ **EQUIPMENT REMOVED:** Yes: \_\_\_\_\_

No: \_\_\_\_\_ No: \_\_\_\_\_

**COMMENTS:** \_\_\_\_\_

**SITE INSPECTED BY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_



**SCHEFFERVILLE AREA IRON ORE PROJECT  
CONSTRUCTION AND OPERATIONS ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

## **APPENDIX F**

### **BACKGROUND INFORMATION ON CARIBOU IN WESTERN LABRADOR**



### **Background Information on Caribou in Western Labrador**

Labrador has both migratory and sedentary ecotypes of caribou that are distinguished by how and where their calving grounds occur as well as other characteristics. Migratory caribou travel large distances, occupy large home ranges, and gather together during calving periods. Conversely, sedentary caribou display limited movements, occupy smaller home ranges, and tend to occur alone or in low densities during the calving period (Schaefer et al. 2000; Bergerud et al. 2008). Sedentary caribou also tend to be larger in size than migratory caribou (Couturier et al. 2010).

The Project occupies a portion of Western Labrador which overlaps with the range of the migratory George River Caribou Herd. Straddling the Quebec-Labrador peninsula, the George River Herd is one of the world's largest caribou populations, with estimates peaking at almost 800,000 individuals in the 1980's (Couturier et al. 1996; Russell et al. 1996, Rivest et al. 1998), however was most recently estimated at 296,000 individuals (Courturier et al. 2004). This area of western Labrador overlaps the George River Herd as a portion of their winter range (Jacobs 1996).

In addition to the George River Herd, there is another migratory population that is recognized on the Ungava Peninsula and known as the Rivière-aux-Feuilles ('Leaf River') Caribou Herd. Existing and recognized sedentary caribou populations include the Lac Joseph Herd located south of the Project, and the Red Wine Mountains, the Joir River, and the Mealy Mountains Herds all much further to the east. Schmelzer et al. (2004) indicates that during the winter months, the George River Caribou Herd encounters the outer limits of the ranges of these sedentary herds providing the opportunity for the intermingling of animals. The Project occurs entirely within the range of the George River Caribou Herd.

Although there is no evidence of sedentary caribou near the Project at present, they were reported historically (e.g., Caniapiscau or McPhadyen Herds) (LWCRT 2005, Bergerud et al. 2008). The sedentary herds of this region have declined or disappeared since the 1960s with the advent of the snowmobile and expanded transportation network allowing greater access for hunting. The migratory and sedentary caribou inhabiting the Ungava peninsula (i.e., Labrador and northeastern Quebec) are, and historically have been, an integral component of the way of life for aboriginal and non-aboriginal people for many centuries (Schmelzer and Otto 2003; Loring 2008).

The Committee on the Status of Endangered Wildlife in Canada listed the sedentary caribou populations of Labrador as "Threatened" (COSEWIC 2008, SARA 2008). Hunting of sedentary herds is illegal; however, the hunting of the migratory George River Caribou Herd is legal within the seasons (August 10 to April 30) and quotas for this Herd are defined by the provincial government (NLDEC 2008).

As part of the baseline and monitoring research associated with this Project, LIM co-sponsored an intensive aerial survey during May 2009 (Groupe Hémisphères and Jacques Whitford Stantec Limited 2009). Completed in



**SCHEFFERVILLE AREA IRON ORE PROJECT  
EXPLORATION ACTIVITIES  
ENVIRONMENTAL PROTECTION PLAN  
FINAL**

**Version: 1.0**

**Date: 14 June 2010**

co-operation with the Provincial Governments of Newfoundland and Labrador and of Quebec, this intensive survey located 7 caribou [one group of four (one adult female that was captured and equipped with satellite collar, an adult female with a male calf, and a yearling male), a group of two (one adult male and one yearling male) and a dead female (estimated at 10+ years that was killed by a single wolf), west and southwest of Schefferville. Measurements of two animals suggested these animals belong to the migratory ecotype. In fact, the adult female equipped with the satellite collar was shot by a hunter approximately 400 km east in the Naskuapi River watershed in February 2010, indicating that this animal and probably the others observed the previous year were of the migratory ecotype (Addendum to Groupe Hémisphères and Jacques Whitford Stantec Limited 2009). A second aerial survey was completed of the area during April-May 2010 in which no caribou were observed within the study area. Although tissue samples collected from two caribou in 2009 have yet to be analyzed for possible genetic affiliation, it is believed that there are no longer sedentary caribou in the vicinity of the Project.

Additional information regarding caribou and mitigation strategies is presented in LIM's approved EIS document (Available at: <http://www.env.gov.nl.ca/env/Env%202001/Project%20Info/1379.htm>).



## **APPENDIX B**

Schefferville Area Iron Ore Mine ERP



	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	Version: 0.0	Page: i of v
Date Issued: June 30, 2011			

**METAL MINING EFFLUENT REGULATIONS**

**EMERGENCY RESPONSE PLAN  
SCHEFFERVILLE AREA IRON ORE PROJECT**

**WESTERN LABRADOR,  
NEWFOUNDLAND AND LABRADOR**

**Date Issued: June 30, 2011  
Version 0.0**



## SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN

Version: 0.0

Page: ii of v

Date Issued: June 30, 2011

### SUMMARY OF ALERTING AND NOTIFICATION PROCEDURES

In the event of an effluent release, follow the steps outlined below:

- The person (i.e., employee, contractor, etc.) who identifies the release should immediately notify the onsite Environmental Manager and give details of the release (e.g., location, volume, effluent/material type, cause, date and time, etc.). Should it be safe to do so, this person should attempt to contain or limit the flow of materials to the environment.
- During normal work hours, the Environmental Manager can be reached at 1-418-585-2166. During off hours, please call 1-418-585-1959 (Corey McLister, onsite Environmental Manager) or 1-902-220-7189 (Brian Chisolm, Innu Municipal onsite Manager). Once notified, the Environmental Manager will immediately notify the VP of Environment and Permitting and the General/Mine Manager to report the release, then continue with release response activities and provide cleanup and follow-up actions. The Environmental Manager may request the General/Mine Manager to deploy additional emergency response efforts to the incident site.
- Based upon the information provided by the Environmental Manager, the Vice President (VP) of Environment and Permitting will then call the 24-hour Environmental Response Canadian Coast Guard Hotline 1-800-563-9089 or 1-709-772-2083 with a preliminary report (see Section 5.3 for information requirements). The VP of Environment and Permitting may request the Environmental Manager to make this call on their behalf.
- The VP Environment and Permitting and the Environmental Manager will consult with the General/Mine Manager, and Health and Safety Coordinator, as appropriate, to address the concerns associated with the release.
- Only the VP Environment and Permitting or the Environmental Manager (or designate) shall have the role of formally initiating the Emergency Response Plan. Once this decision is made, they may request the General/Mine Manager or Health and Safety Coordinator to activate the plan.
- The Vice President of Environment and Permitting, in consultation with the Environmental Manager, will decide whether communication with external agencies (e.g., consulting firms, response agencies, etc.) is required and will follow up with government agencies if necessary.
- The Vice President of Environment and Permitting will handle all reporting and correspondence with the applicable regulatory agencies.
- The Vice President of Environment and Permitting will be responsible for any necessary reporting to LIM Corporate, the public or media regarding the release.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	Version: 0.0	Page: iii of v
Date Issued: June 30, 2011			

**Telephone numbers for internal and external emergency contacts are included in Appendix F.**

#### **IMPORTANT MESSAGE**

An emergency situation, such as a spill or release of a deleterious substance, may occur at any time. Any person who identifies a release is expected to take reasonable actions to stop the release and contain released materials, provided it is safe to do so. Only personnel trained in emergency release response are expected to initiate cleanup or full containment. All personnel and employees are expected to know and understand their responsibilities and related procedures contained in this Emergency Response Plan.

It is imperative to ensure that the health and safety of the Schefferville Area Iron Ore Project personnel is the highest priority in any emergency. Any measures or actions taken in response to a release incident should reflect the health and safety policies of this company.

For information on the emergency response actions to be taken in the event of a spill or release of petroleum, propane, or hazardous chemical products, refer to the [Schefferville Area Iron Ore Project Environmental Contingency Plan \(November 18, 2010, version 1.0\)](#), which is available at several locations throughout the property.

In the event of a serious or major accident, the person(s) who discovers the release is responsible for following the Emergency Procedures and securing the scene – doing everything reasonably possible to prevent further damage without risking safety or health of self or others.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: iv of v</b>
<b>Date Issued:</b> June 30, 2011			

## Table of Contents

<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 Purpose and Scope.....	2
<b>2.0 EMERGENCY RESPONSE PLAN DOCUMENT CONTROL .....</b>	<b>3</b>
2.1 Distribution .....	3
2.2 Review, Update and Revision History .....	3
2.3 Monitoring, Reporting and Audits .....	4
2.4 Reporting of Problems or Concerns .....	4
<b>3.0 SITE RISK ANALYSIS.....</b>	<b>5</b>
3.1 Risk Analysis Methodology .....	5
3.2 Potential Emergency Response Situations .....	6
3.3 Risk Review.....	9
<b>4.0 STRUCTURE AND RESPONSIBILITY.....</b>	<b>10</b>
4.1 Employees.....	10
4.2 Release Observer .....	10
4.3 On Scene Commander.....	10
4.4 Environmental Manager .....	11
4.4.1 Reporting .....	12
4.5 Vice President of Environment and Permitting.....	12
4.6 Plant/Crushing Superintendent .....	13
4.7 General/Mine Manager.....	14
4.8 Health and Safety Coordinator .....	14
<b>5.0 ALERTING AND NOTIFICATION PROCEDURES.....</b>	<b>16</b>
5.1 Communications Procedures .....	16
5.2 Internal Emergency Contacts .....	17
5.3 External Alerting Procedures.....	18

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: v of v</b>
<b>Date Issued:</b> June 30, 2011			

<b>6.0 RELEASE CONTROL AND CLEANUP PROCEDURES .....</b>	<b>20</b>
<b>7.0 EMERGENCY RESPONSE RESOURCES.....</b>	<b>21</b>
7.1    Release/Spill Response Inventory .....	21
7.2    Infrastructure and Equipment Maintenance .....	21
7.3    Local Emergency Phone Numbers.....	21
<b>8.0 EMERGENCY RESPONSE TRAINING .....</b>	<b>24</b>

## **LIST OF APPENDICES**

Appendix A	Figures
Appendix B	Controlled Copy Distribution List
Appendix C	ERP Revision History
Appendix D	Risk Assessment Matrix
Appendix E	Completed Risk Assessment Forms
Appendix F	Labrador Iron Mines Ltd. Schefferville Area Iron Ore Mine Emergency Phone Numbers
Appendix G	Environmental Incident Report Form

## **LIST OF TABLES**

Table 5-1	Internal Emergency Contacts .....	17
Table 5-2	External Emergency Contacts.....	19
Table 7-1	Spill Response Inventory.....	22

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 1 of 24</b>
<b>Date Issued:</b> June 30, 2011			

## 1.0 INTRODUCTION

---

This Emergency Response Plan for the Schefferville Area Iron Ore Mine (Western Labrador) Project located in Newfoundland and Labrador has been prepared by Labrador Iron Mines Limited (LIM). LIM's overall Project includes the re-activation and development of James North and South, and Redmond 2B and 5 mineral deposits which are located in Western Labrador, near the community of Schefferville, Quebec. The Project is located within the Labrador Trough Iron Range. The James and Redmond deposits are located approximately 5 km and 17 km, respectively, southwest of the town of Schefferville.

The beneficiation area, where ore will be crushed and washed, will be situated within an area called the Silver Yard, located approximately 1 km northeast of the James property in Labrador. An historical mining pit, the Ruth Pit, will be utilized as a reject fines disposal area for the washwater that originates from the Silver Yard beneficiation area. Site personnel will be provided camp and lunchroom facilities at a historically developed area approximately 3 km south of the Silver Yard area.

A general plan of the Project layout is shown in Figure 1 in Appendix A. The Redmond area is not shown in the appended figures, as it will be added at a later date, prior to work being conducted in that area, and this plan will be updated accordingly.

The Schefferville Area Iron Ore Mine will generate effluent mainly through the operation of the open pit dewatering systems (perimeter wells and in-pit sumps), the beneficiation process (reject fines washwater), sewage system treated wastewater, and stormwater.

Open pit dewatering water, Silver Yard area treated sewage system wastewater, and stormwater runoff will be directed to a combination of ditching and settling ponds. Camp area treated sewage system wastewater will be directed to a containment area. The beneficiation process water, or reject fines washwater, will be directed to the historical Ruth Pit. The main components of the reject fines washwater, other than water, are suspended solids and minimal potential residual chemical parameters (eg. Ammonia from occasional blasting which is considered to be minimal). Outlet locations include:

- the historical Ruth Pit discharge; and
- the James Settling Pond discharges into the Unnamed Tributary and James Creek.

These outlet locations and the containment area at the Camp, are shown on Figures 2 through 5 in Appendix A, below.

The Emergency Response Plan (ERP) for the Schefferville Area Iron Ore Mine is a key element in protecting the environment within and around the mine. This Plan will help ensure that any effluent releases to the environment are handled safely and efficiently, and in a manner that will limit any environmental damage and satisfy the appropriate regulatory requirements.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 2 of 24</b>
<b>Date Issued:</b> June 30, 2011			

## 1.1 Purpose and Scope

Section 30 of the Metal Mining Effluent Regulations (MMER) requires that an Emergency Response Plan (ERP) be completed and must be available for review by Environment Canada. The ERP is intended to address potential releases of deleterious substances to the environment. The Plan must include the following elements:

- a site risk analysis;
- an organizational scheme for emergency responses, including the roles and responsibilities of the mine's personnel;
- alerting and notification procedures;
- an inventory of release-response equipment, including the location of that equipment; and
- a training plan for the mine's personnel.

The ERP is a tool to provide guidance to company personnel who assume the various jobs, tasks and duties that are necessary to cope with and respond to emergency situations to ensure the protection of the environment, company assets and other stakeholders. The ERP defines the responsibilities of key personnel and outlines the step-by-step action plans that describe the immediate measures needed to prevent, control, limit, contain and/or neutralize releases of deleterious substances, as identified under MMER, on the Schefferville Area Iron Ore Mine property, thereby:

- minimizing their impact on the environment;
- reducing subsequent cleanup costs; and
- allowing operations to return to normal without undue delay.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	Version: 0.0	Page: 3 of 24
<b>Date Issued:</b> June 30, 2011			

## 2.0 EMERGENCY RESPONSE PLAN DOCUMENT CONTROL

---

This document is the sole property of Labrador Iron Mines Ltd. (LIM). This section describes the distribution, review and update requirements, testing, and the revision history of the Plan.

### 2.1 Distribution

The ERP shall be accessible to all employees, departments and agencies having responsibilities in the plan. Controlled copies of the ERP will be distributed to those individuals, organizations and/or locations listed in the Controlled Copy Distribution List (Appendix B). Controlled copy holders will be provided with a copy of the Plan that is up-to-date and contains the most current information. All revisions, additions and deletions to the Plan will be provided and/or communicated to those holders by the Environmental Manager.

In addition to the locations and with the personnel listed in the Controlled Copy Distribution List, the controlled version of the ERP is located on the company's shared directory (Note: any copy of the ERP printed from the database is considered to be "uncontrolled"):

LIM link to file: P:\Environment\ERP

Upon request, the Environmental Manager may provide "uncontrolled copies" (i.e., copies of the Plan that will not receive future revisions, additions and deletions) to individuals and/or organizations not listed in the Controlled Copy Distribution List. The Environmental Manager will retain a record of those provided with uncontrolled copies of the Plan.

Additional copies or updates of the ERP may be obtained from:

Linda Wrong, P.Geo.  
Vice President, Environment & Permitting  
Tel: 1-647-728-4115  
E-mail: wrong.l@labradorironmines.ca

**Note:** Where appropriate, visitors to the mine site will be made aware of the key elements of the ERP.

### 2.2 Review, Update and Revision History

The Vice President (VP) of Environment and Permitting, Environmental Manager, General/Mine Manager, Plant/Crushing Superintendent, and Health and Safety Coordinator will annually, or as necessary, review the ERP to ensure it accurately reflects LIM's needs and the requirements of the MMER. Following review, if revisions to the ERP are required, necessary changes will be made and the Plan will be marked with the version and the date of issue. Changes in the document will be distributed to those individuals, locations and organizations included in the Controlled Copy Distribution List

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 4 of 24</b>
<b>Date Issued:</b> June 30, 2011			

(Appendix B), and will be communicated to those individuals who have responsibilities in the Plan. A log of revisions to the ERP will be retained (Appendix C) and will include the:

- the version of the Plan;
- the date of issue;
- name of last issuer; and
- brief description of the revisions to the Plan.

Any Plan holder or reader can suggest revisions be made to the Plan. If individuals/organizations believe the ERP should be revised, a revision request must be submitted to the VP of Environment and Permitting. It is at the discretion of the VP of Environment and Permitting whether or not the Plan will or will not be revised. Revision of the ERP may only be completed with the approval of Management. Personnel affected by any revisions or changes should be notified and their training updated if necessary. Revisions or changes in the ERP should also be incorporated into the site environmental and safety training.

### **2.3 Monitoring, Reporting and Audits**

Continual review and enhancement of the ERP will be conducted with a goal of continuous improvement. The purpose of monitoring and auditing the emergency response systems is to identify any problems or aspects of the plan that can be improved, and to determine appropriate actions to address these issues.

### **2.4 Reporting of Problems or Concerns**

All LIM employees and contractors/sub-consultants are responsible and encouraged to report problems or concerns related to any aspect of this ERP to the VP, Environment & Permitting.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 5 of 24</b>
<b>Date Issued:</b> June 30, 2011			

## 3.0 SITE RISK ANALYSIS

---

To identify potential areas of the operations that could impact the environment, a site risk analysis was completed. The analysis assessed potential emergency situations at the site for their probability or frequency of occurrence and their consequence or magnitude of impact.

### 3.1 Risk Analysis Methodology

The following steps were completed to identify the hazards associated with potential emergency releases of deleterious substances as defined under MMER:

1. **Determine Risk Assessment Framework** – The concepts outlined in the “CSA Plus 1145 - A Guide to Identifying Significant Environmental Aspects” were applied to analyze site risk.
2. **Identify Activities or Situations** – Activities or situations that could occur at the facility that would result in the release of a deleterious substance were identified. Only the releases that are considered emergencies (i.e., those releases which occur that are uncontrolled) and are regulated under MMER were considered during the analysis.
3. **Identify the Environmental Aspects of Each Activity or Situation** – The environmental aspects (or how an element or elements of an activity or situation interact with the environment) were identified. In the case of this risk analysis, the environmental aspect for all activities was the release of effluent containing high TSS (total suspended solids) and potentially trace chemical parameters (eg. Ammonia).
4. **Determine the Environmental Impacts of Each Aspect** – The actual or potential environmental impacts for each identified aspect (see Step 3) were determined. Impacts include those that have an effect on the biophysical environment, LIM assets or stakeholders (e.g., employees, public, regulators, media, etc.).
5. **Evaluate Significance of Environmental Impacts (Risk Ranking)** – After the actual or potential environmental impacts were identified, the significance or risk rankings were determined. The risk was determined by assessing both the probability of the aspect/impact occurring and what its overall consequence (i.e., impact on the environment, assets and stakeholders) would be. Refer to Appendix D for the risk assessment matrix template that was used during the assessment. Based on the probability and consequence, each aspect/impact was given an overall risk score.
6. **Identify Controls** – For those impacts identified to have an effect on the environment, recommended controls or measures to manage those impacts were identified.
7. **Determine Responsibility for Controls** – For each of the identified controls, the person/department/organization responsible for implementing the control was determined.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 6 of 24</b>
<b>Date Issued:</b> June 30, 2011			

Information from Steps 2 to 7 of the risk analysis were documented in tabular format (Table E-1 in Appendix E). For each potential emergency situation, the environmental aspect, potential environmental impact, risk ranking, recommended controls and responsibilities are provided.

All risks identified during the site-risk analysis are managed in order to reduce the likelihood or impact of an accident. These controls are described in Section 6.0 – Spill Control and Cleanup Procedures of this Plan.

### 3.2 Potential Emergency Response Situations

Potential emergency response situations due to un-planned or un-controlled releases of effluent at the Schefferville Area Iron Ore Mine may include the following:

- Reject fines pipeline emergency drainage at the Silver Yard Beneficiation Plant or pipeline rupture or failure;
- Silver Yard Beneficiation Plant washing equipment rupture or leak or breach, failure, or overtopping at the Silver Yard Settling Pond;
- Dewatering or in-pit sump piping arrangement rupture or leak (between the open pits and the James Settling Pond);
- Breach, failure, or overtopping at the Ruth Pit control/conveyance structures;
- Breach, failure, or overtopping at the James Settling Ponds; and
- Breach, failure, or overtopping at the Camp Biodisk Discharge Containment Area.

#### Reject Fines Washwater Pipeline

If a power outage should occur and the reject fines washwater pipeline requires drainage, effluent will flow (by gravity) to the Silver Yard Settling Pond (SYSP), then in turn to the James Settling Pond #3 (JSP3) via the Silver Yard Ditch, and will not impact any natural water course. The settling ponds and ditch are designed to control and treat effluent resulting from this event. The probability of this event occurring is occasional and controls (settling ponds) are in place to prevent any direct environmental impact.

Although the probability of a rupture or leak from the reject fines washwater pipeline is remote; the consequences of environmental impacts may be as follows:

- impact to the surrounding land and vegetation;
- impact to water quality, fish, and fish habitat if the effluent reaches James Creek; and
- impact to mine assets (roadways, pipeline, etc.).

In the event of an un-planned or un-controlled release, controls would include diversion of flow away from vegetation, undisturbed land, James Creek, and LIM infrastructure.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 7 of 24</b>
<b>Date Issued:</b> June 30, 2011			

### Silver Yard Beneficiation Plant

The Silver Yard Beneficiation Plant site is generally graded to direct surface runoff to the Silver Yard Ditch which directs drainage to the James Settling Pond #3 (as shown on Figure 4 in Appendix A). The Silver Yard Settling Pond, which is in place to accept discharge from the Beneficiation Plant wastewater treatment plant, and emergency and maintenance discharge from the reject fines washwater pipeline, also discharges to the Silver Yard Ditch. Should plant washing equipment rupture or leak, any effluent will be directed by general grading to the Silver Yard Ditch, then in turn to the James Settling Pond #3. Any effluent release as a result of breach, failure, or overtopping at the Silver Yard Settling Pond will also be directed to the James Settling Pond #3, via the Silver Yard Ditch.

The probability of an un-planned or un-controlled release in these situations is remote and controls (settling pond and ditching) are in place to prevent any resulting environmental impact. In addition, the surrounding land will be disturbed through mine development, with little to no vegetation. There could be minor impact to mine assets, resulting in repairs, which could be controlled by flow diversion.

### Dewatering and In-pit Sump Piping

Dewatering water from the perimeter dewatering wells and the in-pit sumps in the open pit will be directed to the James Settling Ponds via pump and surface piping arrangements and ultimately to the Unnamed Tributary and Bean Lake. It is important to note that this groundwater will be relatively clean with typically minor TSS concentrations and that the ponds used for dewatering will not receive water contributions from any other source (other than seasonal precipitation). The probability of a leak or rupture in these piping systems is remote, and the potential impacts to surrounding undisturbed land, vegetation, and mine assets would be relatively minor, however, there could be a significant environmental impact should effluent discharge directly into the Unnamed Tributary if the flow erodes and transports surficial sediments during the release event.

Preventative measures to reduce the probability and impacts of such an event occurring would include scheduled monitoring and maintenance of the piping systems, and grading of slopes and direction of the ditching surrounding the piping systems to direct flow away from the Unnamed Tributary, where possible. In the event of a release, recommended control measures include diversion of flow from undisturbed land, vegetation, the Unnamed Tributary, and mine infrastructure (roadways, pipelines, etc.).

### Ruth Pit Control/Conveyance Structures

The control/conveyance structures in place at Ruth Pit could potentially fail, be breached or overtopped allowing effluent release to James Creek. The probability of such an occurrence is remote as these structures will be designed and constructed to current standards. The potential environmental impacts to surrounding undisturbed land, vegetation and mine assets would be considered intermediate, however, should effluent discharge directly into James Creek there could be intermediate to significant environmental impacts to the water quality, fish and/or fish habitat. Preventative measures to reduce the probability and impacts of such an event occurring would include scheduled monitoring and

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 8 of 24</b>
<b>Date Issued:</b> June 30, 2011			

maintenance of the control/conveyance structures. In the event of an un-planned or un-controlled release, recommended control measures include diversion of flow from James Creek, undisturbed land, vegetation and mine infrastructure (roadways, pipelines, etc.).

#### James Settling Ponds and Camp Biodisk Discharge Containment Area

The embankments containing the James Settling Ponds, and the Camp Biodisk Discharge Containment Area are designed, and constructed using current engineering principles and practices, and will be monitored for erosion and maintenance requirements forming part of the preventative measures in place to reduce the probability and impacts from an un-controlled or un-planned release event. The embankments are designed and constructed to contain design storms and floods in accordance with current accepted engineering practice.

#### *James Settling Pond #3*

James Settling Pond #3 accepts discharge from the Silver Yard Ditch and from the in-pit sumps from the open pits. It drains, via ditch, to James Creek. The probability of a breach, failure, or overtopping of the embankments is considered remote. In the event of an un-planned or un-controlled release, downstream environmental impact to James Creek, undisturbed land or vegetation, would be considered negligible to minor depending on the time of year (fish hatching season). Impacts to mine assets would include relatively minor embankment repair. Preventative measures, as described above would include scheduled monitoring and maintenance of the pond. Recommended control measures in the event of an un-planned or un-controlled release would include diversion of flow away from undisturbed land, vegetation, James Creek, and mine infrastructure (roadways, pipelines, etc.).

#### *James Settling Pond #1 and #2*

James Settling Ponds #1 and #2 accept discharge from the pit dewatering systems. It is important to note that this water will be relatively clean with typically minor TSS concentrations. These ponds drain, via ditch, to the Unnamed Tributary and to James Creek. The probability of a breach, failure, or overtopping of the embankments is considered remote. In the event of an un-planned or un-controlled release, downstream environmental impact to the Unnamed Tributary and/or James Creek, could be considered significant if the flow erodes and transports surficial sediments during the release event. Environmental impact to undisturbed land, vegetation, and mine assets would be classified as intermediate. Preventative measures, as described above would include scheduled monitoring and maintenance of the ponds. Recommended control measures in the event of an un-planned or un-controlled release would include diversion of flow away from undisturbed land, vegetation, the Unnamed Tributary, James Creek and mine infrastructure (roadways, pipelines, etc.).

#### Camp Biodisk Discharge Containment Area

The Camp Biodisk Discharge Containment Area will be accepting discharge from the wastewater treatment plant. Currently, there is no discharge from the containment area; however, future infiltration of compliant discharge into the ground of treated wastewater is planned upon confirmation of

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	Version: 0.0	Page: 9 of 24
<b>Date Issued:</b> June 30, 2011			

compliance with the applicable permits. Surrounding general drainage is directed to Bean Lake via ditching. The probability of a breach, failure, or overtopping of the embankment is considered remote and any environmental impact to undisturbed land, vegetation, Bean Lake or mine assets would be classified as negligible. Preventative measures, as described above, would include scheduled monitoring and maintenance of the area. Recommended control measures in the event of a non-compliant release, would include diversion of flow away from undisturbed land, vegetation, Bean Lake, and mine infrastructure.

### **3.3 Risk Review**

On an annual basis as part of the review of the ERP, environmental risks identified during the site risk analysis will be reviewed to determine if there are any changes (i.e., additions, removals or changes) to the activities/situations, aspects or impacts.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 10 of 24</b>
<b>Date Issued:</b> June 30, 2011			

## 4.0 STRUCTURE AND RESPONSIBILITY

---

The initial stage of any emergency is critical and the effectiveness of the response will determine if the emergency situation will escalate to a higher level. Therefore all personnel must be fully aware of their individual duties and responsibilities contained in this Plan, including the prompt notification of additional/support personnel. To reduce potential confusion, the roles and responsibilities of all personnel/groups associated with emergency response in the ERP are outlined below. All positions outlined below will have a designate should they not be available.

### 4.1 Employees

Understand their roles and responsibilities in preventative measures, and emergency release response, including the contents of this ERP.

### 4.2 Release Observer

- Assess the situation and note any immediate risk to site personnel, the environment or mine assets (example buildings, tanks, other pipelines, etc.).
- Immediately notify the Environmental Manager at 418-585-2166 (during daytime hours) or 418-585-1959 (Corey McLister, Environmental Manager) and provide details of the spill (e.g., location, volume, product, cause, immediate emergency response measures taken, date and time, etc.).
- Until the arrival of the Environmental Manager, act as On Scene Commander and, if possible, stop the release of, or contain the product without risking safety or health of self or others.
- Fill out an Environmental Incident Report Form (see Appendix G) and forward it to the Environmental Manager.

### 4.3 On Scene Commander

**NOTE:** For all situations, the first person on the scene of an emergency is designated the On Scene Commander until such time as the Environmental Manager arrives on sight or an alternate is designated.

- Upon being notified of an emergency, the On Scene Commander will assess the situation based on all current information, and immediately contact the Environmental Manager and the VP of Environment and Permitting.
- Restrict access to the release area to only authorized personnel.
- Continue corrective action to regain control.
- Contact the General/Mine Manager to obtain additional emergency response support.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 11 of 24</b>
<b>Date Issued:</b> June 30, 2011			

- Inform the Health and Safety Coordinator.
- Inform and consult with applicable operating departments.
- Aid in any emergency response and remediation effort.
- If required, assist in conducting a root cause analysis to determine the cause of release or spill of any deleterious substance.

#### **4.4 Environmental Manager**

**NOTE:** Only the VP Environment and Permitting or the Environmental Manager (or designate) shall have the role of formally initiating the Emergency Response Plan. Once this decision is made, they may request the General/Mine Manager or Health and Safety Coordinator to activate the plan.

The Environmental Manager's responsibilities are as follows:

- Assume role of On Scene Commander once on site or once regular telephone or radio contact has been established.
- Contact the VP of Environment and Permitting for consultation and further direction on:
  - Initiating the External Alerting Procedures as outlined in Section 5.3;
  - Requirements for communication and/or support with/from external agencies (e.g., consulting firms, response agencies, etc.); and
  - Who will take on the responsibility of informing applicable Government agencies as required under existing regulations.
- Inform and consult with the General/Mine Manager and Health and Safety Coordinator as appropriate.
- Ensure the efficient execution of this Plan. The Environmental Manager is responsible for providing overall direction on the remediation of environmental issues.
- Provide expertise with respect to cleanup and follow-up actions once notified of a release.
- Take responsibility for overseeing external specialized resources if required.
- If the spill has the potential to enter the natural environment, ensure the Plant/Crushing Superintendent and/or external specialists contain the release by installing silt curtains (or other) or by placing berms, dykes or other obstructions to divert the flow of effluent.
- Conduct all required sampling to determine concentrations of deleterious substances as identified under MMER.
- Document all scene information, including field reporting and GPS-orientated photographs.
- Conduct root cause analysis to determine cause of release of any deleterious substance as identified under MMER, and provide information to the VP Environment and Permitting to identify risks and potential preventive measures to reduce the likelihood of the release recurring.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 12 of 24</b>
<b>Date Issued:</b> June 30, 2011			

- Take all necessary steps to identify activities/processes/etc. which led to elevated levels of any deleterious substance as identified under MMER, and provide mitigative measures.
- Keep the VP of Environment and Permitting informed about the spill and status of remediation and/or investigation.
- Provide relevant information to the VP of Environment and Permitting for dissemination to the public or media regarding the release.
- In consultation with the VP of Environment and Permitting, review and revise the ERP on an annual basis, or as required, insuring that it is up-to-date and effective.
- Ensure that each operating department has identified a list of personnel that could be called upon to assist the On Scene Commander in a release response incident.
- Ensure that spill response training is conducted with any designated employees who have been identified by their departments as responders to release incidents.
- Update the list of materials required for the Release/Spill Response materials storage area and other infrastructure every 6 months.
- Maintain a current listing of available support equipment at the Schefferville Area Iron Ore Mine indicating the locations of the same.
- Retain records required by this Plan, including training records, environmental incident reports, etc. and forward copies to the VP of Environment and Permitting.

#### **4.4.1 Reporting**

In the event of an unplanned occurrence of a deposit or release a deleterious substance, it is the responsibility of the Environmental Manager to prepare a written report. This written report shall be reviewed by the VP Environment and Permitting and submitted to the appropriate regulatory authority(ies) as soon as possible or no later than 30 days after the incident.

The written report shall contain information on the occurrence as outlined in Section 31(2) of the Metal Mining Effluent Regulations (MMER), and also summarized in section 5.3 of this Plan.

#### **4.5 Vice President of Environment and Permitting**

The LIM Vice President of Environment and Permitting's responsibilities are as follows:

- Upon notification of an emergency, consult with the Environmental Manager, Plant/Crushing Superintendent, Health and Safety Coordinator and General/Mine Manager as appropriate.
- Contact the Environmental Manager for consultation on:
  - Initiating the External Alerting Procedures as outlined in Section 5.3;
  - Requirements for communication and/or support with/from external agencies (e.g., consulting firms, response agencies, etc.); and

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 13 of 24</b>
<b>Date Issued:</b> June 30, 2011			

- Who will take on the responsibility of informing applicable Government agencies as required under existing regulations.
- Act as the company's spokesperson to the public or media.
- Keep Schefferville Area Iron Mine Project/LIM senior management informed about the release and status of remediation and/or investigation.
- Review the report that was prepared by the Environmental Manager, which covers all aspects of the release, and submit to the appropriate personnel/organizations. The appropriate personnel/organizations are dependent on the details of the release event (i.e. type, volume, impact, etc).
- Review any emergency response training programs developed and implemented by the Health and Safety Coordinator.
- In consultation with the Environmental Manager, review and revise the Emergency Response Plan on an annual basis, or as required, ensuring that it is up-to-date and effective.
- Review copies of the records forwarded by the Environmental Manager which include training records, environmental incident reports, etc.

#### **4.6 Plant/Crushing Superintendent**

The Plant/Crushing Superintendent's responsibilities are as follows:

- Along with the On Scene Commander, secure the scene (i.e., doing everything reasonably possible to prevent further damage without risking safety or health of self or others) until arrival of the Environmental Manager.
- In the event of an unplanned power outage that leads to effluent discharge, evaluate the need to flush the reject fines pipeline with water.
- In the event of a rupture of the reject fines pipeline, dewatering piping or in-pit sumps piping, if the release has the potential to impact the receiving environment, take all necessary steps to halt the flow of effluent.
- Where applicable and possible, divert the flow of effluent away from Schefferville Area Iron Ore Mine infrastructure (e.g., buildings, equipment, other pipelines, etc.) and vegetation using berms, dykes or other obstructions.
- Undertake required works to remediate the impact to the receiving environment as directed by the Environmental Manager.
- Undertake all required repairs/replacement of reject fines pipeline, dewatering and/or in-pit sump systems infrastructure.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 14 of 24</b>
<b>Date Issued:</b> June 30, 2011			

#### **4.7 General/Mine Manager**

The General/Mine Manager's responsibilities are as follows:

- Upon being notified by the On Scene Commander or Environmental Manager of an emergency, proceed directly to the scene.
- Assist the On Scene Commander and/or Environmental Manager in assessing the situation.
- Along with the On Scene Commander and/or Environmental Manager, secure the scene (i.e., doing everything reasonably possible to prevent further damage without risking safety or health of self or others).
- Provide resources for adequate and appropriate emergency response.
- Overall responsibility and authority to organize emergency response measures concerning plant operations, i.e., shutting down mine/plant operations to protect the health and safety of personnel on site, the environment or company assets/infrastructure.
- In the event of a release of a deleterious substance, consult with Environmental Manager, Plant/Crushing Superintendent, Vice President of Environment and Permitting, and Health and Safety Coordinator to determine if it is appropriate to shut down the Plant, Mine or evacuate the site.
- Determine when it is safe to return to routine operations.
- Assist Environmental Manager with root cause analysis of the event to identify risks and potential preventive measures to reduce the likelihood of the release recurring.

#### **4.8 Health and Safety Coordinator**

The Health and Safety Coordinator's responsibilities are as follows:

- Prepare and implement emergency response training programs.
- Maintain training records.
- Provide support to the On Scene Commander and Mine/Plant/Crushing Superintendents for adequate and appropriate emergency response.
- Assist General/Mine Manager in assessing emergency response measures concerning plant operations, i.e., shutting down mine/plant operations to protect the health and safety of personnel on site, the environment or company assets/infrastructure.
- In the event of a release, consult with Environmental Manager, Plant/Crushing Superintendent, VP of Environment and Permitting, to determine if it is appropriate to shut down the Plant, Mine or evacuate the site.
- Assist General/Mine Manager in determining when it is safe to return to routine operations.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	Version: 0.0	Page: 15 of 24
<b>Date Issued:</b> June 30, 2011			

- Assist Environmental Manager with root cause analysis of the event to identify risks and potential preventive measures to reduce the likelihood of the release recurring.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 16 of 24</b>
<b>Date Issued:</b> June 30, 2011			

## 5.0 ALERTING AND NOTIFICATION PROCEDURES

---

### 5.1 Communications Procedures

Responsibilities for internal and external communication, including the reporting of releases, must be clearly defined. In the event of a release, follow the steps outlined below:

- The person (i.e., employee, contractor, etc.) who identifies the release should immediately notify the onsite Environmental Manager and give details of the release (e.g., location, volume, effluent/material type, cause, date and time, etc.). Should it be safe to do so, this person should attempt to contain or limit the flow of materials to the environment.
- During normal work hours, the Environmental Manager can be reached at 1-418-585-2166. During off hours, please call 1-418-585-1959 (Corey McLester, onsite Environmental Manager) or 1-902-220-7189 (Brian Chisolm, Innu Municipal onsite Manager). Once notified, the Environmental Manager will immediately notify the VP of Environment and Permitting and the General/Mine Manager to report the release, then continue with release response activities and provide cleanup and follow-up actions. The Environmental Manager may request the General/Mine Manager to deploy additional emergency response efforts to the incident site.
- Based upon the information provided by the Environmental Manager, the Vice President (VP) of Environment and Permitting will then call the 24-hour Environmental Response Canadian Coast Guard Hotline 1-800-563-9089 or 1-709-772-2083 with a preliminary report (see Section 5.3 for information requirements). The VP of Environment and Permitting may request the Environmental Manager to make this call on their behalf.
- The VP Environment and Permitting and the Environmental Manager will consult with the General/Mine Manager, and Health and Safety Coordinator, as appropriate, to address the concerns associated with the release.
- Only the VP Environment and Permitting or the Environmental Manager (or designate) shall have the role of formally initiating the Emergency Response Plan. Once this decision is made, they may request the General/Mine Manager or Health and Safety Coordinator to activate the plan.
- The Vice President of Environment and Permitting, in consultation with the Environmental Manager, will decide whether communication with external agencies (e.g., consulting firms, response agencies, etc.) is required and will follow up with government agencies if necessary.
- The Vice President of Environment and Permitting will handle all reporting and correspondence with the applicable regulatory agencies.
- The Vice President of Environment and Permitting will be responsible for any necessary reporting to LIM Corporate, the public or media regarding the release.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 17 of 24</b>
<b>Date Issued:</b> June 30, 2011			

Telephone numbers for internal and external emergency contacts are included in sub-sections 5.2 – Internal Emergency Contacts and 5.3 – External Emergency Contacts, and both are included in Appendix F.

All contacts (internal and external) included in the telephone contact lists shall be aware that they are on the list and know what is expected of them. When necessary, training will be provided to these individuals to ensure they are capable of responding to the situation.

## 5.2 Internal Emergency Contacts

Names and telephone numbers for internal Schefferville Area Iron Ore Mine emergency contacts are presented in Table 5-1, below and in the LIM Emergency Phone Numbers table in Appendix F.

**Table 5-1 Internal Emergency Contacts**

On-Site Emergency Contacts		
Department/Process	Name	Phone Numbers
VP of Environment and Permitting	Linda Wrong	Office: 647-728-4115 Cell: 416-660-2979
Environmental Manager	Corey McLister	Office: 418-585-2166 Cell: 418-585-1959
Environmental Scientist	Shawn Duquet	Office (Lab): 647-776-7873
LIM General/ Mine Manager	Rowan Maule	Office: 418-585-2666
Innu Municipal (IM) Mine Superintendant	Kevin Taylor	Cell: 709-280-3569
LIM Manager of Health and Safety	Don Hindy	Office: (780) 433-2112 Cell: (780) 850-2026
IM Health and Safety Coordinator	Mark Dunne/ Terry Hawco	Office: 418- 585-2666
IM Site Manager	Brian Chisolm	Office: 418-585-2665 Cell: 709-280-4493
IM General Superintendent of Operation	John Young	Cell: 709-280-4703
IM Plant/Crushing Superintendent	Al Wagner	Cell: 709-282-8635

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 18 of 24</b>
<b>Date Issued:</b> June 30, 2011			

### 5.3 External Alerting Procedures

The Environmental Manager, in consultation with the VP Environment and Permitting will initiate the External Reporting Procedure when required.

The following steps will be taken:

1. Immediately call the Environmental Response Canadian Coast Guard at the Spill Report Line (709) 772-2083 or (800) 563-9089 to report the release (as required by the Fisheries Act). Required pertinent information includes:
  - a. Name of reporter and phone number;
  - b. Time of release;
  - c. Time of detection of release;
  - d. Type of effluent/material released;
  - e. Amount of effluent/material released;
  - f. Location of release;
  - g. Source of release;
  - h. Type of accident – rupture, overflow, other;
  - i. If the release is still occurring;
  - j. If the release is contained, and if not, where it is flowing;
  - k. Wind velocity and direction;
  - l. Temperature;
  - m. Proximity to waterbodies, water intakes, and facilities;
  - n. Snow cover and depth, terrain, and soil conditions; and
  - o. Potential health and environmental hazards.

The Environmental Incident Report Form in Appendix G gives the categories of information required for this call.

2. Within 24 hours, fax or email a copy of the Environmental Incident Report Form to:

Troy Duffy, Environmental Engineer  
 Department of Environment and Conservation, Pollution Prevention Division  
 Fax: (709) 643-8654 (Stephenville)  
 Email: [duffyt@gov.nl.ca](mailto:duffyt@gov.nl.ca); and

Graham Thomas, Environmental Emergencies Coordinator  
 Environment Canada  
 Fax: (709) 772-5097  
 Email: [graham.thomas@ec.gc.ca](mailto:graham.thomas@ec.gc.ca).

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 19 of 24</b>
<b>Date Issued:</b> June 30, 2011			

3. Send copies of the Environmental Incident Report Form to:

General/Mine Manager;  
Health and Safety Coordinator; and  
Environmental Manager.

**Note: If all the release information is not available at the time of the release, an Environmental Incident Report is still required in the timeframes noted above.** When a report is incomplete, then a completed report should be sent to (2) and (3) above, when it is available.

The Environmental Manager's designate will follow the external reporting procedure, in consultation with the VP Environment and Permitting, when the Environmental Manager is not available.

Other external emergency contact information is provided in Table 5-2.

**Table 5-2     External Emergency Contacts**

Agency/Organization	Telephone Number
Environmental Response Canadian Coast Guard 24-Hour Hotline	1-800-563-9089 (709) 772-2803
Department of Environment and Conservation (Pollution Prevention Division), Mr. Troy Duffy	W: (709) 643-6114 Cell: (709) 639-3980
Environment Canada Environmental Emergencies Co-ordinator, Mr. Graham Thomas	Bus (709) 772-4285 Cell (709) 687-5634
LIM Schefferville Office	Office: 418-585-2166 Fax: 418-585-2277
Schefferville Police	418-585-2626
Schefferville Nursing Station	418-585-2644
Kawawachikamach Nursing Station	418-585-2110
Matimekosh Nursing Station	418-585-3664
Schefferville Ground Ambulance	418-585-2055
Air Ambulance	Called by the Nursing Station
Schefferville Fire Department	418-585-2863
Surête du Québec (Police) – <b>for Québec</b>	418-585-2626
Royal Canadian Mounted Police (RCMP) – <b>For Newfoundland and Labrador</b>	418-585-2225

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	Version: 0.0	Page: 20 of 24	
		<b>Date Issued:</b> June 30, 2011		

## 6.0 RELEASE CONTROL AND CLEANUP PROCEDURES

---

To respond to an effluent discharge resulting from any of the activities or situations identified in the risk assessment, the following steps should be followed:

- Limit the release.
- Contain and control the release.
- Remove or clean up the deleterious substance.
- Complete an environmental incident report.

Note that any release of effluent or deleterious substance may have significant environmental consequences. Initial containment and control should be implemented as soon as possible. However, any further containment and remedial measures should be reviewed and/or supervised by the Environmental Manager, prior to implementation.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT EMERGENCY RESPONSE PLAN</b>	<b>Version: 0.0</b>	<b>Page: 21 of 24</b>
<b>Date Issued:</b> June 30, 2011			

## 7.0 EMERGENCY RESPONSE RESOURCES

---

### 7.1 Release/Spill Response Inventory

Existing and planned spill response inventory is listed in Table 7-1, below. Figures 1 through 5 in Appendix A present the locations of existing and planned spill response equipment and infrastructure across the site. Figures 2 through 5 present these locations more specifically for Ruth Pit, Silver Yard, the James Mine area, and the Camp. As previously stated, the Redmond area will be added at a later date, and the plan will be updated accordingly. Existing locations presented on the figures reflect the construction period and planned locations reflect the operations period. This operation is a seasonal operation from April to November, therefore, a review of the spill kit locations and areas of high vehicle traffic/use will be evaluated each February or March to determine the necessity for new locations and the plan will be reviewed accordingly.

A Spill Response Trailer will be strategically located for operations prior to start up. To gain entry to the trailer, keys are held in trust with the Environmental Manager, the Plant/Crushing Superintendent, and the General/Mine Manager.

### 7.2 Infrastructure and Equipment Maintenance

Emergency response infrastructure and equipment includes any or all infrastructure and equipment related to emergency response situations related to spills, leaks, fires, environmental impact, health and safety or any other emergency situation. All emergency response infrastructure and equipment must be maintained to ensure the health and safety of employees and avoid undue environmental impacts that could have otherwise been prevented.

An inspection and maintenance schedule will be developed for all equipment. Inspections will include review of the condition, necessity, location and cleaning/repair/maintenance requirements for each piece of equipment or infrastructure. This will be carried out by the Environmental Manager.

See Table 7-1 for a list of infrastructure and equipment. The associated inspection and maintenance schedule will be added to the Table during the plan review process.

### 7.3 Local Emergency Phone Numbers

Local emergency phone numbers are presented in Appendix F.

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT</b> <b>ENVIRONMENTAL CONTINGENCY PLAN</b>	<b>Version: 0.0</b>	<b>Page: 22 of 24</b>
		<b>Date Issued:</b> June 30, 2011	

**Table 7-1 Spill Response Inventory**

STATUS	LOCATION	ITEMS			COMMENTS
		Product	Size	Quantity	
EXISTING	Silver Yard (SY) – near main road	45 gallon lab pack with lid		1	45 Gallon spill kit and temporary trailer with 5 packs of replacement pads (200 each)
		Absorbent pads	15"x18"	50	
		Socks	3"x4'	6	
		Pillows	9"x15"	4	
		Pair Nitrile gloves		2	
		Pair splash resistant goggles		2	
		Disposable bags		4	
	West of Silver Yard	50 gallon lab pack with lid		1	50 Gallon spill kit
		Absorbent pads	15"x18"	50	
		Socks	3"x4'	6	
		Pillows	9"x15"	4	
		Pair Nitrile gloves		2	
		Pair splash resistant goggles		2	
		Disposable bags		4	
	Two (2) James Settling Pond Areas	50 gallon lab pack with lid		1	2 x 50 Gallon spill kits
		Absorbent pads	15"x18"	50	
		Socks	3"x4'	6	
		Pillows	9"x15"	4	
		Pair Nitrile gloves		2	
		Pair splash resistant goggles		2	
		Disposable bags		4	
	All LIM Trucks	Clear vinyl zip bag		1	Truck Kit – Vinyl Zipper Bags
		Absorbent pads	15"x18"	10	
		Socks	3"x4'	3	
		Pair Nitrile gloves		1	
		Disposal bag		1	
	Additional Materials in Storage	Spill trays	2'x2'x6"	4	Located in Sea Cans at Silver Yard (mobile for vehicles)
		Pop up berms	4'x4'x6"	2	
		95 Gallon kits		2	
		65 Gallon kits		5	
		30 Gallon kits		6	

	<b>SCHEFFERVILLE AREA IRON ORE PROJECT</b> <b>ENVIRONMENTAL CONTINGENCY PLAN</b>	<b>Version: 0.0</b>	<b>Page: 23 of 24</b>
<b>Date Issued:</b> June 30, 2011			

**Table 7-1 Spill Response Inventory (continued)**

STATUS	LOCATION	ITEMS			COMMENTS
		Product	Size	Quantity	
PLANNED <sup>1</sup>	Spill Response Trailer at SY <sup>2</sup>				Location and contents to be determined
	Ruth Pit Outlet				Contents to be determined
	SY Fuel Storage				Contents to be determined
	SY Plant Generators				Contents to be determined
	SY Ramp to Primary Crusher				Contents to be determined
	SY Office/Laboratory				Contents to be determined
	SY Crusher Oil Storage Tank				Contents to be determined
	Maintenance Workshop				Contents to be determined
	Haul Road / Rail Loading				Contents to be determined
	Generators for James Dewatering				Contents to be determined
	Road between James and Camp				Contents to be determined
	Camp – fuel storage and generator				Contents to be determined
	Environmental Truck				Large kit with large boom – contents to be determined

Note:

1 – These locations are planned for operations, shown on 1 through 5.

2 – Location to be determined.

**SCHEFFERVILLE AREA IRON ORE PROJECT**  
**EMERGENCY RESPONSE PLAN**

Version: 1.1

Page: 24 of 24

Date Issued: June 30, 2011

## **8.0 EMERGENCY RESPONSE TRAINING**

---

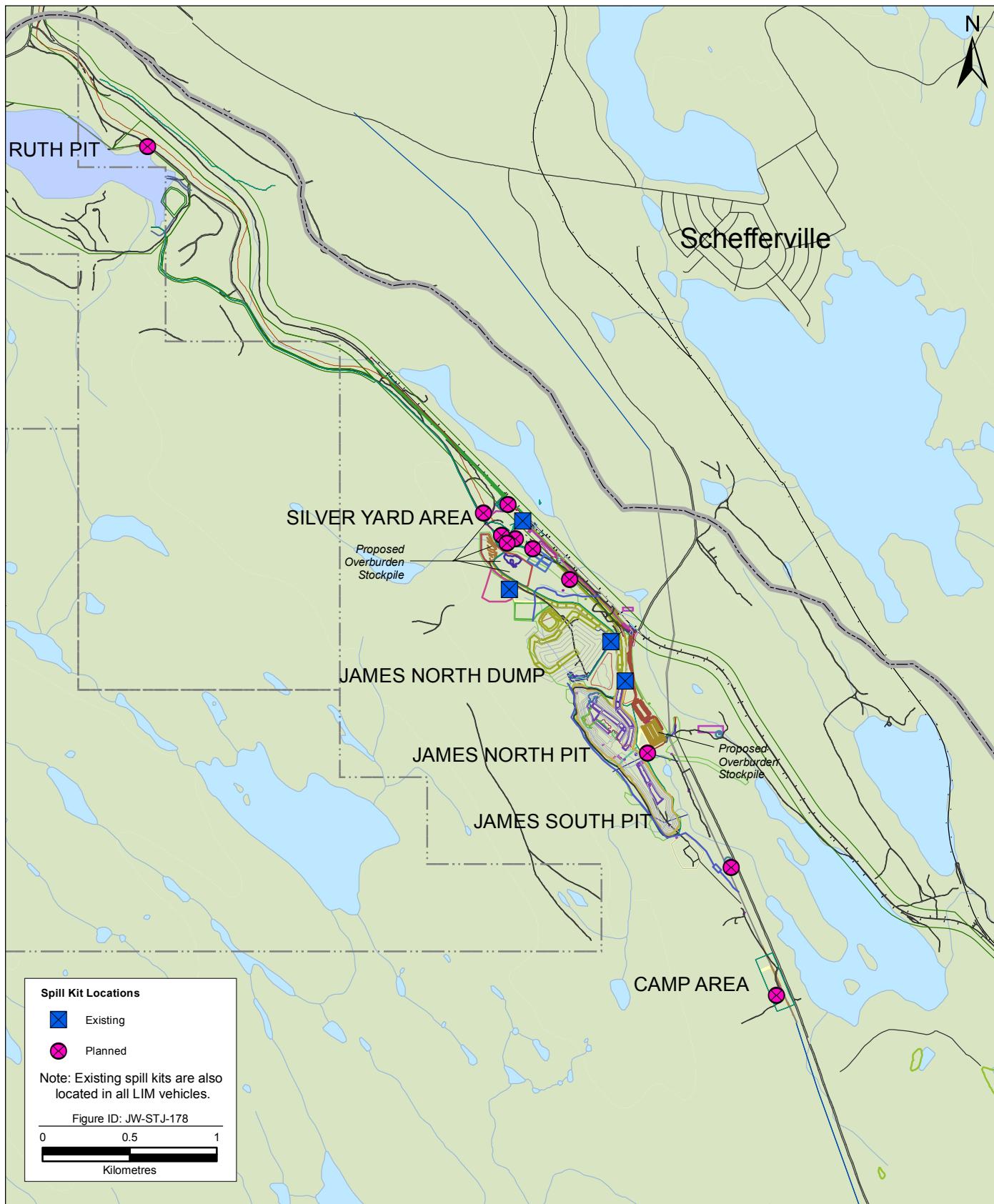
Employee education and awareness about the ERP, and continual communication are important to ensure the success of the Plan. All company staff and contractors/consultants should be informed about the Plan and should know and understand their responsibilities under the Plan. On-going communication about plan implementation, changes and results will ensure a high level of awareness about the Plan.

**Information on environmental and safety awareness and the ERP at the Schefferville Area Iron Ore Mine will be provided to all new employees and contractors/consultants during standard site orientation training.** Additional information and training will be provided on an individual basis, specific to the work area of the employee or contractor/sub-consultant.

A list of employees, staff and contractors/consultants will be kept by the Environmental Manager and the Human Resources department, and will include the type of training each individual received, the date of the training and any updates or additional training.

# **APPENDIX A**

## Figures



LABRADOR IRON MINES LTD.

PROJECT TITLE:

**SCHEFFERVILLE AREA IRON ORE  
PROJECT EMERGENCY RESPONSE PLAN**

DRAWING TITLE:

**SPILL KIT LOCATIONS WITHIN PROJECT AREA**

SCALE: 1:31,000 DATE: May 19, 2011

DRAWN BY: CP CHECKED BY:

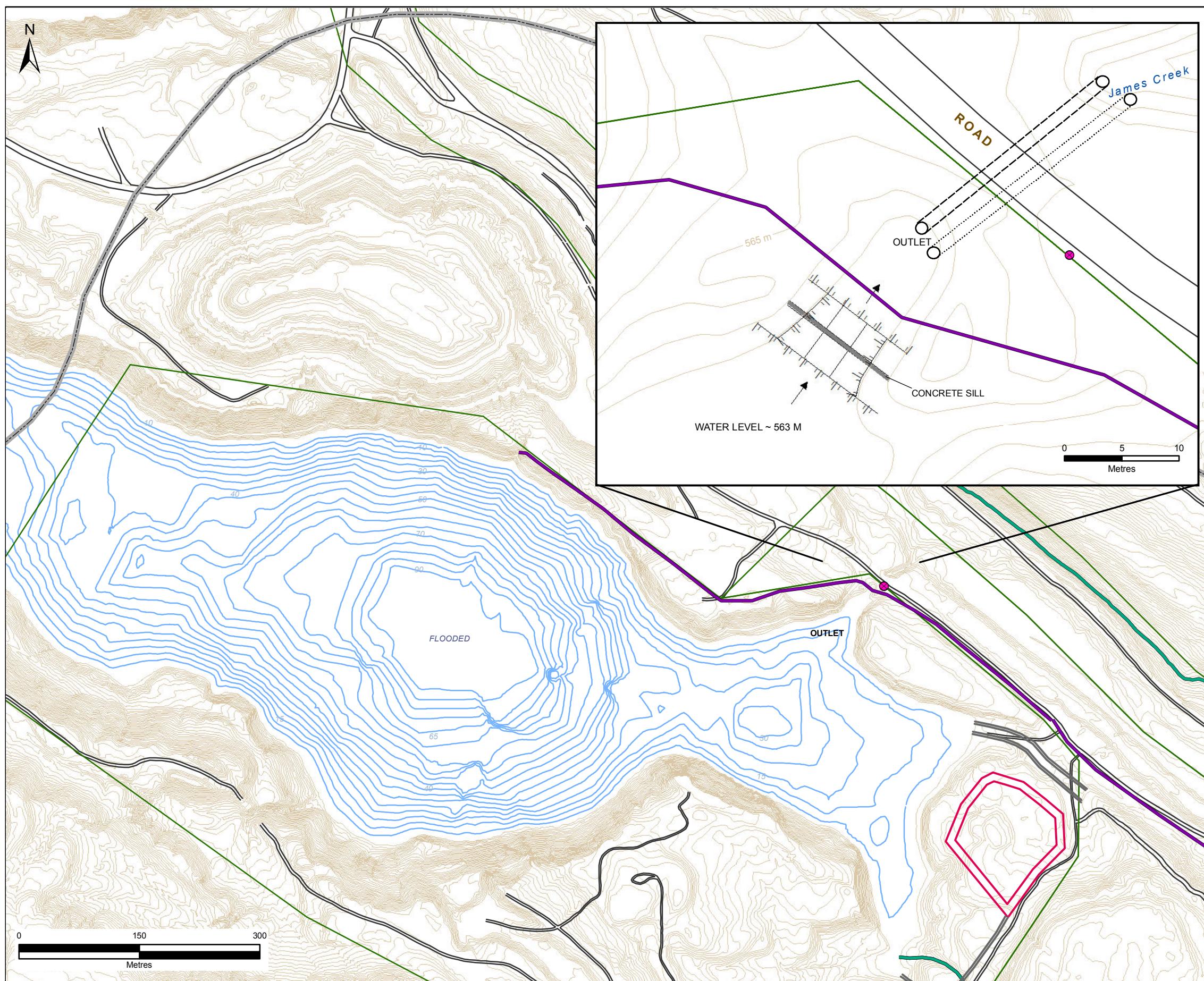
EDITED BY: AF REV. NO. 0

DRAWING NO.: 1

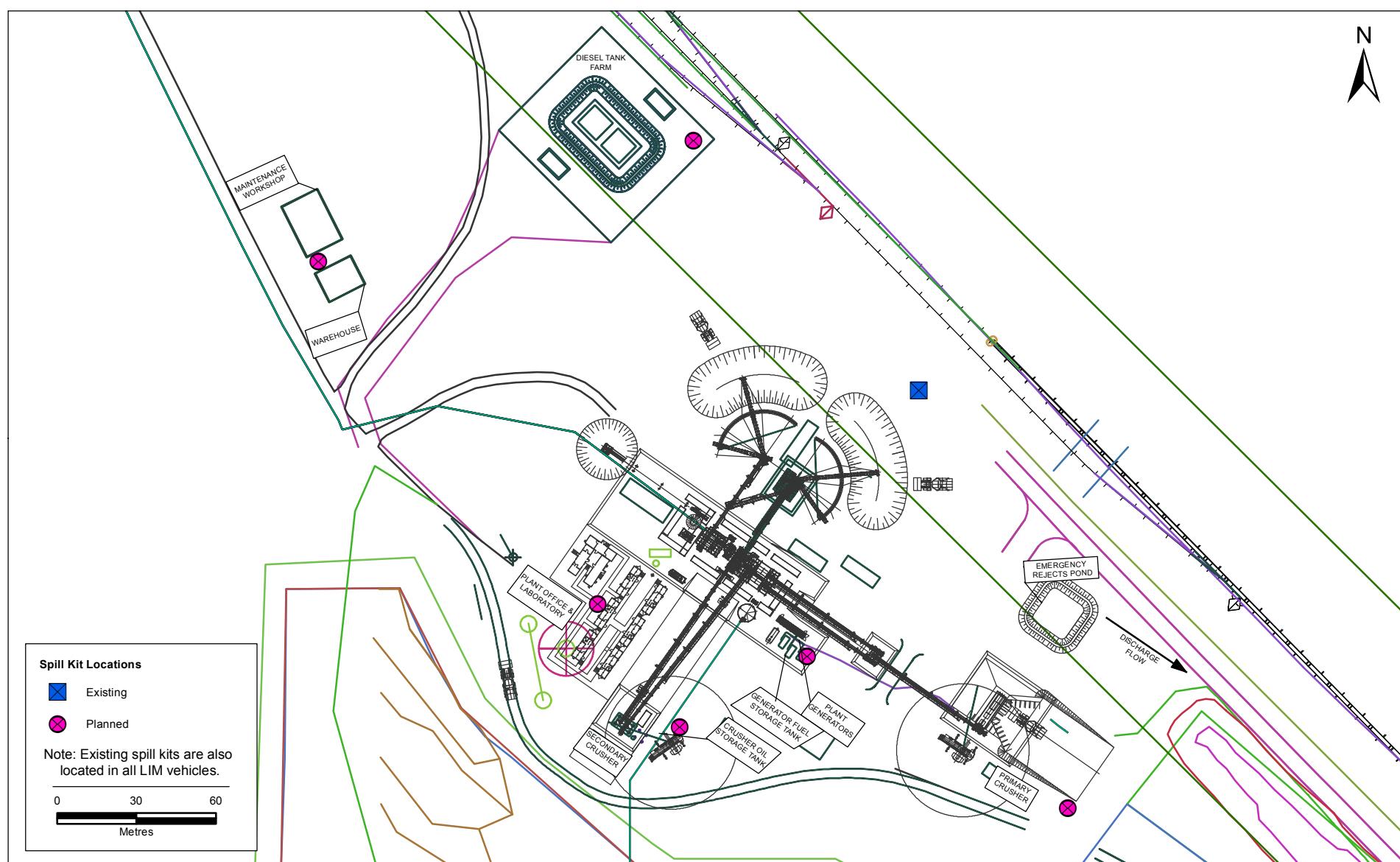
MAP FILE: JW-STJ-178











LABRADOR IRON MINES LTD.

PROJECT TITLE:

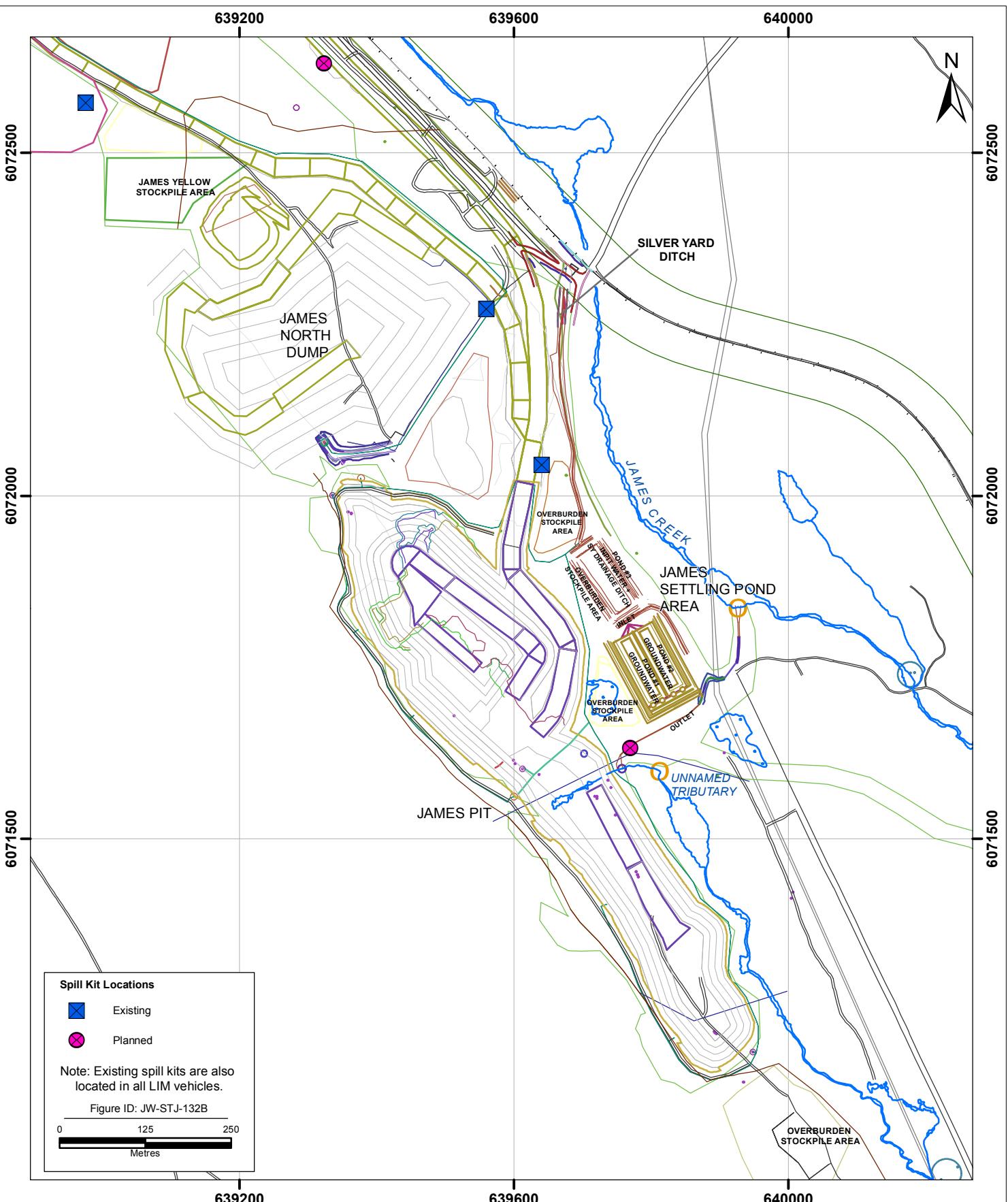
**SCHEFFERVILLE AREA IRON ORE  
PROJECT EMERGENCY RESPONSE PLAN**

DRAWING TITLE:

**SETTLING POND OUTLET AND  
SPILL KIT LOCATIONS AT SILVER YARD BENEFICIATION PLANT**

SCALE:	1:2,100	DATE:	MAY 19, 2011
DRAWN BY:	AF	CHECKED BY:	
EDITED BY:		REV. No.	0
DRAWING No.:	3		
MAP FILE: JW-STJ-179.MXD			





LABRADOR IRON MINES LTD.

PROJECT TITLE:

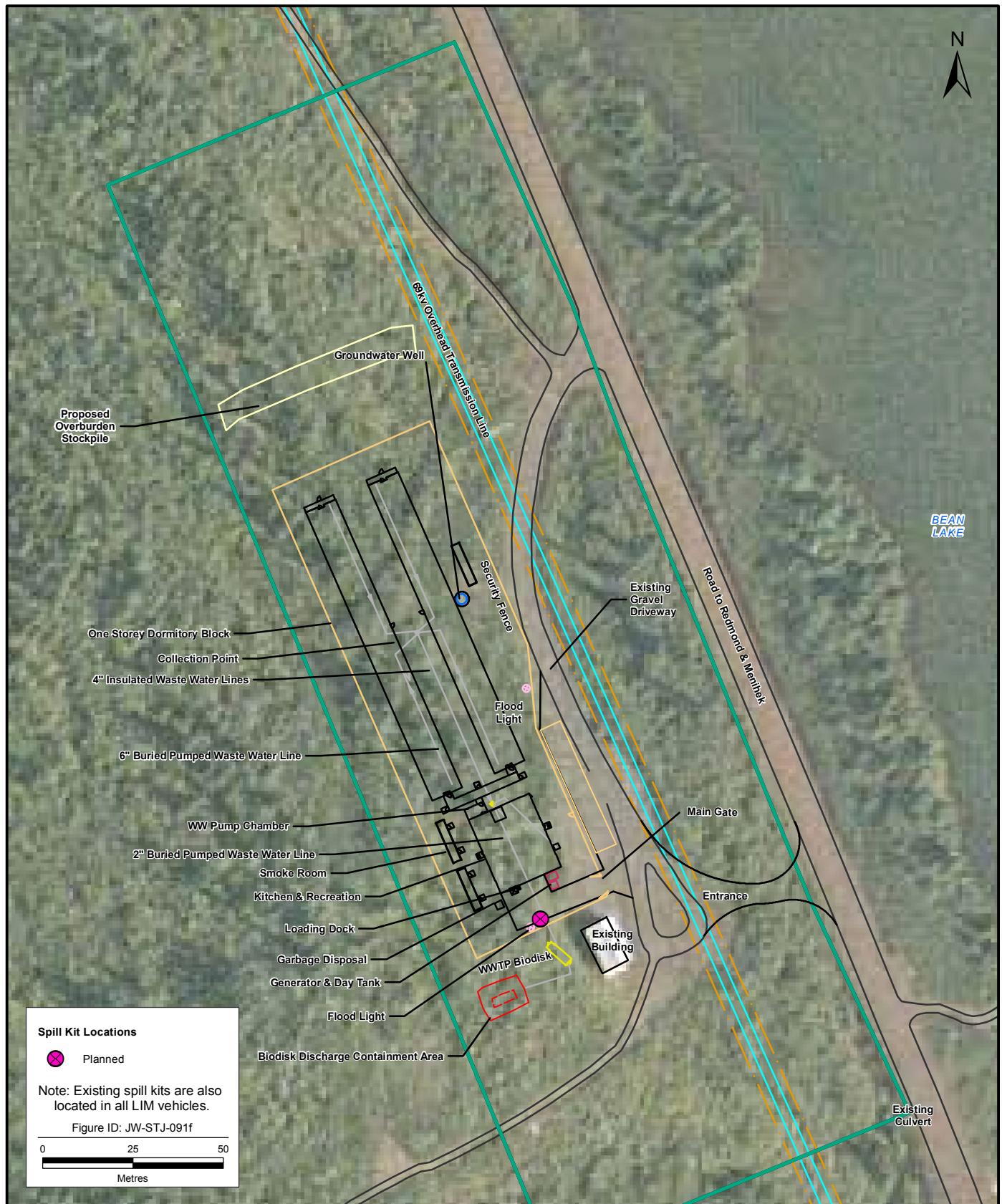
**SCHEFFERVILLE AREA IRON ORE  
PROJECT EMERGENCY RESPONSE PLAN**

DRAWING TITLE:

**JAMES SETTLING POND OUTLET AND  
SPILL KIT LOCATIONS**

SCALE:	1:7,500	DATE:	MAY 19, 2011
DRAWN BY:	CP	CHECKED BY:	
EDITED BY:	AF	REV. No.	0
DRAWING No.:	4		
MAP FILE:	JW-STJ-132B		





### LABRADOR IRON MINES LTD.

PROJECT TITLE: SCHEFFERVILLE AREA IRON ORE  
PROJECT EMERGENCY RESPONSE PLAN

DRAWING TITLE: BIODISK DISCHARGE CONTAINMENT  
AREA AND SPILL KIT LOCATIONS AT CAMP

SCALE:	1:1,500	DATE:	JULY 14, 2011
DRAWN BY:	C.P	CHECKED BY:	
EDITED BY:	AF	REV. No.	5
DRAWING No.:	5		
MAP FILE:	JW-STJ-091e		



## **APPENDIX B**

Controlled Copy Distribution List

## ERP Controlled Copy Distribution List

<b>Department or Organization</b>	<b>Individual or Location</b>
<b><i>Internal</i></b>	
Management	General/Mine Manager
Beneficiation Plant	Mine Superintendent – Innu Municipal
	Site Manager – Innu Municipal
Environment and Permitting Department	Vice President (VP) of Environment and Permitting Environmental Manager
Health and Safety Department	Health and Safety Coordinator Beneficiation Plant
Site Locations	Silver Yard Administration/Office Trailer
	Laboratory
	Maintenance Workshop Building
	Camp
<b><i>External</i></b>	
Department of Environment and Conservation	Pollution Prevention Division
Department of Government Services	Happy Valley - Goose Bay, NL
Fire Departments	Wabush, NL
	Schefferville, PQ

# **APPENDIX C**

## ERP Revision History

# ERP Revision History

# **APPENDIX D**

## Risk Assessment Matrix

		PROBABILITY				
		Improbable	Remote	Occasional	Probable	Frequent
CONSEQUENCE	Negligible	1	2	3	4	5
	Minor	2	4	6	8	10
	Intermediate	3	6	9	12	15
	Significant	4	8	12	16	20
	Critical	5	10	15	20	25

**Notes:**

1. Regions within this matrix have been shaded to indicate relative significance. The darkest cells have the greatest risk associated with the environmental aspect. For the Schefferville Area Iron Ore Mine, due to the contents of the effluent (only TSS) and the use of above ground settling ponds (rather than existing ponds which feed directly into fish bearing waters), these measures effectively reduce probability and consequence ratings to well below critical or frequent environmental aspects, as they are defined below. Therefore, the risk assessment is generally based on the remaining 4 by 4 portion of the matrix.
2. Consequence

**Negligible:** Very low or undetectable environmental degradation or asset damage. No remediation/repair required.

**Minor:** Minor, localized environmental degradation or asset damage. Short term monitoring or immediate remediation/repair with minimal cost.

**Intermediate:** Some environmental degradation or asset damage. Remediation or repair required (immediate or short term with moderate cost) and short term follow up monitoring.

**Significant:** Significant environmental degradation or asset damage. Extensive remediation or repair required with long term monitoring.

**Critical:** Extensive or complete environmental degradation or asset damage. Compensation or long term, extensive remediation or repair required with permanent monitoring.

### 3. Probability

Improbable: Event has not been known to occur in history and/or a very low probability of occurring in the future.

Remote: Event may have occurred in history and/or a low probability of occurring in the future.

Occasional: Event has occurred in history and/or a low to moderate probability of re-occurrence.

Probable: Event occurs with some regularity and/or it is probable the event will continue to occur.

Frequent: Event occurs at frequent intervals and/or it is highly probable the event will continue to occur frequently.

## **APPENDIX E**

Completed Risk Assessment Forms

**TABLE E-1**

Activity or Situation	Environmental Aspect (Indicate people, environment, or process)	Environmental Impact	Risk Ranking			Recommended Controls	Responsibility for Controls
			P	C	Score		
1. Power Outage-Emergency Reject Fines Pipeline Discharge	Effluent Release (increased TSS in SYSP, then in JSP)	Increased flow and TSS flushing through Settling Pond Systems Increased Water Consumption to flush lines when power up again	O	N/A	N/A	Controls are in place – SYSP will discharge to SY Ditch that will take flow to JSP #3 which is designed to control and treat effluent during these events.	Plant/Crushing Superintendent Site Manager General/Mine Manager
2. Reject Fines Washwater Pipeline Rupture	Effluent Release (increased TSS)	Land Disturbance and Damage to Vegetation	R	I	6	Preventative measures - Scheduled monitoring and maintenance of pipeline. In case of release - Assess corrective and preventative actions; and divert flow away from undisturbed land, vegetation, James Creek and LIM infrastructure.	Environmental Manager Plant/Crushing Superintendent
		Discharge to James Creek	R	S	8		
		Asset Integrity	R	M	4		
3. SY Plant Washing Equipment Rupture/Leak	Effluent Release (increased TSS)	Land Disturbance and Damage to Vegetation	R	N/A	N/A	None required - there is no vegetation or undisturbed land between the plant and the Silver Yard ditch, which will take it to the JSP #3.	Environmental Manager Plant/Crushing Superintendent
		Discharge to SY Ditch	R	N/A	N/A	Controls are in place – SY Ditch will take flow to JSP #3 which is designed to control and treat effluent during these events.	
		Asset Integrity	R	M	4	In case of release - Assess corrective and preventative actions; and divert flow away from LIM infrastructure.	
4. Breach, Failure or overtopping at Silver Yard Settling Pond	Effluent Release (increased TSS)	Discharge to SY Ditch then to JSP	R	N/A	N/A	Controls are in place – SY Ditch will take flow to JSP #3 which is designed to control and treat effluent during these events.	Environmental Manager Plant/Crushing Superintendent
		Land Disturbance and Damage to Vegetation	R	N/A	N/A	None required, there is no vegetation or undisturbed land between the SYSP and the JSP #3, via the SY Ditch,	
		Asset Integrity	R	M	4	In case of release - Assess corrective and preventative actions; and divert flow away from LIM infrastructure.	

**TABLE E-1**

Activity or Situation	Environmental Aspect (Indicate people, environment, or process)	Environmental Impact	Risk Ranking			Recommended Controls	Responsibility for Controls
			P	C	Score		
5. Dewatering Piping or In-pit Sump Piping Rupture [Between Open Pits and JSP]	Effluent Release (increased TSS)	Land Disturbance and Damage to Vegetation	R	M	4	Preventative measures - Scheduled monitoring and maintenance of piping arrangement; and design (slope and direction) of piping containment ditch to contain and divert flow away from UT direction.  In case of release - Assess corrective and preventative actions; and divert flow away from undisturbed land, vegetation, Unnamed Tributary, and LIM infrastructure.	Environmental Manager  Plant/Crushing Superintendent
		Discharge to Unnamed Tributary (UT) via overland flow	R	S	8		
		Asset Integrity	R	M	4		
6. Breach, Failure or Overtopping at Ruth Pit Control / Conveyance Structure	Effluent Release (increased TSS to environment)	Discharge to James Creek	R	I to S	6 to 8	Preventative measures - Scheduled monitoring and maintenance of Ruth Pit control / conveyance structures.  In case of release - Assess corrective and preventative actions; and divert flow away from undisturbed land, vegetation, James Creek, and LIM infrastructure.	Environmental Manager  Plant/Crushing Superintendent
		Land Disturbance and Damage to Vegetation	R	I	6		
		Asset Integrity	R	I	6		
7. Breach, Failure or overtopping at James Settling Pond 3	Effluent Release (increased TSS)	Discharge to James Creek	R	M	4	Preventative measures - Scheduled monitoring and maintenance of JSP and control / conveyance structures.  In case of release - Assess corrective and preventative actions; and divert flow away from undisturbed land, vegetation, James Creek, and LIM infrastructure.	Environmental Manager  Plant/Crushing Superintendent
		Land Disturbance and Damage to Vegetation	R	N	2		
		Asset Integrity	R	M	4		
8. Breach, Failure or overtopping at James	Effluent Release (increased TSS)	Discharge to James Creek or Unnamed Tributary	R	S	8	Preventative measures - Scheduled monitoring and maintenance of JSP and control / conveyance structures.  In case of release - Assess corrective	Environmental Manager  Plant/Crushing

**TABLE E-1**

Activity or Situation	Environmental Aspect (Indicate people, environment, or process)	Environmental Impact	Risk Ranking			Recommended Controls	Responsibility for Controls
			P	C	Score		
Settling Ponds 1 and 2		Land Disturbance and Damage to Vegetation	R	I	6	and preventative actions; and divert flow away from undisturbed land, vegetation, Unnamed Tributary, James Creek, and LIM infrastructure.	Superintendent
		Asset Integrity	R	I	6		
9. Breach, Failure or overtopping at Camp Biodisk Discharge Containment Area	Untreated Effluent Release	Discharge to ditch to Bean Lake	R	N	2	Preventative measures - Scheduled monitoring and maintenance of Containment Area. In case of potential overtopping – contact IM to arrange vacuum truck pump trucks In case of non-compliant release - Assess corrective and preventative actions; and divert flow away from undisturbed land, vegetation, Bean Lake, and LIM infrastructure.	General/Mine Manager
		Land Disturbance and Damage to Vegetation	R	N	2		
		Asset Integrity	R	N	2		

**Notes:**

P = Probability

- F – Frequent
- P – Probable
- O – Occasional
- R – Remote
- I – Improbable

C = Consequence

- C – Critical
- S – Significant
- I – Intermediate
- M – Minor
- N – Negligible

N/A = Not Applicable

TSS = Total Suspended Solids

SY Ditch = Silver Yard Ditch

UT = Unnamed Tributary

SYSP = Silver Yard Settling Pond

JSP = James Settling Pond

CBDCA = Camp Biodisk Discharge Containment Area

# **APPENDIX F**

Labrador Iron Mines Ltd.

Emergency Phone Numbers

## LABRADOR IRON MINES LTD. EMERGENCY PHONE NUMBERS

<b>Location of Nearest Land-Based Telephone:</b> Schefferville Tuktu House. Other Available Phones: Site Radio and / or Satellite Phones at Individual Work Sites.	
<b>EMERGENCY TELEPHONE NUMBERS</b>	
<b>LOCAL EMERGENCY CONTACTS</b>	<b>TELEPHONE NUMBERS</b>
LIM Schefferville Office:	Office: <b>418-585-2166</b> . Fax: <b>418-585-2277</b>
Schefferville Police:	<b>418-585-2626</b>
Schefferville Nursing Station:	<b>418-585-2644</b>
Kawawachikamach Nursing Station:	<b>418-585-2110</b>
Matimekosh Nursing Station:	<b>418-585-3664</b>
Schefferville Ground Ambulance:	<b>418-585-2055</b>
Air Ambulance:	<b>Called by the Nursing Station</b>
Schefferville Fire Department:	<b>418-585-2863</b>
Surête du Québec (Police) – <b>for Quebec</b> :	<b>418-585-2626</b>
Royal Canadian Mounted Police (RCMP) – <b>for Newfoundland and Labrador:</b>	<b>418-585-2225</b>
Municipality of Schefferville:	<b>418-585-2471</b>
Band Council Offices: Kawawachikamach	<b>418-585-2687</b>
Band Council Offices: Matimekosh	<b>418-585-2601</b>
<b>LIM CONTACTS</b>	<b>TO BE INFORMED OF ANY EMERGENCY SITUATION</b>
LIM Vice President, Technical Support	Daniel Dufort: Office: <b>647-728-4132</b> . Cell: <b>416-389-6437</b>
LIM Vice President, Environment and Permitting	Linda Wrong: Office: <b>647-728-4115</b> . Cell: <b>416-660-2979</b>
LIM Manager of Health and Safety	Don Hindy: Office: <b>780-433-2112</b> Cell: <b>780-850-2026</b>
LIM General/Mine Manager	Rowan Maule: Office: <b>418-585-2666</b>
LIM Environmental Manager	Corey McLister: Office: <b>418-585-2166</b> Cell: <b>418-585-1959</b>
LIM Environmental Scientist	Shawn Duquet: Office (Lab): <b>647-776-7873</b>
LIM Corporate Office	General Office: <b>647-728-4125</b> Fax: <b>416-368-5344</b>
<b>INNU MUNICIPAL (IM) CONTACTS</b>	<b>TO BE INFORMED OF ANY EMERGENCY SITUATION</b>
IM Site Manager	Brian Chisolm: Office: <b>418-585-2665</b> Cell: <b>709-280-4493</b>
IM General Superintendent of Operation	John Young: <b>709-280-4703</b>
IM Plant/Crushing Superintendent	Al Wagner: <b>709-282-8635</b>
IM Mine Superintendent	Kevin Taylor: <b>709-280-3569</b>
IM Health and Safety Coordinator	Mark Dunne/Terry Hawco: Office: <b>418- 585-2666</b>
<b>REPORTING TO HEALTH AND SAFETY AUTHORITIES</b>	
Québec: Commission de la santé et de la sécurité du travail (CSST)	Sept Iles Office: <b>418-964-3900 or 1-800-668-5214</b>
N&L: Occupational Health and Safety Office	<b>1-709-729-4444</b> (24-hour emergency service)
<b>REPORTING TO ENVIRONMENTAL AUTHORITIES</b>	
Quebec: Urgence Environment	<b>1-866-694-5454</b>
N&L: Environmental Emergencies 24 Hour Report Line	<b>1-800-563-9089</b>

*Revised June 30, 2011*

# **APPENDIX G**

## Environmental Incident Report Form



**SCHEFFERVILLE AREA IRON ORE MINE**

Labrador Iron Mines Limited  
Suite 700-220 Bay Street  
Toronto, Ontario  
M5J 2W4

## **Environmental Incident Report**

<b>Incident Date (Month, Day, Year)</b>	
<b>Incident Time (24 Hour)</b>	
<b>Type of Incident</b>	
<b>Product / Chemical</b>	
<b>Quantity</b>	
<b>Location (General)</b>	
<b>Location (Coordinates)</b>	
<b>Witnesses</b>	
<b>Supervisor</b>	
<b>Department, Department Head</b>	
<b>Cause / Description of Incident</b>	
<b>Totally Contained (Yes / No)</b> <b>Explain</b>	
<b>Clean-up Procedures</b>	
<b>Weather Conditions (wind velocity, direction, temperature, etc)</b>	
<b>Preventative Actions</b>	
<b>Reportable Event (Yes/No)</b>	
<b>Reported to Government by</b>	
<b>Date / Time Reported</b>	

SCHEFFERVILLE AREA IRON ORE PROJECT  
Environmental Incident Report  
Page 2 of 2

---

<b>Potential Environmental Effects</b>	
<b>Follow-up required (Yes / No)</b> Explain	
<b>Incident Complete (Yes / No)</b> If No - Explain	
<b>Attachments</b>	

**Report Completed by:**

<b>Date (Month, Day, Year)</b>	
<b>Name</b>	
<b>Signature</b>	



## **APPENDIX C**

### Regional Groundwater Quality



## Site Data



**Client:** WESA - Kingston  
 The Tower, The Woolen Mill, 4 Cataraqui St.  
 Kingston, ON  
 K7K 1Z7  
**Attention:** Mr. Byron O'Connor

INVOICE: Water & Earth Science Associates-Carp  
**Chain of Custody Number:** 147961

**Kingston Report:** K11-3409  
**Report Number:** 1123838  
**Date:** 2011-10-18  
**Date Submitted:** 2011-10-11  
**Project:** KB6836 - Houston  
**P.O. Number:**  
**Matrix:** Water

PARAMETER	UNITS	MRL	LAB ID:
			Sample Date:
			Sample ID:
Alkalinity as CaCO <sub>3</sub>	mg/L	5	916927
Bromide	mg/L	0.25	2011-10-10
Chloride	mg/L	1	Houston - TW
Colour	TCU	2	3
Conductivity	uS/cm	5	
Dissolved Organic Carbon	mg/L	0.5	
Fluoride	mg/L	0.1	
N-NH <sub>3</sub> (Ammonia)	mg/L	0.02	
N-NO <sub>2</sub> (Nitrite)	mg/L	0.1	
N-NO <sub>3</sub> (Nitrate)	mg/L	0.1	
pH		6.09	
Sulphate	mg/L	1	
Total Dissolved Solids (COND - CALC)	mg/L	1	
Total Kjeldahl Nitrogen	mg/L	0.1	
Total Phosphorus	mg/L	0.01	
Turbidity	NTU	0.1	
Hardness as CaCO <sub>3</sub>	mg/L	1	
Calcium	mg/L	1	
Magnesium	mg/L	1	
Potassium	mg/L	1	
Sodium	mg/L	2	
Aluminum	mg/L	0.01	
Antimony	mg/L	0.0005	
Arsenic	mg/L	0.001	
Barium	mg/L	0.01	
Beryllium	mg/L	0.0005	
Boron	mg/L	0.01	
Cadmium	mg/L	0.0001	
Chromium	mg/L	0.001	
Cobalt	mg/L	0.0002	

MRL = Method Reporting Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

Holding time for turbidity analysis was exceeded.

APPROVAL:

Lorna Wilson  
 Inorganic Lab Supervisor

Methods references and/or additional QA/QC information available on request.

**Client:** WESA - Kingston  
 The Tower, The Woolen Mill, 4 Cataraqui St.  
 Kingston, ON  
 K7K 1Z7  
**Attention:** Mr. Byron O'Connor

INVOICE: Water & Earth Science Associates-Carp  
**Chain of Custody Number:** 147961

**Kingston Report:** K11-3409  
**Report Number:** 1123838  
**Date:** 2011-10-18  
**Date Submitted:** 2011-10-11  
**Project:** KB6836 - Houston  
**P.O. Number:**  
**Matrix:** Water

PARAMETER	UNITS	MRL	LAB ID:
			Sample Date:
			Sample ID:
Copper	mg/L	0.001	916927
Iron	mg/L	0.03	2011-10-10
Lead	mg/L	0.001	Houston - TW
Manganese	mg/L	0.01	3
Mercury	mg/L	0.0001	
Molybdenum	mg/L	0.005	
Nickel	mg/L	0.005	
Selenium	mg/L	0.001	
Silicon	mg/L	0.1	
Silver	mg/L	0.0001	
Strontium	mg/L	0.001	
Thallium	mg/L	0.0001	
Titanium	mg/L	0.01	
Uranium	mg/L	0.001	
Vanadium	mg/L	0.001	
Zinc	mg/L	0.01	

MRL = Method Reporting Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

Methods references and/or additional QA/QC information available on request.

APPROVAL: \_\_\_\_\_  
 Lorna Wilson  
 Inorganic Lab Supervisor

**Client: WESA - Kingston**  
 The Tower, The Woolen Mill, 4 Cataraqui St.  
 Kingston, ON  
 K7K 1Z7  
**Attention: Mr. Byron O'Connor**

INVOICE: Water & Earth Science Associates-Carp  
**Chain of Custody Number: 147961**

**Kingston Report:** K11-3409  
**Report Number:** 1123838  
**Date:** 2011-10-18  
**Date Submitted:** 2011-10-11  
**Project:** KB6836 - Houston  
**P.O. Number:**  
**Matrix:** Water

PARAMETER	UNITS	MRL	LAB ID:			
			Sample Date:			
				Sample ID:	LAB BLANK	LAB QC % RECOVERY
Alkalinity as CaCO <sub>3</sub>	mg/L	5	<5	103	95-105	2011-10-13
Bromide	mg/L	0.25	<0.25	103	90-110	2011-10-14
Chloride	mg/L	1	<1	103	90-112	2011-10-14
Colour	TCU	2	<2	100	80-120	2011-10-13
Conductivity	uS/cm	5	<5	99	95-105	2011-10-13
Dissolved Organic Carbon	mg/L	0.5	<0.5	92	84-116	2011-10-17
Fluoride	mg/L	0.1	<0.10	99	90-110	2011-10-13
N-NH <sub>3</sub> (Ammonia)	mg/L	0.02	<0.02	99	85-115	2011-10-13
N-NO <sub>2</sub> (Nitrite)	mg/L	0.1	<0.10	100	80-120	2011-10-13
N-NO <sub>3</sub> (Nitrate)	mg/L	0.1	<0.10	93	80-120	2011-10-14
pH			5.90	99	90-110	2011-10-13
Sulphate	mg/L	1	<1	103	90-110	2011-10-14
Total Dissolved Solids (COND - CALC)	mg/L	1	<1		-	2011-10-17
Total Kjeldahl Nitrogen	mg/L	0.1	<0.10	102	77-123	2011-10-14
Total Phosphorus	mg/L	0.01	<0.01	100	85-115	2011-10-13
Turbidity	NTU	0.1	<0.1	98	73-127	2011-10-13
Hardness as CaCO <sub>3</sub>	mg/L	1	<1		-	2011-10-17
Calcium	mg/L	1	<1	113	80-120	2011-10-13
Magnesium	mg/L	1	<1	113	80-120	2011-10-13
Potassium	mg/L	1	<1	113	80-120	2011-10-13
Sodium	mg/L	2	<2	113	80-120	2011-10-13
Aluminum	mg/L	0.01	<0.01	100	90-110	2011-10-13
Antimony	mg/L	0.0005	<0.0005	101	77-123	2011-10-13
Arsenic	mg/L	0.001	<0.001	103	81-119	2011-10-13
Barium	mg/L	0.01	<0.01	100	91-109	2011-10-13
Beryllium	mg/L	0.0005	<0.0005	98	82-118	2011-10-13
Boron	mg/L	0.01	<0.01	105	81-119	2011-10-13
Cadmium	mg/L	0.0001	<0.0001	95	86-114	2011-10-13
Chromium	mg/L	0.001	<0.001	98	89-111	2011-10-13
Cobalt	mg/L	0.0002	<0.0002	98	88-112	2011-10-13

MRL = Method Reporting Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

Methods references and/or additional QA/QC information available on request.

APPROVAL: \_\_\_\_\_  
 Lorna Wilson  
 Inorganic Lab Supervisor

**Client:** WESA - Kingston  
The Tower, The Woolen Mill, 4 Cataraqui St.  
Kingston, ON  
K7K 1Z7  
**Attention:** Mr. Byron O'Connor

INVOICE: Water & Earth Science Associates-Carp  
**Chain of Custody Number:** 147961

**Kingston Report:** K11-3409  
**Report Number:** 1123838  
**Date:** 2011-10-18  
**Date Submitted:** 2011-10-11  
**Project:** KB6836 - Houston  
**P.O. Number:**  
**Matrix:** Water

PARAMETER	UNITS	MRL	LAB ID:				
			Sample Date:				
			Sample ID:	LAB BLANK	LAB QC % RECOVERY	QC RECOVERY RANGE	DATE ANALYSED
Copper	mg/L	0.001	<0.001	94	86-114	2011-10-13	
Iron	mg/L	0.03	<0.03	101	88-112	2011-10-13	
Lead	mg/L	0.001	<0.001	101	89-111	2011-10-13	
Manganese	mg/L	0.01	<0.01	95	91-109	2011-10-13	
Mercury	mg/L	0.0001	<0.0001	89	70-130	2011-10-13	
Molybdenum	mg/L	0.005	<0.005	97	84-116	2011-10-13	
Nickel	mg/L	0.005	<0.005	98	92-108	2011-10-13	
Selenium	mg/L	0.001	<0.001	97	77-123	2011-10-13	
Silicon	mg/L	0.1	<0.1		-	2011-10-13	
Silver	mg/L	0.0001	<0.0001	100	89-111	2011-10-13	
Strontium	mg/L	0.001	<0.001	98	91-109	2011-10-13	
Thallium	mg/L	0.0001	<0.0001	99	88-112	2011-10-13	
Titanium	mg/L	0.01	<0.01	95	88-112	2011-10-13	
Uranium	mg/L	0.001	<0.001	97	87-113	2011-10-13	
Vanadium	mg/L	0.001	<0.001	98	88-112	2011-10-13	
Zinc	mg/L	0.01	<0.01	93	89-111	2011-10-13	

MRL = Method Reporting Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

Methods references and/or additional QA/QC information available on request.

APPROVAL: \_\_\_\_\_  
Lorna Wilson  
Inorganic Lab Supervisor

**Client:** WESA - Kingston  
 The Tower, The Woolen Mill, 4 Cataraqui St.  
 Kingston, ON  
 K7K 1Z7  
**Attention:** Mr. Byron O'Connor

INVOICE: Water & Earth Science Associates-Carp  
**Chain of Custody Number:** 147961

**Kingston Report:** K11-3409  
**Report Number:** 1123839  
**Date:** 2011-10-17  
**Date Submitted:** 2011-10-11  
**Project:** KB6836 - Houston  
**P.O. Number:**  
**Matrix:** Water

PARAMETER	UNITS	MRL	LAB ID:	916928	
			Sample Date:	2011-10-10	
			Sample ID:	Housta - TW3	Total
Calcium	mg/L	1		2	
Magnesium	mg/L	1		2	
Potassium	mg/L	1		<1	
Sodium	mg/L	2		<2	
Aluminum	mg/L	0.01		0.13	
Antimony	mg/L	0.0005		<0.0005	
Arsenic	mg/L	0.001		<0.001	
Barium	mg/L	0.01		<0.01	
Beryllium	mg/L	0.0005		<0.0005	
Boron	mg/L	0.01		<0.01	
Cadmium	mg/L	0.0001		<0.0001	
Chromium	mg/L	0.001		<0.001	
Cobalt	mg/L	0.0002		<0.0002	
Copper	mg/L	0.001		<0.001	
Iron	mg/L	0.03		0.09	
Lead	mg/L	0.001		<0.001	
Manganese	mg/L	0.01		0.38	
Mercury	mg/L	0.0001		<0.0001	
Molybdenum	mg/L	0.005		<0.005	
Nickel	mg/L	0.005		<0.005	
Selenium	mg/L	0.001		<0.001	
Silicon	mg/L	0.1		3.6	
Silver	mg/L	0.0001		<0.0001	
Strontium	mg/L	0.001		0.004	
Thallium	mg/L	0.0001		<0.0001	
Titanium	mg/L	0.01		<0.01	
Uranium	mg/L	0.001		<0.001	
Vanadium	mg/L	0.001		<0.001	
Zinc	mg/L	0.01		<0.01	

MRL = Method Reporting Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

APPROVAL:

Lorna Wilson  
 Inorganic Lab Supervisor

Methods references and/or additional QA/QC information available on request.

<b>Client:</b> WESA - Kingston		<b>Kingston Report:</b>	K11-3409
The Tower, The Woolen Mill, 4 Cataraqui St.		<b>Report Number:</b>	1123839
Kingston, ON		<b>Date:</b>	2011-10-17
K7K 1Z7		<b>Date Submitted:</b>	2011-10-11
<b>Attention:</b> Mr. Byron O'Connor		<b>Project:</b>	KB6836 - Houston
INVOICE: Water & Earth Science Associates-Carp		<b>P.O. Number:</b>	
<b>Chain of Custody Number:</b> 147961		<b>Matrix:</b>	Water

PARAMETER	UNITS	MRL	LAB ID:					
			Sample Date:					
				Sample ID:	LAB BLANK	LAB QC % RECOVERY	QC RECOVERY RANGE	DATE ANALYSED
Calcium	mg/L	1	<1	113	80-120	2011-10-13		
Magnesium	mg/L	1	<1	113	80-120	2011-10-13		
Potassium	mg/L	1	<1	113	80-120	2011-10-13		
Sodium	mg/L	2	<2	113	80-120	2011-10-13		
Aluminum	mg/L	0.01	<0.01	100	90-110	2011-10-13		
Antimony	mg/L	0.0005	<0.0005	101	77-123	2011-10-13		
Arsenic	mg/L	0.001	<0.001	103	81-119	2011-10-13		
Barium	mg/L	0.01	<0.01	100	91-109	2011-10-13		
Beryllium	mg/L	0.0005	<0.0005	98	82-118	2011-10-13		
Boron	mg/L	0.01	<0.01	105	81-119	2011-10-13		
Cadmium	mg/L	0.0001	<0.0001	95	86-114	2011-10-13		
Chromium	mg/L	0.001	<0.001	98	89-111	2011-10-13		
Cobalt	mg/L	0.0002	<0.0002	98	88-112	2011-10-13		
Copper	mg/L	0.001	<0.001	94	86-114	2011-10-13		
Iron	mg/L	0.03	<0.03	101	88-112	2011-10-13		
Lead	mg/L	0.001	<0.001	101	89-111	2011-10-13		
Manganese	mg/L	0.01	<0.01	95	91-109	2011-10-13		
Mercury	mg/L	0.0001	<0.0001	89	70-130	2011-10-13		
Molybdenum	mg/L	0.005	<0.005	97	84-116	2011-10-13		
Nickel	mg/L	0.005	<0.005	98	92-108	2011-10-13		
Selenium	mg/L	0.001	<0.001	97	77-123	2011-10-13		
Silicon	mg/L	0.1	<0.1	-	-	2011-10-13		
Silver	mg/L	0.0001	<0.0001	100	89-111	2011-10-13		
Strontium	mg/L	0.001	<0.001	98	91-109	2011-10-13		
Thallium	mg/L	0.0001	<0.0001	99	88-112	2011-10-13		
Titanium	mg/L	0.01	<0.01	95	88-112	2011-10-13		
Uranium	mg/L	0.001	<0.001	97	87-113	2011-10-13		
Vanadium	mg/L	0.001	<0.001	98	88-112	2011-10-13		
Zinc	mg/L	0.01	<0.01	93	89-111	2011-10-13		

MRL = Method Reporting Limit INC = Incomplete AO = Aesthetic Objective OG = Operational Guideline MAC = Maximum Allowable Concentration IMAC = Interim Maximum Allowable Concentration

Comment:

Methods references and/or additional QA/QC information available on request.

APPROVAL: \_\_\_\_\_  
Lorna Wilson  
Inorganic Lab Supervisor

## Regional Data



Groundwater Chemistry for Labrador Iron Mines - General Chemistry  
WESA File #K-B6836

Sample ID		JA-MW1-A1	JA-MW1-A2	JA-MW1-B	JA-MW1-C	JA-MW2-A	JA-MW2-B	JA-MW2-C	JA-MW2-D	JA-MW4-A	JA-MW4-B	JA-MW5-A	JA-MW5-B	JA-MW5-C	JA-MW7-A	JA-MW7-B	JA-MW7-C	JA-MW7D	JA-MW8-A
Date Sampled		11-OCT-08	24-Sep-08	23-Sep-08	24-Sep-08	10-OCT-08	23-Sep-08	23-Sep-08	23-Sep-08	23-Sep-08	11-OCT-08								
ALS Sample ID		L696839-1	L696839-2	L696839-3	L696839-5	L696839-4	L696839-6	L696839-7	L696839-9	L696839-10	L696839-11	L696839-13						L696839-17	
Matrix		UNITS	LOR	Water	Water	Water	Water	Water	Water	Water	Water	Water							
<b>Physical Tests</b>																			
Color, Apparent	C.U.	1	21	18	430	90	21	260	39	120	16	33	11	130	540	-	43	59	
Conductivity	umhos/cm	0.4	56.8	57.0	252	157	53.9	49.1	39.1	39.8	140	117	34.2	61.6	136	-	55.5	58.6	
pH	pH units	0.01	6.82	6.83	7.38	6.56	7.12	6.90	6.75	6.64	7.04	6.95	6.76	8.97	9.28	8.70	6.78	6.96	
Total Suspended Solids	mg/L	3	980	1000	14000	3900	350	9200	6200	15000	25000	2700	-	-	-	1300	1900	11000	
Total Dissolved Solids	mg/L	20	30	30	1800	230	30	280	60	600	70	60	-	-	-	40	<20	60	
Turbidity	NTU	0.1	8.3	6.9	>200	>200	8.9	>200	194	>200	130	52.0	77	100	>200	59	>200	>200	
<b>Anions and Nutrients</b>																			
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	mg/L	10	29	29	65	35	21	23	21	73	62	19	26	44	-	23	26	40	
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	mg/L	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Alkalinity, Total (as CaCO <sub>3</sub> )	mg/L	10	29	29	65	35	21	23	21	73	62	19	29	53	-	26	41	40	
Ammonia as N	mg/L	0.05	<0.05	<0.05	0.51	0.53	<0.05	0.50	<0.05	<0.50	<0.05	<0.05	<0.05	<0.5	0.58	-	<0.05	<0.05	
Bromide	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Chloride	mg/L	2	6	7	8	7	5	7	7	6	6	7	2	7	-	6	<2	6	
Computed Conductivity	uS/cm	81.2	72.6	238	155	60.9	61.5	57.9	58.5	148	127	-	-	-	-	92.6	66.3	124	
Conductivity % Difference	%	35.4	24.0	5.6	-1.1	12.3	22.3	38.8	38.1	5.5	8.3	-	-	-	-	50.1	12.3	25.6	
Fluoride	mg/L	0.1	0.1	<0.1	0.2	<0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	0.1	0.2	-	<0.1	<0.1	<0.1	
Hardness (as CaCO <sub>3</sub> )	mg/L	43	33	8	23	30	17	25	16	78	69	-	-	-	-	41	36	58	
Ion Balance	%	Low EC	Low EC	85.0	115	Low EC	Low EC	Low EC	Low EC	115	120	-	-	-	-	Low EC	Low EC	Low EC	
Langelier Index	-	-2.0	-2.2	-1.9	-2.6	-2.1	-2.5	-2.5	-2.8	-1.2	-1.4	-	-	-	-	-2.1	-1.9	-1.8	
Nitrate and Nitrite as N	mg/L	0.2	0.3	0.2	0.7	0.3	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.3	0.2	-	0.2	0.2	0.5
Nitrate-N	mg/L	0.1	0.3	0.2	0.7	0.3	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.3	0.2	-	0.2	0.3	0.2
Nitrite-N	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1
Saturation pH	pH	8.83	9.01	9.24	9.14	9.22	9.40	9.22	9.42	8.28	8.37	-	-	-	-	8.89	8.91	8.54	
Phosphate-P (ortho)	mg/L	0.003	0.003	0.075	0.019	0.008	0.006	0.004	0.004	0.010	0.004	0.004	0.041	0.11	-	0.009	0.004	0.003	
Phosphorus, Total	mg/L	0.03	0.06	0.05	0.60	0.07	0.05	0.09	0.05	0.28	0.05	0.05	<0.05	<1	0.13	-	<0.5	<0.05	
TDS (Calculated)	mg/L	41	38	152	90	30	32	30	32	81	68	-	-	-	-	41	34	65	
Sulphate	mg/L	2	2	2	55	28	2	<2	<2	2	2	<2	<2	4	14	-	5	3	6
Anion Sum	me/L	0.7	0.7	2.5	1.4	0.5	0.6	0.6	0.6	1.4	1.2	-	-	-	-	0.7	0.5	0.8	
Cation Sum	me/L	0.9	0.7	2.1	1.6	0.6	0.6	0.5	0.5	1.7	1.4	-	-	-	-	1.1	0.8	1.7	
Cation - Anion Balance	%	Low EC	Low EC	-8.1	6.8	Low EC	Low EC	Low EC	Low EC	7.1	9.1	-	-	-	-	Low EC	Low EC	Low EC	
<b>Cyanides</b>																			
Cyanide, Total	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	
<b>Organic / Inorganic Carbon</b>																			
Dissolved Organic Carbon	mg/L	1	<1	<1	2.7	<1	<1	<1	1	<1	<1	-	-	-	-	<1	<1	<1	
Total Organic Carbon	mg/L	<1	<1	<1	3	<1	<1	<1	1	<1	<1	-	-	-	-	<1	<1	<1	
<b>Inorganic Parameters</b>																			
Silica	mg/L	0.2	7.3	7.9	6.3	6.3	6.3	5.7	5.5	4.7	9.2	9.2	6.5	6.7	23.4	-	6.1	6.4	6.1
																		7.2	

Groundwater Chemistry for Labrador Iron Mines - General Chemistry  
WESA File #K-B6836

Sample ID		JA-MW8-B	JA-MW8-C	JA-MW9-B		JA-MW9-C		RED-MW3-A	RED-MW3-B	RED-MW4	RED-MW5-A	RED-MW5-B	JA-PW2-1	JA-PW2-2	JA-PW2-3	JA-JA-N
Date Sampled		09-OCT-08	09-OCT-08	23-Sep-08	09-OCT-08	23-Sep-08	09-OCT-08	24-Sep-08	24-Sep-08	11-OCT-08	11-OCT-08	11-OCT-08	23-Oct-08	23-Oct-08	23-Oct-08	
ALS Sample ID		L696839-18	L696839-19	L696839-20	L696839-21					L696839-24	L696839-25	L696839-26	L701621-1	L701621-2	L701621-3	L701621-4
Matrix		UNITS	LOR	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
<b>Physical Tests</b>																
Color, Apparent	C.U.	1	40	32	1	3	4	23	13	8	46	230				
Conductivity	umhos/cm	0.4	61.6	33.4	98.4	95.7	132	118	18	129	25.5	70.0				
pH	pH units	0.01	7.19	7.07	6.74	7.14	6.74	7.18	6.97	8.10	7.07	7.11	7.33	7.15	7.08	
Total Suspended Solids	mg/L	3	1800	23000	-	810	-	270	-	17000	11000	27000				
Total Dissolved Solids	mg/L	20	50	<20	-	40	-	60	-	70	30	450				
Turbidity	NTU	0.1	34.0	160	2	1.3	18.1	19.2	140	168	>200	>200				
<b>Anions and Nutrients</b>																
Alkalinity, Bicarbonate (as CaCO <sub>3</sub> )	mg/L	10	26	15	41	38	56	51	11	65	<10	23				
Alkalinity, Carbonate (as CaCO <sub>3</sub> )	mg/L	10	<10	<10	<10	<10	56	<10	<10	<10	<10	<10				
Alkalinity, Total (as CaCO <sub>3</sub> )	mg/L	10	26	15	41	38	<10	51	11	66	<10	23				
Ammonia as N	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05	<0.5	<0.5	<0.05	<0.05	<0.05	
Bromide	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Chloride	mg/L	2	7	6	6	6	9	7	7	7	6	7	<2	<2	<2	
Computed Conductivity	uS/cm	85.4	46.5	-	116	-	143	-	-	137	30.9	96.1				
Conductivity % Difference	%	32.4	32.9	-	19.4	-	19.3	-	-	6.4	19.1	31.4				
Fluoride	mg/L	0.1	0.1	<0.1	<0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1	
Hardness (as CaCO <sub>3</sub> )	mg/L	40	18	-	59	-	73	-	-	65	14	27				
Ion Balance	%	Low EC	Low EC	Low EC	107	-	-	-	-	103	Low EC	Low EC				
Langelier Index	-	-1.8	-2.5	-	-1.6	-	-1.4	-	-	-0.2	-7.3	-2.0				
Nitrate and Nitrite as N	mg/L	0.2	0.3	0.5	0.3	0.4	0.3	0.4	<0.2	0.3	0.2	0.5				
Nitrate-N	mg/L	0.1	0.3	0.5	0.3	0.4	0.3	0.4	0.1	0.3	0.2	0.5	0.2	0.2	0.3	
Nitrite-N	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Saturation pH	pH	8.97	9.55	-	8.69	-	8.53	-	-	8.32	14.4	9.16				
Phosphate-P (ortho)	mg/L	0.003	0.006	0.003	<0.003	0.003	<0.003	<0.003	0.006	0.100	0.009	0.009				
Phosphorus, Total	mg/L	0.03	0.05	0.05	<0.05	0.07	<0.05	0.09	<0.5	0.31	0.26	0.60	<0.03	<0.3	<0.03	
TDS (Calculated)	mg/L	43	24	-	60	-	76	-	-	76	13	53				
Sulphate	mg/L	2	4	<2	11	11	15	14	<2	3	<2	13	3	2	<2	
Anion Sum	me/L	0.7	0.5	-	1.1	-	1.4	-	-	1.4	0.2	0.9				
Cation Sum	me/L	0.9	0.4	-	1.2	-	1.5	-	-	1.4	0.3	0.9				
Cation - Anion Balance	%	Low EC	Low EC	-	Low EC	-	3.5	-	-	1.6	Low EC	Low EC				
<b>Cyanides</b>																
Cyanide, Total	mg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-	<0.004	-	-	-	-	-	
<b>Organic / Inorganic Carbon</b>																
Dissolved Organic Carbon	mg/L	1	<1	<1	-	<1	<0.01	<1	'	<1	<1	<1	<1	<1	<1	
Total Organic Carbon	mg/L	1	<1	<1	-	<1	-	<1	-	<1	<1	<1	<1	<1	<1	
<b>Inorganic Parameters</b>																
Silica	mg/L	0.2	6.0	4.1	5.7	4.7	5.7	4.8	8.2	7.7	5.6	7.0				

Sample ID		JA-MW1-A1	JA-MW1-A2	JA-MW1-B	JA-MW1-C	JA-MW2-A	JA-MW2-B	JA-MW2-C	JA-MW2-D	JA-MW4-A	JA-MW4-B	JA-MW5-A	JA-MW5-B	JA-MW5-C	JA-MW7-A						
Date Sampled		11-OCT-08	24-Sep-08	10-OCT-08	23-Sep-08	10-OCT-08	24-Sep-08	10-OCT-08	23-Sep-08	09-OCT-08											
ALS Sample ID		L696839-1	L696839-2	L696839-3	L696839-4	L696839-5	L696839-6	L696839-7	L696839-8	L696839-9	L696839-10		L696839-11		L696839-12		L696839-13		L696839-14		
Matrix		UNITS	LOR	Water	Water	Water	Water	Water	Water	Water	Water	Water									
<b>Total Metals</b>																					
Aluminum (Al)-Total	mg/L	0.01	0.88	1.08	0.52	32.5	7.4	0.52	37.6	6.3	14.1	6.5	2.9	0.02	2.6	0.06	3.6	3.5	61.9	0.02	0.01
Antimony (Sb)-Total	mg/L	0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	
Arsenic (As)-Total	mg/L	0.001	<0.001	<0.001	<0.01	0.01	<0.001	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.001	<0.01	<0.001	<0.001		
Barium (Ba)-Total	mg/L	0.01	0.01	0.01	<0.01	1.8	0.5	<0.01	2.3	<0.1	0.4	0.2	0.5	<0.01	<0.1	<0.01	0.2	0.09	3.6	<0.01	<0.01
Beryllium (Be)-Total	mg/L	0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.001	<0.01	<0.01	<0.001	<0.001	
Bismuth (Bi)-Total	mg/L	0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.001	<0.01	<0.001	<0.001		
Boron (B)-Total	mg/L	0.05	<0.05	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.05	<0.5	<0.05	<0.5	<0.05	<0.05	<0.05	
Cadmium (Cd)-Total	mg/L	0.0001	<0.0001	<0.0001	0.0002	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0007	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	
Calcium (Ca)-Total	mg/L	0.5	10.4	6.7	32	14	5.7	49	25	21	17	14	9.6	<5	5.3	8	9.4	83	11.4	1.7	
Chromium (Cr)-Total	mg/L	0.001	0.002	0.002	0.01	0.001	<0.01	<0.01	0.012	0.005	0.009	0.050	0.080	<0.0005	0.011	<0.0005	0.009	0.0021	0.077	<0.0005	<0.0005
Cobalt (Co)-Total	mg/L	0.0005	0.0014	0.0014	0.019	<0.005	0.0006	0.012	<0.005	0.009	0.005	0.080	<0.0005	0.011	<0.0005	0.009	0.0021	0.077	<0.0005	<0.0005	
Copper (Cu)-Total	mg/L	0.001	0.004	0.003	0.05	0.02	0.05	0.03	0.06	0.01	0.02	<0.001	0.03	0.009	<0.01	0.01	0.08	0.08	0.006	0.003	
Iron (Fe)-Total	mg/L	0.05	1.86	2.18	42.3	10.1	1.50	28.0	9.2	19.3	78.3	11.5	<0.05	26.4	<0.05	9.6	6.4	130	<0.05	<0.05	
Lead (Pb)-Total	mg/L	0.001	0.003	0.003	0.13	0.04	0.001	0.25	0.02	0.08	<0.01	<0.01	<0.01	<0.001	0.02	0.013	0.52	<0.001	<0.001		
Magnesium (Mg)-Total	mg/L	0.5	4.1	4.0	28	8	3.8	30	6	11	11	8	2.4	<5	<0.5	5	1.7	49	3	<0.5	
Manganese (Mn)-Total	mg/L	0.001	0.189	0.201	0.96	0.25	0.037	0.63	0.37	0.95	4.77	8.27	0.01	2.38	0.004	3.72	0.898	37.4	0.011	0.005	
Mercury (Hg)-Total	mg/L	0.0001	<0.0001	<0.0004	<0.0001	0.0003	0.0002	0.0004	0.0035	0.0023	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Molybdenum (Mo)-Total	mg/L	0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.001	0.002	<0.01	<0.001	<0.001	<0.001	
Nickel (Ni)-Total	mg/L	0.002	<0.002	<0.002	<0.02	0.04	<0.02	<0.02	<0.02	0.03	0.02	<0.02	<0.02	<0.002	<0.02	0.04	<0.002	<0.002	<0.002	<0.002	
Phosphorus (P)-Total	mg/L	0.05	0.07	0.07	1.9	<0.5	0.12	1.2	<0.5	<0.5	1.4	<0.5	<0.5	<0.05	<0.5	0.13	1.8	<0.05	0.05		
Potassium (K)-Total	mg/L	1	<1	<1	10	<10	<1	20	<10	<10	<10	<10	<10	<1	<10	2	30	<1	<1		
Selenium (Se)-Total	mg/L	0.005	<0.005	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005		
Silicon (Si)-Total	mg/L	0.1	3.4	3.7	62	17	2.9	43	11	11	8	3.1	5	3.1	8	11	66	2.9	2.6		
Silver (Ag)-Total	mg/L	0.0001	0.0001	0.0002	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.0001	<0.0001	<0.0001		
Sodium (Na)-Total	mg/L	0.5	<0.5	<0.5	69	27	0.5	56	<5	19	<5	<5	<5	<5	15.3	5	29.4	119	6.6	19.3	
Strontium (Sr)-Total	mg/L	0.001	0.007	0.005	0.36	0.11	0.004	0.84	0.05	0.23	0.06	0.03	0.009	<0.01	0.011	0.08	1.69	0.024	0.004		
Thallium (Tl)-Total	mg/L	0.0003	<0.0003	0.0003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.003	<0.0003	<0.0003	<0.0003		
Tin (Sn)-Total	mg/L	0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001		
Titanium (Ti)-Total	mg/L	0.002	0.																		



## **APPENDIX D**

### Regional and Site Surface Water Quality



**Table 2 Water Analytical Results – Inorganics**

Parameter	Units	CWQG FWAL	GCDWQ	RDL+	HP3										HP-M					Gilling River			Mike Tributary		
Sampling Date					27-Apr-07	6-Jun-08	13-Sep-08	27-May-09	4-Jul-09	15-Sep-09	14-Sep-10	10-Aug-11	6-Jun-08	13-Sep-08	14-Apr-10	14-Sep-10	10-Aug-11	1-Apr-09	4-Jul-09	16-Sep-09	1-Apr-09	5-Jul-09	15-Sep-09		
<b>INORGANICS</b>																									
Total Alkalinity (Total as CaCO <sub>3</sub> )	mg/L	NG	NG	5	11	<10	13	<10	<10	<10	13	13	<10	20	11	<10	11	51	42	40	70	48	54		
Chloride	mg/L	NG	NG	1	ND	<2	<2	<2.0	<2.0	<2.0	<2.0	<2.0	<2	6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Colour	TCU	NG	≤15*	5	ND	5	6	15.3	10.0	4.2	10.6	5.7	17	28	3.1	20.1	7.2	4.4	3.9	2.8	4.1	4.1	4.3		
Total Dissolved Solids	mg/L	NG	NG	10	43	30	70	26	26	40	32	44	20	90	40	48	54	66	50	58	94	54	82		
Hardness (CaCO <sub>3</sub> )	mg/L	NG	NG	1	21	17	18	16.9	17.2	24.7	30.8	18.9	12	20	20.8	13.6	18.8	60.0	49.7	67.5	90.6	59.1	124		
Nitrate + Nitrite	mg/L	NG	NG	0.05	0.08	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
Nitrite (N)	mg/L	0.06	NG	0.01	ND	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Nitrogen (Ammonia Nitrogen)	mg/L	NG	NG	0.05	ND	0.10	0.05	<0.050	<0.050	<0.050	<0.050	0.145	0.06	0.07	<0.050	<0.050	<0.050	0.064	<0.050	<0.050	0.067	<0.050	<0.050	<0.050	
Dissolved Organic Carbon (C)	mg/L	NG	NG	0.5	0.9	1	1	2.6	2.3	1.0	1.9	<1.0	3	5	<1.0	3.3	<1.0	1.2	1.5	<1.0	2.3	2.1	3.4		
Total Organic Carbon (C)	mg/L	NG	NG	0.5	0.8	3	<1		2.4	2.3	1.9	<1.0	5	5	<1.0	3.8	1.4	1.5	1.5	4.3	2.6	2.2	4.8		
Orthophosphate (P)	mg/L	NG	NG	0.01	ND	0.003	0.003	0.0031	<0.0030	<0.0030	<0.0030	<0.0030	<0.003	<0.003	<0.0030	0.0032	0.0038	0.0039	<0.0030	<0.0030	0.0037	<0.0030	<0.0030		
pH	pH	6.5 - 9	6.5 - 8.5	N/A	6.88	7.05	7.28	7.04	7.29	7.24	7.14	6.82	6.87	7.28	7.34	6.73	6.89	7.76	7.93	7.85	7.89	7.99	8.01		
Reactive Silica (SiO <sub>2</sub> )	mg/L	NG	NG	0.5	6.1	4.4	5.2	7.30	5.22	5.78	5.0	4.3	2.8	5.3	7.5	4.6	4.5	5.5	4.71	5.10	4.3	3.52	3.94		
Dissolved Sulphate (SO <sub>4</sub> )	mg/L	NG	NG	2	10	8	9	6.8	6.6	9.0	6.5	6.1	5	5	11.0	3.2	6.9	5.8	4.4	4.8	8.8	5.1	6.8		
Turbidity	NTU	NG	NG	0.1	ND	0.20	0.20	0.27	0.27	0.14	0.18	0.15	0.22	0.40	0.15	0.20	0.20	0.36	0.26	0.19	0.15	0.18	0.16		
Conductivity	uS/cm	NG	NG	1	49	34.0	42.6	35.0	36.0	38.8	38.0	42.9	22.5	42.3	49.8	25.0	44.5	119	92.0	93.8	159	105	123		
Bromine	mg/L	NG	NG	0.1	NA	<0.1	<0.1	<0.10	<0.10	<0.10	<0.11	<0.12	<0.19	<0.20	<0.21	<0.22	<0.23	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		
Fluoride	mg/L	NG	1.5	0.1	NA	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		
<b>RCAP CALCULATIONS</b>																									
Nitrate (N)	mg/L	NG	45	N/A	9.92	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Anion Sum	me/L	NG	NG	N/A	0.44	0.2	0.4	0.14	0.14	0.19	0.35	0.34	0.1	0.6	0.41	<0.10	0.33	0.96	0.81	0.76	1.34	0.90	1.04		
Bicarb. Alkalinity (calc. as CaCO <sub>3</sub> )	mg/L	NG	NG	1	11	<10	13	<10	<10	<10	13	13	<10	20	11	<10	11	51	42	40	70	48	53		
Calculated TDS	mg/L	NG	≤500*	1	31	14	23	12.4	12.3	17.6	25.5	19.6	9	29	24.6	7.6	19.6	55.6	46.2	51.3	80.8	52.5	82.8		
Carb. Alkalinity (calc. as CaCO <sub>3</sub> )	mg/L	NG	NG	1	ND	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10		
Cation - Anion Balance	%	NG	NG	N/A	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	11.1	Low EC	Low EC	15.1	13.4	41.1		
Cation Sum	me/L	NG	NG	N/A	0.47	0.4	0.4	0.36	0.37	0.52	0.64	0.39	0.2	0.4	0.44	0.27	0.38	1.20	0.99	1.35	1.82	1.18	2.48		
Conductivity % Difference	%	NG	NG	N/A	3.3																				
Computed Conductivity	uS/cm	NG	NG	N/A	-2.79	32.3	43.7	29.8	29.8	41.7	53.3	39.2	21.2	55.6	47.9	19.8	38.6	105	88.0	104	152	101	173		
Ion Balance (% Difference)	%	NG	NG	N/A	-3.04	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	125	Low EC	Low EC	135	131	239		
Langelier Index (@ 20C)	N/A	NG	NG	N/A	9.67	-7.0	-2.4	-6.9	Low Bicarb	Low Bicarb	-2.1	-2.8	-6.4	-2.2	-2.4	-6.2	-2.8	-0.8	-0.7	-0.3	-0.6	-0.1			

**Table 2 Water Analytical Results Tom Pond – Inorganics (continued)**

Parameter	Units	CWQG FWAL	GCDWQ	RDL+	HP6 (Tom Pond)						
<b>Sampling Date</b>					27-Apr-07	6-Jun-08	13-Sep-08	4-Jul-09	15-Sep-09	10-Aug-11	14-Sep-10
<b>INORGANICS</b>											
Total Alkalinity (Total as CaCO <sub>3</sub> )	mg/L	NG	NG	5	ND	<10	<10	<10	<10	<10	<10
Chloride	mg/L	NG	NG	1	ND	<2	<2	<2.0	<2.0	<2.0	<2.0
Colour	TCU	NG	≤15*	5	ND	11	10	10.8	12.4	11.5	17.3
Total Dissolved Solids	mg/L	NG	NG	10	11	<20	70	<20	32	22	22
Hardness (CaCO <sub>3</sub> )	mg/L	NG	NG	1	4	6	4	4.7	16.6	5	14.3
Nitrate + Nitrite	mg/L	NG	NG	0.05	0.07	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrite (N)	mg/L	0.06	NG	0.01	ND	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrogen (Ammonia Nitrogen)	mg/L	NG	NG	0.05	0.08	0.07	0.07	<0.050	<0.050	<0.050	<0.050
Dissolved Organic Carbon (C)	mg/L	NG	NG	0.5	0.9	2	4	3.0	3.4	3.2	3.5
Total Organic Carbon (C)	mg/L	NG	NG	0.5	ND	3	3	3.5	4.5	4.4	4.4
Orthophosphate (P)	mg/L	NG	NG	0.01	ND	<0.003	<0.003	<0.0030	<0.0030	<0.0030	0.0032
pH	pH	6.5 - 9	6.5 - 8.5	N/A	6.24	6.47	6.83	6.91	6.84	6.76	6.80
Reactive Silica (SiO <sub>2</sub> )	mg/L	NG	NG	0.5	ND	1.8	0.9	1.69	1.76	<2.1	2.3
Dissolved Sulphate (SO <sub>4</sub> )	mg/L	NG	NG	2	ND	<2	<2	<2.0	<2.0	<2.0	<2.0
Turbidity	NTU	NG	NG	0.1	24	0.35	0.53	0.37	0.53	0.43	0.52
Conductivity	uS/cm	NG	NG	1	13	9.1	11.0	11.0	13.4	11.4	17.0
Bromine	mg/L	NG	NG	0.1	NA	<0.13	<0.14	<0.15	<0.16	<0.17	<0.18
Fluoride	mg/L	NG	1.5	0.1	NA	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
<b>RCAP CALCULATIONS</b>											
Nitrate (N)	mg/L	NG	45	N/A	NC	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Anion Sum	me/L	NG	NG	N/A	0	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10
Bicarb. Alkalinity (calc. as CaCO <sub>3</sub> )	mg/L	NG	NG	1	ND	<10	<10	<10	<10	<10	<10
Calculated TDS	mg/L	NG	≤500*	1	3	2	1	1.5	6.0	1.6	5.1
Carb. Alkalinity (calc. as CaCO <sub>3</sub> )	mg/L	NG	NG	1	ND	<10	<10	<10	<10	<10	<10
Cation - Anion Balance	%	NG	NG	N/A	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC
Cation Sum	me/L	NG	NG	N/A	0.13	0.1	<0.1	<0.10	0.33	<1.0	0.29
Conductivity % Difference	%	NG	NG	N/A	100	7.3	5.0	5.16	18.5	5.49	15.9
Computed Conductivity	uS/cm	NG	NG	N/A	NC	Low EC	Low EC	Low EC	Low EC	Low EC	Low EC
Ion Balance (% Difference)	%	NG	NG	N/A	NC	-6.4	-6.9	-6.9	-6.0	-6.7	-6.1
Langelier Index (@ 20C)	N/A	NG	NG	N/A	NC	12.9	13.7	13.82	12.87	13.45	12.87
Saturation pH (@ 20C)	N/A	NG	NG	N/A	NC						

RDL+ - Analytical Reportable Detection Limit

CWQG, FWAL = CCME Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (2006 Update)

GCDWQ = CCME Canadian Water Quality Guidelines for Drinking Water Quality

334

Exceeds CCME FWAL Standards

334

Exceeds GCDWQ Standards

ND = Not detected

N/A = Not Applicable

NA = Not Analyzed

\* Aesthetic Objective

\*\* Interim Maximum Acceptable Concentration

**Table 3 Surface Water Analytical Results – Metals**

Parameter	Units	Criteria 1	Criteria 2	RDL+	HP3								
		CWQG FWAL	GCDWQ		27-Apr-07	6-Jun-08	13-Sep-08	27-May-09	4-Jul-09	15-Sep-09	14-Sep-10	10-Aug-11	
Sampling Date													
<b>Total Metals</b>													
Total Aluminum (Al)	mg/L	0.005-.1	0.1	0.01	ND	0.01	<0.01	0.026	0.021	0.026	0.035	0.01	
Total Antimony (Sb)	mg/L	NG	0.006**	0.005	ND	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Total Arsenic (As)	mg/L	0.005	0.01	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Total Barium (Ba)	mg/L	NG	10	0.01	ND	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	
Total Beryllium (Be)	mg/L	NG	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Total Bismuth (Bi)	mg/L	NG	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Total Boron (B)	mg/L	NG	50**	0.05	ND	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050	
Total Cadmium (Cd)	mg/L	0.017	0.005	0.0001	ND	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Total Calcium (Ca)	mg/L	NG	NG	0.1	3.7	2.8	3.4	2.49	5.54	4.91	7.97	3.83	
Total Chromium (Cr)	mg/L	NG	50	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Total Cobalt (Co)	mg/L	NG	NG	0.0005	ND	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Total Copper (Cu)	mg/L	0.002-0.004	≤10*	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Total Iron (Fe)	mg/L	0.3	≤0.3*	0.005	0.096	0.13	0.12	0.149	0.148	0.102	0.072	0.08	
Total Lead (Pb)	mg/L	0.001-0.007	0.01	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Total Magnesium (Mg)	mg/L	NG	NG	100	3.5	2.4	3.0	2.60	2.40	3.01	2.64	2.95	
Total Manganese (Mn)	mg/L	NG	≤0.05	0.001	0.072	0.016	0.009	0.0274	0.0297	0.0217	0.0226	0.022	
Total Mercury (Hg)	mg/L	NG	0.001	0.0001	ND	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Total Molybdenum (Mo)	mg/L	0.073	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Total Nickel (Ni)	mg/L	0.025-0.150	NG	0.002	ND	<0.002	<0.002	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
Total Phosphorus (P)	mg/L	NG	NG	0.03	ND	<0.03	<0.03	<0.030	<0.030	<0.030	<0.030	0.089	
Total Potassium (K)	mg/L	NG	NG	0.001	0.6	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	
Total Selenium (Se)	mg/L	0.001	0.01	0.005	ND	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Total Silicon (Si)	mg/L	NG	NG	0.001		2.1	2.4	3.41	2.16	2.70	2.3	2.4	
Total Silver (Ag)	mg/L	NG	NG	0.0001	ND	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Total Sodium (Na)	mg/L	NG	≤0.2*	0.1	0.8	0.6	0.6	0.55	<0.50	0.65	0.59	0.62	
Total Strontium (Sr)	mg/L	NG	NG	0.004	0.007	0.006	0.007	0.0047	0.0070	0.0074	0.0088	0.0067	
Total Thallium (Tl)	mg/L	0.0008	NG	0.0003	ND	<0.0003	<0.0003	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	
Total Tin (Sn)	mg/L	NG	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Total Titanium (Ti)	mg/L	NG	NG	0.002	ND	<0.002	<0.002	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
Total Vanadium (V)	mg/L	NG	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Total Zinc (Zn)	mg/L	0.03	≤5*	0.003	0.005	<0.003	<0.003	<0.0030	0.0316	0.0261	0.0313	0.0032	
<b>Dissolved Metals</b>													
Dissolved Aluminum (Al)	mg/L	0.005-.1	0.1	0.01	ND	<0.01	<0.01	0.013	<0.010	<0.010	<0.010	<0.010	
Dissolved Antimony (Sb)	mg/L	NG	0.006**	0.005	ND	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Dissolved Arsenic (As)	mg/L	0.005	0.01	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Dissolved Barium (Ba)	mg/L	NG	10	0.01	ND	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010	<0.010	
Dissolved Beryllium (Be)	mg/L	NG	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Dissolved Bismuth (Bi)	mg/L	NG	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Dissolved Boron (B)	mg/L	NG	50**	0.05	ND	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050	
Dissolved Cadmium (Cd)	mg/L	0.017	0.005	0.0001	ND	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Dissolved Calcium (Ca)	mg/L	NG	NG	0.1	NA	2.6	2.9	2.44	2.55	3.00	2.75	3.33	
Dissolved Chromium (Cr)	mg/L	NG	50	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Dissolved Cobalt (Co)	mg/L	NG	NG	0.0005	ND	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Dissolved Copper (Cu)	mg/L	0.002-0.004	≤10*	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Dissolved Iron (Fe)	mg/L	0.3	≤0.3*	0.005	ND	<0.05	<0.05	<0.050	<0.050	<0.050	<0.050	<0.050	
Dissolved Lead (Pb)	mg/L	0.001-0.007	0.01	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Dissolved Magnesium (Mg)	mg/L	NG	NG	100	NA	2.3	2.7	2.48	2.62	2.86	2.32	2.58	
Dissolved Manganese (Mn)	mg/L	NG	≤0.05	0.001	0.064	0.006	<0.001	0.0099	0.0033	0.0074	0.0038	<0.0010	
Mercury Dissolved (Hg)	mg/L	NG	0.001	0.0001	NA	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Dissolved Molybdenum (Mo)	mg/L	0.073	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0		

**Table 3      Surface Water Analytical Results – Metals (continued)**

Parameter	Units	Criteria 1	Criteria 2	RDL+	HP-6 (Tom Pond)						
		CWQG	FWAL		27-Apr-07	6-Jun-08	13-Sep-08	4-Jul-09	15-Sep-09	10-Aug-11	14-Sep-10
Sampling Date											
<b>Total Metals</b>											
Total Aluminum (Al)	mg/L	0.005-1	0.1	0.01	3.4	0.04	0.03	0.023	0.053	0.036	0.047
Total Antimony (Sb)	mg/L	NG	0.006**	0.005	ND	<0.005	<0.005	<0.0050	<0.0050	<0.0050	<0.0050
Total Arsenic (As)	mg/L	0.005	0.01	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010
Total Barium (Ba)	mg/L	NG	10	0.01	0.026	<0.01	<0.01	<0.010	<0.010	<0.010	<0.010
Total Beryllium (Be)	mg/L	NG	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010
Total Bismuth (Bi)	mg/L	NG	NG	0.001	ND	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010
Total Boron (B)	mg/L	NG	50**	0.05	ND	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Cadmium (Cd)	mg/L	0.017	0.005	0.0001	ND	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Total Calcium (Ca)	mg/L	NG	NG	0.1	1.8	1.5	0.8	1.20	5.07	1.36	4.24
Total Chromium (Cr)	mg/L	NG	50	0.001	0.007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Cobalt (Co)	mg/L	NG	NG	0.0005	0.001	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Copper (Cu)	mg/L	0.002-0.004	≤10*	0.001	0.009	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Iron (Fe)	mg/L	0.3	≤0.3*	0.005	3.9	0.12	0.12	0.076	0.106	<0.050	0.065
Total Lead (Pb)	mg/L	0.001-0.007	0.01	0.001	0.0056	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Magnesium (Mg)	mg/L	NG	NG	100	1.5	0.6	0.7	0.59	0.96	0.65	0.90
Total Manganese (Mn)	mg/L	NG	≤0.05	0.001	0.079	0.003	0.003	0.0070	0.0068	0.004	0.0079
Total Mercury (Hg)	mg/L	NG	0.001	0.0001	0.04	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Total Molybdenum (Mo)	mg/L	0.073	NG	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Nickel (Ni)	mg/L	0.025-0.150	NG	0.002	0.008	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Total Phosphorus (P)	mg/L	NG	NG	0.03	0.3	<0.03	<0.03	<0.030	<0.030	<0.050	<0.030
Total Potassium (K)	mg/L	NG	NG	0.001	0.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Selenium (Se)	mg/L	0.001	0.01	0.005	ND	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total Silicon (Si)	mg/L	NG	NG	0.001	NA	1.0	0.4	0.67	0.82	<1.0	1.1
Total Silver (Ag)	mg/L	NG	NG	0.0001	ND	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Total Sodium (Na)	mg/L	NG	≤0.2*	0.1	0.5	<0.5	<0.5	<0.50	<0.50	<0.50	<0.50
Total Strontium (Sr)	mg/L	NG	NG	0.004	0.006	0.004	0.003	0.0030	0.0068	0.0033	0.0057
Total Thallium (Tl)	mg/L	0.0008	NG	0.0003	ND	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Total Tin (Sn)	mg/L	NG	NG	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Titanium (Ti)	mg/L	NG	NG	0.002	0.054	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Total Vanadium (V)	mg/L	NG	NG	0.001	0.007	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Zinc (Zn)	mg/L	0.03	≤5*	0.003	0.035	0.004	<0.003	0.0056	0.0194	0.0033	0.0196
<b>Dissolved Metals</b>											
Dissolved Aluminum (Al)	mg/L	0.005-1	0.1	0.01	ND	0.02	<0.01	0.023	0.017	0.038	0.021
Dissolved Antimony (Sb)	mg/L	NG	0.006**	0.005	ND	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Arsenic (As)	mg/L	0.005	0.01	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Barium (Ba)	mg/L	NG	10	0.01	ND	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Dissolved Beryllium (Be)	mg/L	NG	NG	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Bismuth (Bi)	mg/L	NG	NG	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Boron (B)	mg/L	NG	50**	0.05	ND	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dissolved Cadmium (Cd)	mg/L	0.017	0.005	0.0001	ND	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Dissolved Calcium (Ca)	mg/L	NG	NG	0.1	NA	0.8	0.7	0.79	0.95	0.92	1.05
Dissolved Chromium (Cr)	mg/L	NG	50	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Cobalt (Co)	mg/L	NG	NG	0.0005	ND	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Copper (Cu)	mg/L	0.002-0.004	≤10*	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Iron (Fe)	mg/L	0.3	≤0.3*	0.005	ND	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dissolved Lead (Pb)	mg/L	0.001-0.007	0.01	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Magnesium (Mg)	mg/L	NG	NG	100	NA	0.6	0.6	0.66	0.78	0.65	0.74
Dissolved Manganese (Mn)	mg/L	NG	≤0.05	0.001	0.011	0.002	0.001	0.0038	0.0016	0.0016	0.0039
Mercury Dissolved (Hg)	mg/L	NG	0.001	0.0001	NA	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Dissolved Molybdenum (Mo)	mg/L	0.073	NG	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Nickel (Ni)	mg/L	0.025-0.150	NG	0.002	ND	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Dissolved Potassium (K)	mg/L	NG	NG	0.03	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dissolved Selenium (Se)	mg/L	NG	NG	0.001	ND	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Silicon (Si)	mg/L	0.001	0.01	0.005	NA	0.9	0.3	0.79	0.62	<1.0	<1.0
Dissolved Silver (Ag)	mg/L	NG	NG	0.001	ND	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Dissolved Sodium (Na)	mg/L	NG	NG	0.0001	NA	<0.5	<0.5	<0.50	<0.50	<0.5	<0.50
Dissolved Strontium (Sr)	mg/L	NG	≤0.2*	0.1	ND	0.003	0.003	0.0027	0.0034	0.0028	0.0036
Dissolved Thallium (Tl)	mg/L	NG	NG	0.004	ND	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved Tin (Sn)	mg/L	0.0008	NG	0.0003	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Titanium (Ti)	mg/L	NG	NG	0.001	ND	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Dissolved Tungsten (W)	mg/L	NG	NG	0.002	ND	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Uranium (U)	mg/L	NG	NG	0.001	ND	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Zinc (Zn)	mg/L	NG	NG	0.003	ND	0.008	<0.003	<0.0030	<0.0030	<0.0030	<0.0030

All results expressed as indicated

All results expressed as indicated

GWG, EWAL, CCME Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life, (2006 Update)

CWQG, FWAL = CCME Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life

<b>334</b>	Exceeds CCME FWAL Standards
<b>334</b>	Exceeds GCDWQ Standards

33

N/A - Not Applicable

ND = Not detected

NA = Not Analyzed

\* Aesthetic Objective

\*\* Interim Maximum Acceptable Concentration

**Table 3 Surface Water Analytical Results – Metals (continued)**

Parameter	Units	Criteria 1	Criteria 2	RDL+	HP-M				
		CWQG FWAL	GCDWQ		6-Jun-08	13-Sep-08	14-Apr-10	14-Sep-10	10-Aug-11
<b>Total Metals</b>									
Total Aluminum (Al)	mg/L	0.005-.1	0.1	0.01	0.03	0.02	<0.010	0.027	0.011
Total Antimony (Sb)	mg/L	NG	0.006**	0.005	<0.005	<0.005	<0.0050	<0.0050	<0.0050
Total Arsenic (As)	mg/L	0.005	0.01	0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010
Total Barium (Ba)	mg/L	NG	10	0.01	<0.01	<0.01	<0.010	<0.010	<0.010
Total Beryllium (Be)	mg/L	NG	NG	0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010
Total Bismuth (Bi)	mg/L	NG	NG	0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010
Total Boron (B)	mg/L	NG	50**	0.05	<0.050	<0.050	<0.050	<0.050	<0.050
Total Cadmium (Cd)	mg/L	0.017	0.005	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Total Calcium (Ca)	mg/L	NG	NG	0.1	2.3	4.4	3.65	2.87	3.61
Total Chromium (Cr)	mg/L	NG	50	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Cobalt (Co)	mg/L	NG	NG	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Copper (Cu)	mg/L	0.002-0.004	≤10*	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Iron (Fe)	mg/L	0.3	≤0.3*	0.005	0.16	0.52	0.059	0.102	0.1
Total Lead (Pb)	mg/L	0.001-0.007	0.01	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Magnesium (Mg)	mg/L	NG	NG	100	1.5	3.4	2.94	1.56	2.82
Total Manganese (Mn)	mg/L	NG	≤0.05	0.001	0.017	0.032	0.111	0.0459	0.0598
Total Mercury (Hg)	mg/L	NG	0.001	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Total Molybdenum (Mo)	mg/L	0.073	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Nickel (Ni)	mg/L	0.025-0.150	NG	0.002	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Total Phosphorus (P)	mg/L	NG	NG	0.03	<0.03	<0.03	<0.030	<0.030	<0.050
Total Potassium (K)	mg/L	NG	NG	0.001	<1.0	<1.0	<1.0	<1.0	<1.0
Total Selenium (Se)	mg/L	0.001	0.01	0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total Silicon (Si)	mg/L	NG	NG	0.001	1.4	2.5	3.4	2.1	2.5
Total Silver (Ag)	mg/L	NG	NG	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Total Sodium (Na)	mg/L	NG	≤0.2*	0.1	<0.5	0.5	0.56	<0.50	0.59
Total Strontium (Sr)	mg/L	NG	NG	0.004	0.005	0.009	0.0052	0.0047	0.0059
Total Thallium (Tl)	mg/L	0.0008	NG	0.0003	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Total Tin (Sn)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Titanium (Ti)	mg/L	NG	NG	0.002	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Total Vanadium (V)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Zinc (Zn)	mg/L	0.03	≤5*	0.003	0.005	0.005	<0.0030	0.0048	<0.0030
<b>Dissolved Metals</b>									
Dissolved Aluminum (Al)	mg/L	0.005-.1	0.1	0.01	0.01	<0.01	<0.010	0.019	0.01
Dissolved Antimony (Sb)	mg/L	NG	0.006**	0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Arsenic (As)	mg/L	0.005	0.01	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Barium (Ba)	mg/L	NG	10	0.01	<0.010	<0.010	<0.010	<0.010	<0.010
Dissolved Beryllium (Be)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Bismuth (Bi)	mg/L	NG	NG	0.001	<0.001	<0.001	<0.0010	<0.0010	<0.0010
Dissolved Boron (B)	mg/L	NG	50**	0.05	<0.050	<0.050	<0.050	<0.050	<0.050
Dissolved Cadmium (Cd)	mg/L	0.017	0.005	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Dissolved Calcium (Ca)	mg/L	NG	NG	0.1	1.8	3.4	3.42	2.26	3.31
Dissolved Chromium (Cr)	mg/L	NG	50	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Cobalt (Co)	mg/L	NG	NG	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Copper (Cu)	mg/L	0.002-0.004	≤10*	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Iron (Fe)	mg/L	0.3	≤0.3*	0.005	<0.050	<0.050	<0.050	<0.050	<0.050
Dissolved Lead (Pb)	mg/L	0.001-0.007	0.01	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Magnesium (Mg)	mg/L	NG	NG	100	1.4	2.9	2.98	1.46	2.55
Dissolved Manganese (Mn)	mg/L	NG	≤0.05	0.001	0.014	0.019	0.0804	0.0110	0.0286
Mercury Dissolved (Hg)	mg/L	NG	0.001	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Dissolved Molybdenum (Mo)	mg/L	0.073	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Nickel (Ni)	mg/L	0.025-0.150	NG	0.002	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Dissolved Potassium (K)	mg/L	NG	NG	0.03	<1.0	<1.0	<1.0	<1.0	<1.0
Dissolved Selenium (Se)	mg/L	NG	NG	0.001	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Silicon (Si)	mg/L	0.001	0.01	0.005	1.3	2.6	3.5	2.1	2.1
Dissolved Silver (Ag)	mg/L	NG	NG	0.001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Dissolved Sodium (Na)	mg/L	NG	NG	0.0001	<0.5	<0.5	0.57	<0.50	<0.5
Dissolved Strontium (Sr)	mg/L	NG	≤0.2*	0.1	0.004	0.009	0.0052	0.0044	0.0051
Dissolved Thallium (Tl)	mg/L	NG	NG	0.004	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved Tin (Sn)	mg/L	0.0008	NG	0.0003	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Titanium (Ti)	mg/L	NG	NG	0.001	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Dissolved Tungsten (W)	mg/L	NG	NG	0.002	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Uranium (U)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Zinc (Zn)	mg/L	NG	NG	0.003	0.005	0.004	<0.0030	<0.0030	<0.0030

All results expressed as indicated

RDL+ - Analytical Reportable Detection Limit

CWQG, FWAL = CCME Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (2006 Update)

GCDWQ = CCME Canadian Water Quality Guidelines for Drinking Water Quality

334

Exceeds CCME FWAL Standards

334

**Table 3 Surface Water Analytical Results – Metals (continued)**

Parameter	Units	Criteria 1	Criteria 2	RDL+	Gilling River			Mike Tributary		
		CWQG FWAL	GCDWQ		1-Apr-09	4-Jul-09	16-Sep-09	1-Apr-09	5-Jul-09	15-Sep-09
<b>Total Metals</b>										
Total Aluminum (Al)	mg/L	0.005-1	0.1	0.01	<0.010	0.014	0.033	0.011	<0.010	0.084
Total Antimony (Sb)	mg/L	NG	0.006**	0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total Arsenic (As)	mg/L	0.005	0.01	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Barium (Ba)	mg/L	NG	10	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Beryllium (Be)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Bismuth (Bi)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Boron (B)	mg/L	NG	50**	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Cadmium (Cd)	mg/L	0.017	0.005	0.0001	<0.00010	<0.00010	<0.00010	0.00014	<0.00010	0.00036
Total Calcium (Ca)	mg/L	NG	NG	0.1	11.8	9.81	15.5	20.2	10.7	34.1
Total Chromium (Cr)	mg/L	NG	50	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Cobalt (Co)	mg/L	NG	NG	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Total Copper (Cu)	mg/L	0.002-0.004	≤10*	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Iron (Fe)	mg/L	0.3	≤0.3*	0.005	0.127	0.147	0.115	0.071	0.081	0.082
Total Lead (Pb)	mg/L	0.001-0.007	0.01	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Magnesium (Mg)	mg/L	NG	NG	100	7.41	5.75	6.99	9.76	6.35	9.50
Total Manganese (Mn)	mg/L	NG	≤0.05	0.001	0.0462	0.0528	0.0159	0.0056	0.0051	0.0223
Total Mercury (Hg)	mg/L	NG	0.001	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Total Molybdenum (Mo)	mg/L	0.073	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Nickel (Ni)	mg/L	0.025-0.150	NG	0.002	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Total Phosphorus (P)	mg/L	NG	NG	0.03	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
Total Potassium (K)	mg/L	NG	NG	0.001	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Selenium (Se)	mg/L	0.001	0.01	0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total Silicon (Si)	mg/L	NG	NG	0.001	2.56	1.88	2.39	1.99	1.11	1.84
Total Silver (Ag)	mg/L	NG	NG	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Total Sodium (Na)	mg/L	NG	≤0.2*	0.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Total Strontium (Sr)	mg/L	NG	NG	0.004	0.0079	0.0064	0.0110	0.0156	0.0079	0.0262
Total Thallium (Tl)	mg/L	0.0008	NG	0.0003	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Total Tin (Sn)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Titanium (Ti)	mg/L	NG	NG	0.002	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Total Vanadium (V)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Zinc (Zn)	mg/L	0.03	≤5*	0.003	0.0078	0.0099	<b>0.0622</b>	0.0325	0.0034	<b>0.214</b>
<b>Dissolved Metals</b>										
Dissolved Aluminum (Al)	mg/L	0.005-1	0.1	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Dissolved Antimony (Sb)	mg/L	NG	0.006**	0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Arsenic (As)	mg/L	0.005	0.01	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Barium (Ba)	mg/L	NG	10	0.01	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Dissolved Beryllium (Be)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Bismuth (Bi)	mg/L	NG	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Boron (B)	mg/L	NG	50**	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dissolved Cadmium (Cd)	mg/L	0.017	0.005	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Dissolved Calcium (Ca)	mg/L	NG	NG	0.1	11.2	8.58	9.30	15.4	10.7	13.6
Dissolved Chromium (Cr)	mg/L	NG	50	0.001	<0.0010	<0.0010	<0.0010	0.0020	<0.0010	<0.0010
Dissolved Cobalt (Co)	mg/L	NG	NG	0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Dissolved Copper (Cu)	mg/L	0.002-0.004	≤10*	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Iron (Fe)	mg/L	0.3	≤0.3*	0.005	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dissolved Lead (Pb)	mg/L	0.001-0.007	0.01	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Magnesium (Mg)	mg/L	NG	NG	100	7.24	6.86	6.59	9.41	6.65	8.55
Dissolved Manganese (Mn)	mg/L	NG	≤0.05	0.001	0.0205	<0.0010	0.0035	<0.0010	<0.0010	<0.0010
Mercury Dissolved (Hg)	mg/L	NG	0.001	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Dissolved Molybdenum (Mo)	mg/L	0.073	NG	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Dissolved Nickel (Ni)	mg/L	0.025-0.150	NG	0.002	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Dissolved Potassium (K)	mg/L	NG	NG	0.03	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dissolved Selenium (Se)	mg/L	NG	NG	0.001	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dissolved Silicon (Si)	mg/L	0.001	0.01	0.005	2.59	2.20	2.14	2.10	1.65	1.58
Dissolved Silver (Ag)	mg/L	NG	NG	0.001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Dissolved Sodium (Na)	mg/L	NG	NG	0.0001	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dissolved Strontium (Sr)	mg/L	NG	≤0.2*	0.1	0.0071	0.0054	0.0065	0.0121	0.0082	0.0106
Dissolved Thallium (Tl)	mg/L	NG	NG	0.004	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Dissolved Tin (Sn)	mg/L	0.0008	NG	0.0003						

# **APPENDIX E**

## Schefferville Area Iron Ore Mine Waste Management Plan



	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: i of iii
Date Issued: October 22, 2010			

**WASTE MANAGEMENT PLAN**

**FOR**

**SCHEFFERVILLE AREA IRON ORE PROJECT**

**WESTERN LABRADOR**

**Date Issued: October 22, 2010**  
**Version 1.0**

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: ii of iii
Date Issued: October 22, 2010			

## TABLE OF CONTENTS

	Page No.
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 Purpose and Goals.....	1
1.2 Scope .....	1
1.3 Plan Organization.....	1
1.4 Document History.....	2
<b>2.0 REGULATORY FRAMEWORK.....</b>	<b>3</b>
<b>3.0 WASTE CHARACTERIZATION.....</b>	<b>4</b>
<b>4.0 MANAGEMENT STRUCTURE.....</b>	<b>7</b>
4.1 Management Commitment .....	7
4.2 Mine Manager .....	7
4.3 Roles and Responsibilities .....	7
4.4 Orientation, Awareness and Training .....	9
<b>5.0 OPERATIONAL PROCEDURES.....</b>	<b>10</b>
5.1 On-Site Waste Disposal .....	10
5.2 Off-Site Waste Disposal .....	10
5.3 Waste Diversion and Reduction Programs .....	11
5.4 Waste Handling .....	12
5.4.1 Special Waste Handling .....	19
5.4.2 Waste Transportation .....	21
5.4.3 Waste Storage.....	21
5.4.4 Infrastructure and Equipment Maintenance.....	22
<b>6.0 MONITORING, REPORTING AND AUDITS .....</b>	<b>23</b>
6.1 Reporting of Problems or Concerns .....	23
6.2 Record Keeping.....	23
6.3 Routine Monitoring .....	23
6.4 Annual Monitoring, Reporting and WMP Revision .....	24

## LIST OF TABLES

	Page No.
Table 1-1 Document History.....	2
Table 2-1 Regulatory Requirements for Solid Waste Management .....	3
Table 3-1 Waste Type, Origin and Disposal Categories .....	4
Table 5-1 Waste Management Contracts/Contractors .....	10
Table 5-2 Waste Reduction and Diversion Options and Initiatives.....	12
Table 5-3 Waste Handling Procedures.....	12

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: iii of iii
Date Issued: October 22, 2010			

## LIST OF APPENDICES

### Appendix A

- Diesel Generating Units for Schefferville Area Iron Ore Project Construction and Operation Activities Certificate of Approval
- Schefferville Area Iron Ore Project Construction Activities Certificate of Approval
- Schefferville Area Iron Ore Project Operations Certificate of Approval

### Appendix B

- Part IV and V of the Environmental Protection Act

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	<b>Version: 1.0</b>	<b>Page: 1 of 24</b>
<b>Date Issued:</b> October 22, 2010			

## 1.0 INTRODUCTION

### 1.1 Purpose and Goals

This Waste Management Plan (WMP) provides direction on waste handling, storage, transport, treatment and disposal of the various wastes produced at the Schefferville Area Iron Ore Mine. The Plan provides a waste management system to deal with waste streams and allow for the implementation of reduction and diversion opportunities. The Plan will also serve as an internal quality control document that provides clear and concise direction for company staff and contractors regarding waste management policies and procedures that must be followed.

The goals of this Plan are to:

- Minimize adverse effects on the environment.
- Incorporate and optimize the basic principles of waste management including reduce, reuse, recycle, recovery and residual waste disposal.
- Meet all regulatory requirements for waste management.

### 1.2 Scope

This WMP covers Labrador Iron Mines Ltd.'s (LIM) Schefferville Area Iron Ore Mine Operation only. The Plan will address both the mine, plant and camp operations, and provide direction on waste handling, storage, transport, treatment and disposal. The WMP will address the industrial wastes produced at the site; however, will not cover mining wastes such as mine effluent (reject fines) or waste rock.

### 1.3 Plan Organization

Section 1 of this Plan provides the purpose, goals and scope of the Plan. The regulatory framework which provides the basis for the Plan is summarized in Section 2.

Sections 3 to 6 detail the basic elements of the waste management system including waste characterization, management structure, operational procedures, handling practices and monitoring, reporting and auditing systems.

Much of the information is presented in tabular format which will provide simple, concise listings that can be easily reviewed and updated as part of the annual review of the Plan.

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 2 of 24
<b>Date Issued:</b>		October 22, 2010	

## 1.4 Document History

**Table 1-1 Document History**

Date	Version	Notes
September 10, 2010	0.0	Review by Labrador Iron Mines Ltd.
October 22, 2010	1.0	Submission to Dept. of Environment and Conservation, Pollution Prevention Division

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	<b>Version: 1.0</b>	<b>Page: 3 of 24</b>
<b>Date Issued:</b> October 22, 2010			

## 2.0 REGULATORY FRAMEWORK

The foundation of the Waste Management Plan is based on the regulatory framework for industrial waste management in Newfoundland and Labrador including legislation, regulations and guidelines at the federal, provincial and municipal levels.

The principle legislation guiding and governing waste management in Newfoundland and Labrador is the Environmental Protection Act (EPA), assented in 2002, and amended in 2006, which consolidates the previous Environment Act, Environmental Assessment Act, Pesticides Act, Waste Management Act and Waste Material Disposal Act. The EPA covers the technical aspects of waste disposal, including handling, diverting, recovering, recycling, reducing and reusing waste materials. Under the provisions of this legislation, waste materials may be designated for recycling, composting or reuse and bans may be placed on the disposal of certain wastes.

The following table provides a list of the current, applicable requirements that affect this WMP.

**Table 2-1 Regulatory Requirements for Solid Waste Management**

Legislation, Guideline, etc.	Section or Reference	Requirements/Comments
Diesel Generating Units for Schefferville Area Iron Ore Project Construction and Operation Activities Certificate of Approval (No. AA10-075530)	Conditions 9 – 10 and 11 – 13.	Covers spill prevention and containment, and used oil.
Schefferville Area Iron Ore Project Construction Activities Certificate of Approval (No. AA10-075531)	Conditions 18 – 19, 20, 24 – 27, and 32.	Covers waste management, open burning, spill prevention and containment, and used oil.
Schefferville Area Iron Ore Project Operations Certificate of Approval (No. AA10-095537)	Conditions 18 – 19, 20, 25 – 28, and 33.	Covers waste management, open burning, spill prevention and containment, and used oil.
Environmental Protection Act (EPA)	Parts IV and V.	Covers all aspects of waste disposal, handling, etc. and provides for the requirement of this plan

Note: Copies of the Certificate of Approvals issued by the Department of Environment and Conservation and relevant sections of the EPA are located in Appendices A and B of this plan.

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 4 of 24
<b>Date Issued:</b> October 22, 2010			

### 3.0 WASTE CHARACTERIZATION

Typically, in order to assess the current and future requirements of a WMP, a qualitative and quantitative assessment or characterization of the waste materials being generated is required. This characterization establishes the baseline conditions and serves as a guide for monitoring and auditing.

In order to ensure that the WMP will remain flexible and responsive to the needs of the waste management systems, reporting, auditing and monitoring procedures will be established. These procedures will:

- Ensure review, as required, of waste quantities and composition for specific waste streams.
- Ensure appropriate infrastructure and equipment are provided for handling waste materials.
- Ensure that the collection frequency of waste materials is appropriate.
- Assist in assessing the feasibility of new waste reduction, diversion and disposal options.

A list of the various waste types, origins, and disposal categories based on anticipated waste streams are provided in Table 3-1 below. The waste data presented below will be reviewed and updated once operations commence.

**Table 3-1 Waste Type, Origin and Disposal Categories**

Category	Waste Type	Waste Origin	Waste Disposal Category
General	Domestic Waste (all materials that cannot be recycled or reused)	All Areas	Off-site Landfill
	Phones, Computers, Monitors, Printers and Related Hardware	Plant Offices and Camp	Recycled/Reused
	Printer and Copier Ink Cartridges	Plant Offices and Camp	Recycled
Sewage	Biological (Sewage) Waste	Toilets at Camp and Plant	Biodisk Plants and Off-site Disposal of Solids
Plastics and Rubber	Plastic Pails, Containers, or Parts etc.	Maintenance Workshop, Storage Area, Plant, Laboratory, and Kitchen/Dining/Recreation Area	Reused or Off-site Landfill (Note – not all plastics can be recycled in NL)
	Conveyor Belts	Plant	Reused, Sold, or Off-site Landfill
	Used Tires	Maintenance Workshop	Reconditioned/Recycled - Reused



# SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN

Version: 1.0

Page: 5 of 24

Date Issued:

October 22, 2010

Category	Waste Type	Waste Origin	Waste Disposal Category
Recyclable Food and Drink Product Packaging	<ul style="list-style-type: none"><li>• Aluminum cans</li><li>• Plastic drink and food containers</li><li>• Glass bottles</li><li>• Drink boxes</li><li>• Steel cans</li><li>• Gable top containers</li><li>• Alcoholic containers</li><li>• Other plastics - (yogurt drinks, flavoured drink pouches, foil-topped juice, white juice jugs, etc.)</li></ul>	Plant Offices, Camp and Kitchen/Dining/Recreation Area	Recycled/Reused – Returned for Refund
Compostable Food Waste	Personnel Lunches and Kitchen Scraps	Plant Offices, Camp and Kitchen/Dining/Recreation Area	Composted
Glass	Windows	Plant and Maintenance Workshop	Reused or Off-site Landfill
Wood and Paper	Pallets	Plant and Maintenance Workshop	Reused, or Off-site Landfill
	Wire Spools	Plant	Recycled/Reused – Returned for Refund, or Off-site Landfill
	Scrap Wood	Plant and Maintenance Workshop	Reused, Burned (with permit), or Off-site Landfill
	Cardboard and Paper	Mine, Maintenance Workshop and Offices	Recycled, Burned (with permit) or Off-site Landfill
Metals	Large Pieces of Machinery and Mobile Equipment	Across Entire Mine site	Recycled or Off-site Landfill
	Scrap Metal, Piping, Small Parts and Machinery, Non-recyclable Aluminum Cans	Mine, Plant and Maintenance Workshop	
	Coated Wire and Electrical Cable	Mine, Plant and Maintenance Workshop	
Hazardous Materials	Aerosol Cans	Maintenance Workshop and Kitchen/Dining/ Recreation Area	Off-Site Disposal (Recycled, Reused, Treated or Incinerated) in accordance with applicable provincial and federal regulations.
	Lithium/NiCad Batteries	All Areas	
	Bulbs (fluorescent, halogen, etc.)	All Areas	
	Plastic Drums Containing Contaminant Residues	Plant and Maintenance Workshop	
	Paint and Other Toxic Products Containers	Plant, Laboratory, Maintenance Workshop and Other Areas	
	Lab Chemicals	Laboratory	



# SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN

Version: 1.0

Page: 6 of 24

Date Issued:

October 22, 2010

Category	Waste Type	Waste Origin	Waste Disposal Category
	Bio-medical Waste <ul style="list-style-type: none"><li>• diabetic needles</li><li>• materials such as bandages, gloves, dressings etc. that have been in contact with blood</li></ul>	First Aid Room in Safety/Training Trailer at Silver Yard	
Hydrocarbon Materials	Fuel and Oil Filters	Maintenance Workshop	Off-Site Disposal (Recycled, Reused, Treated or Incinerated) in accordance with applicable provincial federal regulations
	Sweepings from Maintenance Workshop	Maintenance Workshop	
	Solvent/Oil Contaminated Rags, Workwear, and Absorbent Pads	Plant, Maintenance Workshop and Mobile Equipment	
	Petroleum Contaminated Soils	All Areas	
	Paint Filters	Maintenance Workshop	
	Grease Tubes	Maintenance Workshop and Mobile Equipment	
	Hydraulic Hoses	Maintenance Workshop	
	Waste Grease	Maintenance Workshop	
	Solvents and Oils	Maintenance Workshop	
	Glycol	Maintenance Workshop	
	Used Oil	Plant, Maintenance Workshop and Mobile Equipment	

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 7 of 24
Date Issued: October 22, 2010			

## 4.0 MANAGEMENT STRUCTURE

### 4.1 Management Commitment

LIM is committed to the preservation and protection of our environment. As such, LIM commits to the implementation, maintenance and upgrading of this WMP which incorporates existing waste management strategies and new initiatives.

The Schefferville Area Iron Ore Mine management recognizes that staff time and resources are required to implement and maintain this Plan. All employees must understand the importance of the Plan and of following procedures. The roles and responsibilities of the on-site Mine Manager, and LIM's Vice President (VP) of Environment and Permitting, as well as other staff, are defined below.

### 4.2 Mine Manager

The Mine Manager will aid in the management of contractors managing the waste and review of the WMP initiatives and procedures with the VP of Environment and Permitting and ensure that this plan is carried out with a full understanding of the applicable regulations and requirements.

### 4.3 Roles and Responsibilities

The effectiveness of this WMP depends on the commitment and actions of all employees. Therefore, all personnel must be fully aware of their individual duties and responsibilities, as outlined below.

#### Vice President of Environment and Permitting

- Provide guidance and expertise to the Mine Manager and Mine Contractor on all aspects of waste management activities.
- Support waste management orientation and awareness training for all LIM employees and contractors, as required.
- Review results of routine monitoring and/or audits with respect to waste handling, infrastructure and equipment, and contractors as part of the continual approval process.
- Interface with regulators with regards to waste management and recycling programs, as required.

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 8 of 24
<b>Date Issued:</b> October 22, 2010			

#### Mine Manager

- Review onsite waste management needs and contract requirements with the Mine Contractor.
- Report any health and safety issues with respect to the WMP to the Health and Safety Coordinator.
- Respond to any urgent onsite waste management issues.
- Report on any issues relating to the implementation of the WMP to the Vice President of Environment and Permitting.
- Forward results of routine monitoring and/or audits with respect to waste handling, infrastructure and equipment and contractors to the Vice President of Environment and Permitting.

#### Mine Contractor

- Responsible for the coordination of the WMP with the Mine Manager.
- Set up contracts with the waste management contractors and review practices at all sites for appropriateness and compliance.
- Collect and maintain all records pertaining to waste management activities for compliance monitoring.
- Provide to the Mine Manager and Vice President of Environment and Permitting all necessary documentation pertaining to the transportation, final disposal location and disposal process for all waste removed from the Schefferville Area Iron Ore Mine Property.
- Conduct routine monitoring and/or audits with respect to waste handling, infrastructure and equipment and contractors and provide results to LIM Mine Manager.
- Conduct waste management orientation and awareness training for all LIM employees and subcontractors.
- Report any health and safety issues with respect to the WMP to the Mine Manager and the Health and Safety Coordinator.

#### Environmental Technician

- Provide onsite implementation support and plan compliance during operations.
- Assist the Mine Contractor with routine monitoring and/or audits with respect to waste handling, infrastructure and equipment, and contractors, if required.
- Report any non-compliance issues to the Mine Manager and Vice President of Environment and Permitting.

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 9 of 24
<b>Date Issued:</b> October 22, 2010			

### Waste Management Contractors

- Are to be fully licensed to conduct waste management activities in the province of Newfoundland and Labrador.
- Must adhere to all federal, provincial and municipal waste management regulations.
- Provide to the Mine Contractor all necessary documentation pertaining to the transportation, final disposal location and disposal process for all waste removed from the Schefferville Area Iron Ore Mine Property.
- Adhere to all Schefferville Area Iron Ore Mine and LIM's Environmental Protection Plan (EPP) and health and safety guidelines.

### Employees

- Must be aware of the waste management requirements specific to their area or type of work.
- Must attend and sign off on WMP orientation program.

#### **4.4 Orientation, Awareness and Training**

Employee education and awareness about the WMP, and continual communication are important to ensure the success of the Plan. All company staff and contractors/sub-consultants should be informed about the Plan and should know and understand their responsibilities under the Plan. On-going communication about plan implementation, changes and results will ensure a high level of awareness about the Plan.

Information on waste management and the WMP at the Schefferville Area Iron Ore Mine will be provided to all new employees and contractors/sub-consultants during standard site orientation training. Additional information and training will be provided on an individual basis, specific to the work area of the employee or contractor/sub-consultant. All contractors/sub-consultants will be provided with specific instructions on how to deal with waste disposal on the Schefferville Area Iron Ore Mine Property by the Mine Contractor.

A list of employees, staff and contractors/sub-consultants will be kept by the Mine Contractor, and provided to the Mine Manager, and will include the type of WMP training each individual received, the date of the training and any updates or additional training.

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 10 of 24
<b>Date Issued:</b> October 22, 2010			

## 5.0 OPERATIONAL PROCEDURES

### 5.1 On-Site Waste Disposal

There will be no on-site waste disposal at the Schefferville Area Iron Ore Mine.

### 5.2 Off-Site Waste Disposal

Off-site waste disposal includes any waste that is disposed of outside of the Schefferville Area Iron Ore Mine site. This would include waste materials taken off-site to be recycled, reused, incinerated, stored or sent to an off-site landfill.

All waste products that must be disposed of off-site will be handled for shipping by trained mine staff. The material will be placed on suitable rail cars and moved over the section of rail line leading from Silver Yard to Tshuetin main line, and then on Tshuetin rail line to Emeril Siding.

Off-site waste disposal will be conducted by licensed waste management contractors as listed in Table 5-1 below.

**Table 5-1 Waste Management Contracts/Contractors**

Waste Management Contracts/Contractors	Contract or Reference No.	Types of Waste Handled
Capital Environmental Services		Used hydrocarbon disposal
City Tire (Labrador City)		Used tire repair, recycle and disposal
College of the North		Collects computers and printers and ink cartridges from the general public and in turn send all to a recycler
GSC/Environmental Friends		<ul style="list-style-type: none"> <li>• Used hydrocarbon recycling and disposal</li> <li>• Metal recycling</li> <li>• Battery recycling</li> <li>• Sewage disposal (vacuum trucks)</li> <li>• General waste (bin rentals and sales, and waste haulage)</li> <li>• Hazardous materials</li> </ul>
Hodge Brothers (Wabush, NL)		<ul style="list-style-type: none"> <li>• General waste (bin rentals and sales, and waste haulage)</li> <li>• Bio-medical waste</li> </ul>

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 11 of 24
<b>Date Issued:</b> October 22, 2010			

Waste Management Contracts/Contractors	Contract or Reference No.	Types of Waste Handled
Hounsel Enterprises		Metal recycling
Innu-Municipal		<ul style="list-style-type: none"> <li>• Bio-medical waste</li> <li>• Hazardous materials</li> </ul>
Ken Tech Computers		Used computers and printers recycling
Mobile 01 Metal Press		Metal recycler
MMSB Green Depot		Beverage containers recycling
Newalta		Bio-medical waste
Town of Labrador City		Operates local landfill

### 5.3 Waste Diversion and Reduction Programs

Waste diversion and reduction programs are necessary to optimize the reduction of waste materials, the cost of purchased materials and the return, rebate and sale of recyclable or reusable materials. Schefferville Area Iron Ore Mine management will review all aspects of waste reduction and diversion practices on a continual basis or as required. This review will, at a minimum cover the following aspects:

- Purchasing practices;
- Packaging materials;
- Supplier rebates;
- Recycling or reuse returns and rebates;
- New Labrador West regional, government and commercial waste management initiatives, operations and services; and
- Examine potential partnerships with Labrador West regional municipalities and businesses to manage waste.

Table 5-2 provides a list of waste reduction and diversion options and considerations. This list will be updated as required and all past considerations and options will remain listed with details on implementation or why an option was not implemented.

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 12 of 24
<b>Date Issued:</b> October 22, 2010			

**Table 5-2 Waste Reduction and Diversion Options and Initiatives**

Initiative	Date	Options and Issues	Implementation Plan
Reduce amount of drink containers	TBD	<ul style="list-style-type: none"> <li>Supply refillable thermos bottles for personnel</li> <li>Procure large water and juice coolers/containers</li> <li>Procure an ice machine</li> </ul>	Evaluate options and issues.

#### 5.4 Waste Handling

Waste handling covers all aspects of waste sorting, transportation and storage of common waste as well as special wastes at the Schefferville Area Iron Ore Mine. A summary of the general waste handling procedures including collection, storage and transportation practices are provided in Table 5-3.

A storage area will be developed near the Maintenance Workshop at Silver Yard. Appropriate and clearly marked containers and bins will be placed here to receive, separate and temporarily store the various waste streams.

There will be no open burning of the materials listed in Table 1 of the Certificate of Approvals (Construction Activities and Operations) located in Appendix A, and permission of the Department of Environment and Conservation will be obtained prior to open fires for burning of other materials.

**Table 5-3 Waste Handling Procedures**

Category	Waste Type	Collection/ Transportation	Initial Storage Location	Final Collection/ Transportation
General	Domestic Waste (all materials that cannot be recycled or reused)	Collected by site personnel and placed in temporary garbage cans at the Camp, Kitchen/Dining/ Recreation Area and lunchroom at the Plant offices.	Covered steel containers located near the Camp Kitchen/Dining/ Recreation Area.	Covered containers to be transported to and loaded onto railcars, unloaded at Emeril Siding and transported to the municipal landfill in Labrador City.



## SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN

Version: 1.0 Page: 13 of 24

Date Issued:

October 22, 2010

Category	Waste Type	Collection/ Transportation	Initial Storage Location	Final Collection/ Transportation
	Phones, Computers, Monitors, Printers and Related Hardware	In the Plant offices and at the Camp.	Designated location in the storage area at Silver Yard.	Reused or shipped via rail and truck to the College of the North in Labrador City, who as a community service, accumulates this material and in turn sends it to a recycler. A supplier Ken Tech Computers will accept used computers and add them to their recycling program.
	Printer and Copier Ink Cartridges	In the Plant offices and at the Camp.	Designated location in the storage area at Silver Yard.	Reused or shipped via rail and truck to the College of the North in Labrador City, who as a community service, accumulates this material and in turn sends it to a recycler. A supplier Ken Tech Computers will accept used printer and copier ink cartridges and add them to their recycling program.
Sewage	Biological (sewage) Waste	All sewage is directed to the Biodisk units for treatment.	The Biodisk units provide treatment and initial storage.	The discharge from the Biodisk units will flow to designated tanks and/or settling ponds. The solids will be periodically (once per season) pumped out by vacuum truck, transported by rail to Emeril Siding, by truck to Labrador City and disposed of at an approved facility.



## SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN

Version: 1.0 Page: 14 of 24

Date Issued:

October 22, 2010

Category	Waste Type	Collection/ Transportation	Initial Storage Location	Final Collection/ Transportation
Plastics and Rubber	Plastic Pails, Containers, or Parts etc.	Site personnel assigned to the Maintenance Workshop, Plant, assay laboratory, or the Kitchen/Dining/ Recreation Area will gather the empty pails.	Potential hydrocarbon or hazardous materials present in the containers will be cleaned out and the containers will be bundled or stacked at a designated storage area.	Transported and loaded onto railcars, unloaded at Emeril Siding and transported to the municipal landfill in Labrador City.
	Conveyor Belts	Personnel working in the Plant will gather conveyor belts when they need to be replaced.	They will be rolled and stored by unused conveyor belts in a designated location near the Plant.	Sections that are salvageable will be reused. Unusable sections will be transported to and loaded onto railcars, unloaded at Emeril Siding and transported to the municipal landfill in Labrador City.
	Used Tires	The maintenance personnel working in the vehicle repair facility will gather used tires as they need to be replaced.	They will be stored at a designated location near the vehicle repair facility.	All used tires will be transported to and loaded onto railcars, unloaded at Emeril Siding and transported to repair shops such as City Tire in Labrador City to be repaired and then shipped back to the site to be reused. City Tire has a disposal program for those that cannot be repaired for reuse.



## SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN

Version: 1.0 Page: 15 of 24

Date Issued:

October 22, 2010

Category	Waste Type	Collection/ Transportation	Initial Storage Location	Final Collection/ Transportation
Recyclable Food and Drink Product Packaging	<ul style="list-style-type: none"><li>• Aluminum cans</li><li>• Plastic drink and food containers</li><li>• Glass bottles</li><li>• Drink boxes</li><li>• Steel cans</li><li>• Gable top containers</li><li>• Alcoholic containers</li><li>• Other plastics - (yogurt drinks, flavoured drink pouches, foil-topped juice, white jus jugs, etc.)</li></ul>	Marked collection containers will be placed at various locations at the Camp and in the lunchrooms.	A collection bin will be located at the storage area.	Once the bin is filled with recyclables it will be transported to and loaded onto railcars, unloaded at Emeril Siding and transported to MMSB Green Depot, a recycling depot in Labrador City.
Compostable Food Waste	Personnel Lunches and Kitchen Scraps	Personnel producing waste will place in containers provided.	Container will be set up in the cafeteria.	The kitchen staff will separate compostable material and place it in a composter set up in a fenced area away from the camp. Should the composter become a wildlife attractant, other options will be considered.
Glass	Windows	Scrap glass will be collected by site personnel.	Broken glass will be placed in a bin located near the storage area marked for broken glass.	Once the bin is filled with glass, it will be transported to and loaded onto railcars, unloaded at Emeril Siding and transported to the municipal landfill in Labrador City.
Wood and Paper	Pallets	Collected by receiving personnel in the storage area.	Reusable pallets will be stacked near the storage area for reuse. Damaged pallets will be placed in a bin with other scrap wood.	An application to burn combustible material will be submitted. If the permits are not issued or if it is a time of year when burning is not permitted, when the scrap wood bin is full it will be transported to and loaded onto TSH railcars, unloaded at Emeril Siding and transported to the municipal landfill in Labrador City.



## SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN

Version: 1.0 Page: 16 of 24

Date Issued:

October 22, 2010

Category	Waste Type	Collection/ Transportation	Initial Storage Location	Final Collection/ Transportation
	Wire Spools	Empty spools will be collected by electrical personnel.	The reusable empty spools will be stored near the storage area.  Damaged spools will be added to the scrap wood bin.	Reusable spools will be transported to and loaded onto TSH railcars, unloaded at Emeril Siding and transported to the supplier for reuse. See the scrap wood final collection/transportation details below.
	Scrap Wood	Scrap wood will be collected by site personnel.	Scrap wood will be placed in a bin located near the storage area marked for scrap wood.	An application to burn combustible material will be submitted. If the permits are not issued or if it is a time of year when burning is not permitted, when the scrap wood bin is full, it will be transported to and loaded onto TSH railcars, unloaded at Emeril Siding and transported to the municipal landfill in Labrador City.
	Cardboard and Paper	Cardboard and paper will be collected in containers located at various locations around the site.	A bin marked for cardboard and paper will be placed near the kitchen and a second near the storage area.	An application to burn combustible material will be submitted. If the permits are not issued or if it is a time of year when burning is not permitted, when the bins filled with cardboard and paper are full, they will be transported to and loaded onto railcars , unloaded at Emeril Siding and transported to the municipal landfill in Labrador City.
Metals	Large Pieces of Machinery and Mobile Equipment	This will be collected by Maintenance Workshop personnel.	The pieces will be stored at a location near the Maintenance Workshop.	Machinery, scrap metal and electrical wire will be transported to and loaded onto railcars, unloaded at Emeril



## SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN

Version: 1.0

Page: 17 of 24

Date Issued:

October 22, 2010

Category	Waste Type	Collection/ Transportation	Initial Storage Location	Final Collection/ Transportation
	Scrap Metal, Piping, Small Parts and Machinery, Non-recyclable Aluminum Cans	This will be collected by Maintenance Workshop personnel.	A bin designated for scrap metal will be placed near the storage area.	Siding and transported to a scrap metal recycler in Labrador City or to the municipal landfill if not considered recyclable.
	Coated Wire and Electrical Cable	This will be collected by electrical personnel.	A bin designated for electrical wire will be placed near the storage area.	
Hazardous Materials	Aerosol Cans	Collected by site personnel.	This type of material will be placed in designated containers located at the storage area.	Innu-Municipal will transport and load drums, and bins containing hazardous materials onto railcars, unload them at Emeril Siding and haul them to GSC Environmental Friends, where they will be disposed of as per the proper disposal methods for each type of hazardous material.
	Lithium/NiCad Batteries	Collected by site personnel.		
	Bulbs (fluorescent, halogen, etc.)	Collected by site personnel.		
	Plastic Drums Containing Contaminant Residues	Collected by site personnel.	These drums will have sealed lids and be placed at a designated location near the storage area.	
	Paint and Other Toxic Products Containers	Collected by site personnel.	Collection bins and drums will be placed at a designated location near the storage area.	
	Lab Chemicals	Collected by lab personnel.	Collection bins and drums will be placed at a designated location near the storage area.	



# SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN

Version: 1.0 Page: 18 of 24

Date Issued:

October 22, 2010

Category	Waste Type	Collection/ Transportation	Initial Storage Location	Final Collection/ Transportation
	Bio-medical Waste <ul style="list-style-type: none"><li>• diabetic needles</li><li>• materials such as bandages, gloves, dressings etc. that have been in contact with blood</li></ul>	<ul style="list-style-type: none"><li>• Needles will be deposited by the user in "Sharps Containers".</li><li>• Materials that have been in contact with blood will be deposited by the user in "Yellow Bags" provided by Newfoundland Poly Bag.</li></ul>	First Aid Room in Safety/Training Trailer at Silver Yard	TDG certified personnel with Innu-Municipal will transport and load "Sharps Containers" and "Yellow Bags" onto railcars, unload them at Emeril Siding and transport them to the Captain William Jackman Memorial Hospital in Labrador City. The bio-medical waste will then be moved by a licensed transporter (Hodge Brothers) to Newalta in Goose Bay where it will be disposed of as per the proper disposal methods.
Hydrocarbon Materials	Fuel and Oil Filters	Collected by site maintenance personnel.	Placed in appropriately labelled drums or containers, located near the storage area, and stored in a location designated for waste oil storage.	These drums and containers will be transported to and loaded onto railcars, unloaded at Emeril Siding and hauled by a licensed transporter to be disposed of as per the proper disposal methods for each type of material.
	Sweepings from Maintenance Workshop			
	Solvent/Oil Contaminated Rags, Workwear, and Absorbent Pads			
	Petroleum Contaminated Soils			
	Paint Filters			
	Grease Tubes			
	Hydraulic Hoses			
	Waste Grease			
	Solvents and Oils			
	Glycol	Collected by site personnel.	Stored in used oil storage tank located at Plant.	Trash pump from service truck to plastic cube container, then transported via rail for final disposal in Labrador City by a licensed contractor.
	Used Oil			

Waste handling procedures shall conform to all existing or new internal and external regulations and policies as identified in this WMP or that come into affect prior to revision of this Plan.

Handling of waste related to an employee's specific line of work should be conducted by the employee as required within his/her normal duties. Depending on the waste type and method of storage, proper

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 19 of 24
<b>Date Issued:</b> October 22, 2010			

training and/or instruction and orientation may be required to ensure that the procedures as outlined in this Plan are followed.

Handling of special, hazardous or hydrocarbon waste should only be conducted by personnel trained in all aspects of handling, transportation and storage of the material or materials.

#### **5.4.1 Special Waste Handling**

Special waste handling procedures are as follows:

- Special wastes are wastes that must be handled to ensure that the material does not cause contamination, fire or affect the health of personnel. Special wastes may include hydrocarbon, sewage, bio-medical, hazardous or any other waste that, when not handled properly, induce additional risk to personnel or property.
- Special wastes must be handled by employees trained to complete this work or a licensed waste disposal contractor.
- Solid waste to be recycled/incinerated should be separately binned and/or stored in temporary containers until final storage. These wastes include:
  - Aerosol cans
  - Lithium/NiCad batteries
  - Bulbs (fluorescent, halogen, etc.)
  - Plastic drums (totes and bags) containing contaminant residues
- Liquid and liquid contaminated wastes to be recycled/incinerated should be drummed or put in approved containers **ensuring no mixing** of materials. These wastes include:
  - Fuel and oil filters
  - Sweepings from shops
  - Solvent/oil contaminated rags, workwear, and absorbent pads
  - Paint filters
  - Paint and other toxic products containers
  - Grease tubes
  - Hydraulic hoses
  - Waste grease
  - Solvents/oils
  - Laboratory Chemicals
  - Glycol

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 20 of 24
<b>Date Issued:</b> October 22, 2010			

- For drum storage of waste the following practices must be followed. Drummed waste is stored in a properly dyked and protected storage area. The Mine Contractor will be responsible for ensuring that there are proper interim storage areas for these materials. The drums must be clearly labelled indicating their contents and that materials are not mixed. See comments below regarding handling and storage requirements:
  - Full Drums
    - Labelling - Drums must have proper labelling (MSDS available where applicable)
    - Storage - On pallets and in designated areas protected from damage and properly ventilated
    - Movement - Verify that drums are tightly closed to prevent spills
      - For multiple drums, ensure drums are secured on pallet before moving
      - For single drums, use proper slings or secure drum to cart before moving
  - In-use Drums
    - Labelling - Drums must have proper labelling (MSDS available where applicable)
    - Storage - In designated areas protected from damage and properly ventilated
    - Movement - Verify that drums are tightly closed to prevent spills
    - Decanting - Ensure that decanting nozzle does not leak when installed
      - Use with a drip pan to prevent spills, keep clean-up material nearby
      - Use only properly labelled decanting containers (do not mix products)
- Biosolids removal will be done by a pump truck. See comments below regarding removal procedures:
  - The scum blanket should be removed first, then the sludge.
  - Sludge is distributed over the primary clarified tank bottom. More solids will be near the inlet and under the first stage.
  - The nozzle of the hose must be moved around the tank bottom at different points to access all areas of the tank. Sludge can funnel at 60 degrees if the suction hose is stationary.
  - The biological growth (biomass) on the disks should not be washed off.
  - It is not necessary to remove all the tank contents or all the sludge and scum.
  - The sludge blanket and the biological activity on the disk are both a source of heat. Removal of biosolids should be done in the spring if possible. Winter removal of all biosolids will reduce the heat generated from biological activity. If required, partial removal of biosolids in the winter is recommended.
- Bio-medical waste removal from site will only be handled by employees or contractors trained and certified in the Transportation of Dangerous Goods (TDG).

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 21 of 24
<b>Date Issued:</b> October 22, 2010			

#### 5.4.2 Waste Transportation

The following procedures apply to waste transportation:

- Transportation of waste may include:
  - Movement of waste from a work area to the appropriate disposal or storage area.
  - Movement of waste from a temporary disposal or storage area to a bulk storage area or off-site (via TSH railcars).
  - Movement of waste from a bulk storage area or laydown area located near the Workshop storage area to off-site (via railcars).
- Movement of common or routine waste from a work area to the appropriate disposal or storage area should be completed by the employee. The employee should be aware of the type of waste and the proper handling and transportation procedures specific to that type of waste.
- Movement from a temporary disposal or storage area to a bulk storage area or off-site (via railcars) should be completed by waste handling personnel (unless additional employees or contractors are designated). Movement of such materials should be conducted using appropriate equipment while utilizing appropriate personal protective equipment (PPE) at all times.

#### 5.4.3 Waste Storage

Waste storage applies to on-site temporary pallets, bins, laydown areas and bulk storage areas:

- All waste should be stored at the designated location in/on approved containers, pallets or laydown areas, and be dyked if applicable.
- Storage areas/containers are to be clearly marked and located at approved locations around the site based on the waste requirements of each area.
- Waste placed at laydown areas or stored in containers will be collected at appropriate intervals to avoid spillage, overflow or congestion.
- Bulk storage areas will be maintained to ensure safety, maximization of available space and access for waste haulers to all adjacent areas.
- Storage areas will be inspected and reviewed based on space, necessity, access, etc. as required or at a minimum, annually.
- The hydrocarbon and hazardous waste containment area must be properly maintained and inspected to ensure full access, proper storage procedures and early leak or spill detection.
- Used oil storage containers must be inspected and maintained on a monthly basis.
- All records of inspections must be submitted to the Mine Contractor and, from there, to the Mine Manager and VP of Environment and Permitting.

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 22 of 24
Date Issued:		October 22, 2010	

#### **5.4.4 Infrastructure and Equipment Maintenance**

Waste management infrastructure and equipment includes any or all infrastructure and equipment related to handling, transportation, storage or removal of wastes from the site. All waste management infrastructure and equipment must be maintained to ensure the health and safety of employees and avoid contamination or degradation of waste during storage or transportation.

LIM will not have equipment specifically dedicated to waste management. There will be several loaders, boom trucks, flatbed tractor trailer trucks, and pickup trucks that will be involved in waste management. An inspection and maintenance schedule will be developed and implemented for all mobile equipment. Inspections will include review of the condition, necessity, location and cleaning/repair/maintenance requirements for each piece of equipment or infrastructure.

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 23 of 24
<b>Date Issued:</b> October 22, 2010			

## 6.0 MONITORING, REPORTING AND AUDITS

Continual review and enhancement of the WMP will be conducted with a goal of continuous improvement. The purpose of monitoring and auditing the waste management system is to identify any problems or aspects of the plan that can be improved, and to determine appropriate actions to address these issues.

### 6.1 Reporting of Problems or Concerns

All Schefferville Area Iron Ore Mine employees and contractors/sub-consultants are responsible and encouraged to report problems or concerns related to any aspect of this WMP.

Issues pertaining to training, waste handling, transportation, storage, infrastructure and equipment should be reported to the Mine Contractor and Mine Manager. Any appropriate issues will be reviewed and forwarded to the VP of Environment and Permitting for action. A record will be kept of all problems or concerns that are identified.

### 6.2 Record Keeping

Records related to the Schefferville Area Iron Ore Mine waste management system will be kept by the Mine Contractor and copies are to be provided to the Mine Manager and VP of Environment and Permitting.

Records may include documents and information related to:

- orientation and waste management training;
- waste characterization;
- waste management legislation, regulations and guidelines;
- waste management contractors;
- off-site waste disposal;
- Waste Management Committee meetings;
- inspections of waste storage facilities; and
- any other aspects or issues related to the waste management system.

### 6.3 Routine Monitoring

Routine monitoring of waste management activities will be conducted to ensure that the guidelines and procedures outlined in this plan are being followed. Routine monitoring may consist of informal or formal checks on personnel, equipment and contractors and review of records related to waste management activities.

	<b>SCHEFFERVILLE AREA IRON ORE MINE WASTE MANAGEMENT PLAN</b>	Version: 1.0	Page: 24 of 24
<b>Date Issued:</b> October 22, 2010			

Monitoring may include:

- location and condition of on-site waste and recycling collection bins;
- condition and organization of waste laydown and storage areas;
- waste collection, transportation and handling operations for Schefferville Area Iron Ore Mine employees and waste management contractors;
- waste volumes from mine areas; and
- any other aspects or issues related to the waste management system.

#### **6.4 Annual Monitoring, Reporting and WMP Revision**

This plan will be reviewed annually or as necessary to ensure that all components of the plan are current and operating properly. The review of the plan will be conducted by the Mine Manager and the Vice President of Environment and Permitting in coordination with the Mine Contractor.

The review of the plan should include the following:

- existing, new and upcoming changes in legislation, regulations and guidelines;
- existing and potential waste diversion and reduction programs; and
- operational procedures, equipment and infrastructure.

Monitoring of some components of the waste management system may be required prior to or as a result of the formal review process. If monitoring is required as a result of the review, an additional formal review may be required where changes to the WMP are necessary.

Revision of the WMP may only be completed with the approval of the Vice President of Environment and Permitting. Personnel affected by any revisions or changes should be notified by the Mine Contractor and their training updated if necessary. Revisions or changes in the WMP will also be updated in the waste management orientation and operations training by the Mine Contractor.

## **APPENDIX A**

**Diesel Generating Units for Schefferville Area Iron Ore Project Construction  
and Operation Activities Certificate of Approval**

**Schefferville Area Iron Ore Project Construction Activities Certificate of  
Approval**

**Schefferville Area Iron Ore Project Operations Certificate of Approval**



# Newfoundland Labrador

GOVERNMENT OF  
NEWFOUNDLAND AND LABRADOR  
Department of Environment and Conservation

## CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002 c E-14.2 Section 83

Issue Date: *July 21, 2010*

Approval No AA10-075530

Expiration: *July 21, 2015*

File No. 731.400

Proponent: **Labrador Iron Mines**  
220 Bay Street  
Suite 700, Toronto, ON  
M5J 2W4

Attention: Linda Wrong - Vice President, Environment and Permitting

Re: **Diesel Generating Units for Schefferville Area Iron Ore Project  
Construction and Operation Activities**

---

Approval is hereby given for: the operation of: (i) two 750kW diesel generators at the Silver Yard (primary beneficiation area); (ii) one 450 kW diesel generator at the James Claim; and (iii) two 450 kW diesel generators at the worker's camp at the Labrador Iron Mines sites works in Labrador, near Schefferville, Quebec.

This certificate of approval does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Nothing in this certificate of approval negates any regulatory requirement placed on the proponent. Where there is a conflict between conditions in this certificate of approval and a regulation, the condition in the regulation shall take precedence. Approval from the Department of Environment and Conservation shall be obtained prior to any significant change in the design, construction, installation, or operation of the facility, including any future expansion of the works. This certificate of approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

This certificate of approval is subject to the terms and conditions as contained in Appendix 'A' attached hereto, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this certificate of approval null and void, may require the proponent to cease all activities associated with this certificate of approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, delete or modify conditions to correct errors in the certificate of approval or to address significant environmental or health concerns.



*Dexter Path*  
FOR MINISTER

## APPENDIX "A"

### TERMS AND CONDITIONS FOR APPROVAL No. AA10-075530

July 21, 2010

#### General

1. Approval is hereby given for: the operation of five (5) diesel generating units as outlined in Table 1 at the Labrador Iron Mines in Labrador, near Schefferville, Quebec.

**Table 1 – Summary of Planned Diesel Generators on LIM Properties**

Location	Number of Units	Power Rating	Manufacturer	Model Number(s)
Silver Yard (primary beneficiation area)	2	750 kW	Cummins	QST30-G1
James Claim	1	450 kW	Cummins	KTA19-G4
Worker's Camp	2	450 kW	Cummins	QSX15-G9

2. Any inquires concerning this approval shall be directed to the St. John's office of the Pollution Prevention Division (telephone: (709) 729-2555; or facsimile: (709) 729-6969).
3. In this Certificate of Approval:
  - **CO** means carbon monoxide;
  - **CO<sub>2</sub>** means carbon dioxide;
  - **Department** means the Department of Environment and Conservation and its successors;
  - **Director** means the Director of the Pollution Prevention Division of the Department;
  - **GSC** means the Government Service Centre;
  - **licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;
  - **LIM** means Labrador Iron Mines;
  - **Minister** means the Minister of the Department;
  - **NO<sub>x</sub>** means oxides of nitrogen;

- **register(ed)**, in the context of storage tanks, means that information regarding the storage tank system has been submitted to a GSC office and a registration number has been assigned to the storage tank system.
- **SO<sub>2</sub>** means sulphur dioxide;
- **spill or spillage** means a loss of gasoline or associated product in excess of 70 litres from a storage tank system, pipeline, tank vessel or vehicle, or of any volume of a regulated substance onto or into soil or a body of water;
- **storage tank system** means a tank and all vent, fill and withdrawal piping associated with it installed in a fixed location and includes a temporary arrangement;
- **used lubricating oil** means lubricating oil that as a result of its use, storage or handling, is altered so that it is no longer suitable for its intended purpose but is suitable for refining or other permitted uses;
- **used oil** means a used lubricating oil or waste oil; and
- **waste oil** means an oil that as a result of contamination by any means or by its use, is altered so that it is no longer suitable for its intended purpose.

4. All necessary measures shall be taken to ensure compliance with all applicable acts, regulations, policies and guidelines, including the following, or their successors:

- *Environmental Protection Act;*
- *Water Resources Act;*
- *Air Pollution Control Regulations, 2004;*
- *Environmental Control Water and Sewage Regulations, 2003;*
- *Storage and Handling of Gasoline and Associated Products Regulations, 2003; and*
- *Used Oil Control Regulations.*

This Approval provides terms and conditions to satisfy various requirements of the above listed acts, regulations, Departmental policies and guidelines. If it appears that all of the pertinent requirements of these acts, regulations, policies and guidelines are not being met, then a further review of the works shall be conducted, and suitable pollution control measures may be required by the Minister.

5. All reasonable efforts shall be taken to minimize the impact of the diesel generating units on the environment. Such efforts include minimizing the area disturbed by the station, minimizing air or water pollution, finding alternative uses, acceptable to the Director, for waste or rejected materials, and considering the requirement for the eventual rehabilitation of disturbed areas when planning the development of any area on the facility property.

6. LIM shall provide to the Department, within a reasonable time, any information, records, reports or access to data requested or specified by the Department.

7. LIM shall keep all records or other documents required by this Approval for a period of not less than three (3) years, beginning the day they were made. These records

shall be made available for review by officials of the Department or the GSC when requested.

8. Should LIM wish to deviate in any way from the terms and conditions of this Certificate of Approval, a written request detailing the proposed deviation shall be made to the Minister. LIM shall comply with the most current terms and conditions until the Minister has authorized otherwise. In the case of meeting a deadline requirement, the request shall be made at least 60 days ahead of the applicable date as specified in this Approval or elsewhere by the Department

## **Spill Prevention and Containment**

9. All on site storage of petroleum shall comply with the ***Storage and Handling of Gasoline and Associated Products Regulations, 2003***, or its successor. Storage tank systems shall be registered with the GSC. All aboveground storage tanks shall be clearly and visibly labelled with their GAP registration numbers.
10. Where applicable, all tanks and fuel delivery systems shall be inspected to appropriate American Petroleum Institute or Underwriters' Laboratories of Canada standards, or any other standards acceptable to this Department. The required frequency of inspections may be changed at the discretion of the Director.

## **Used Oil**

11. Used oil shall be retained in an approved tank or closed container, and disposed of by a company licensed for handling and disposal of used oil products.
12. Information on used oil that is generated by the diesel generating units shall be submitted to the Director for review within thirty (30) days of the beginning of each calendar year. This shall include a description of:
  - the type(s) of oil used;
  - the method of disposal for the used oil; and
  - the approximate total volume of used oil generated during the previous year.
13. In the event that off-site used oil is stored in the on-site storage tank(s), the information listed above shall also be required for the off-site systems.

## **Ambient Air**

14. Pending the results of any ambient air monitoring, stack emission testing, and/or dispersion modelling, the Director may require that LIM take measures deemed necessary to ensure that the requirements of the ***Air Pollution Control Regulations, 2004*** are being met.

## **Annual Air Emissions Reporting**

15. LIM shall submit an annual Air Emission Report to the Director by **February 28** of the subsequent year. This report shall include:

- the estimated annual emissions of the following flue gas constituents: SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, CO and particulate; and
- the actual calculations including factors, formulae and/or assumptions used.

## **Monitoring Alteration**

16. Although a monitoring program is not part of this approval, the Department may require a monitoring program when it is the judgement of the Director that:

- pollutants might be released to the surrounding environment without being detected; or
- an adverse environmental effect may occur.

## **Reporting**

17. All incidents of:

- emergency response activities for oil or hazardous materials spills associated with the operation of the diesel generating units; or
- non-conformance of any condition within this approval; or
- verbal/written complaints of an environmental nature from the public received by LIM related to the diesel generating station, whether or not they are received anonymously;

shall be reported immediately where possible and no later than three (3) working days after the incident, to a person or message manager or facsimile machine as follows:

- contact this Department (St. John's office) by phoning (709) 729-2556, or faxing (709) 729-6969.

A written report including a detailed description of the incident, summary of contributing factors, and an action plan to prevent future incidents of a similar nature, shall be submitted to the Director. The action plan shall include a description of actions already taken and future actions to be implemented, and shall be submitted within thirty days of the date of the initial incident. The address for written report submission is:

Director, Pollution Prevention Division  
 Department of Environment and Conservation  
 P.O. Box 8700  
 St. John's, NL  
 A1B 4J6  
 Telephone: (709) 729-2556  
 Facsimile: (709) 729-6969

18. Any spillage or leakage of gasoline or associated product shall be reported

immediately through the Canadian Coast Guard at 1-(709)-772-2083.

## **Expiration**

19. This Certificate of Approval expires ***July 21, 2015***.
20. Should LIM wish to continue to operate diesel generating units at the Schefferville Area Iron Ore Project beyond this expiry date, a written request shall be submitted to the Director for the renewal of this approval. Such request shall be made prior to ***January 21, 2015***.

cc: Mr. Kevin Power, P.Eng. - Head  
Environmental Protection Section  
Environment Canada  
6 Bruce Street  
Donovans Industrial Park  
Mount Pearl, NL  
A1N 4T3

Mr. Ken Russell - Manager  
Government Service Centre (GSC)  
13 Churchill Street  
Happy Valley Goose Bay, NL  
P. O. Box 3014 - Stn. B  
A0P 1E0

Mr. Rick Curran – Director  
Program and Support Services  
Department of Government Services  
P.O. Box 8700  
St. John's, NL  
A1B 4J6

Mr. Alex Smith, P. Eng. – Director  
Mineral Development Division  
Department of Natural Resources  
P.O. Box 8700  
St. John's, NL  
A1B 4J6



# Newfoundland Labrador

GOVERNMENT OF  
NEWFOUNDLAND AND LABRADOR  
Department of Environment and Conservation

## CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002 c E-14.2 Section 83

Issue Date: *July 21, 2010*

Approval No. AA10-075531

Expiration: *July 21, 2012*

File No. 731.400

Proponent: **Labrador Iron Mines  
220 Bay Street  
Suite 700, Toronto, ON  
M5J 2W4**

Attention: Linda Wrong - Vice President, Environment and Permitting

Re: **Schefferville Area Iron Ore Project  
Construction Activities**

---

Approval is hereby given for the construction for open pit mining at James North, James South, Richmond 2B and Redmond 5 deposits; a beneficiation facility; ore, waste rock and overburden stockpiles; settling ponds; access roads; worker's camp and other associated works in Labrador, near Schefferville, Quebec.

This certificate of approval does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Nothing in this certificate of approval negates any regulatory requirement placed on the proponent. Where there is a conflict between conditions in this certificate of approval and a regulation, the condition in the regulation shall take precedence. Approval from the Department of Environment and Conservation shall be obtained prior to any significant change in the design, construction, installation, or operation of the facility, including any future expansion of the works. This certificate of approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

This certificate of approval is subject to the terms and conditions as contained in Appendix 'A' attached hereto, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this certificate of approval null and void, may require the proponent to cease all activities associated with this certificate of approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, delete or modify conditions to correct errors in the certificate of approval or to address significant environmental or health concerns.



*Dertha Potts*  
For MINISTER

## TERMS AND CONDITIONS FOR APPROVAL No. AA10-075531

July 21, 2010

### General

1. Approval is hereby given for the construction for open pit mining at James North, James South, Richmond 2B and Redmond 5 deposits; a beneficiation facility; ore, waste rock and overburden stockpiles; settling ponds; access roads; worker's camp and other associated works in Labrador, near Schefferville, Quebec.
2. Any inquires concerning this approval shall be directed to the St. John's office of the Pollution Prevention Division (telephone: (709) 729-2555; or facsimile: (709) 729-6969).
3. In this Certificate of Approval:

- **accredited** means the formal recognition of the competence of a laboratory to carry out specific functions;
- **acutely lethal** means that the effluent at 100% concentration kills more than 50% of the rainbow trout subjected to it during a 96-hour period, when tested in accordance with the Rainbow Trout test;
- **Department** means the Department of Environment and Conservation and its successors;
- **Director** means the Director of the Pollution Prevention Division of the Department;
- **discharge criteria** means the maximum allowable levels for the parameters listed in Table 3B;
- **GSC** means the Government Service Centre - Goose Bay;
- **grab sample** means a quantity of undiluted sample collected at any given time. In this approval it refers to waste oil and effluent;
- **licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;
- **LIM** means Labrador Iron Mines Limited;
- **malfunction** means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, wastewater treatment equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused in part by poor maintenance or careless operation are not malfunctions;
- **Minister** means the Minister of the Department;
- **proficiency testing** means the use of inter-laboratory comparisons to determine the performance of individual laboratories for specific tests or

measurements;

- **QA/QC** means Quality Assurance/Quality Control;
- **register(ed)**, in the context of storage tanks, means that information regarding the storage tank system has been submitted to a Government Service Centre office and a registration number has been assigned to the storage tank system.
- **regulated substance** means a substance subject to discharge limit(s) under the *Environmental Control Water and Sewage Regulations, 2003*;
- **spill or spillage** means a loss of gasoline or associated product in excess of 70 litres from a storage tank system, pipeline, tank vessel or vehicle, or of any volume of a regulated substance onto or into soil or a body of water;
- **storage tank system** means a tank and all vent, fill and withdrawal piping associated with it installed in a fixed location and includes a temporary arrangement;
- **TDS** means total dissolved solids;
- **TPH** means total petroleum hydrocarbons;
- **TSS** means total suspended solids;
- **used lubricating oil** means lubricating oil that as a result of its use, storage or handling, is altered so that it is no longer suitable for its intended purpose but is suitable for refining or other permitted uses;
- **used oil** means a used lubricating oil or waste oil; and
- **waste oil** means an oil that as a result of contamination by any means or by its use, is altered so that it is no longer suitable for its intended purpose.

4. All necessary measures shall be taken to ensure compliance with all applicable acts, regulations, policies and guidelines, including the following, or their successors:

- *Environmental Protection Act;*
- *Water Resources Act;*
- *Air Pollution Control Regulations, 2004;*
- *Environmental Control Water and Sewage Regulations, 2003;*
- *Halocarbon Regulations*
- *Storage and Handling of Gasoline and Associated Products Regulations, 2003;*
- *Used Oil Control Regulations; and*
- *Accredited and Credited Laboratory Policy*

This Approval provides terms and conditions to satisfy various requirements of the above listed acts, regulations, Departmental policies and guidelines. If it appears that all of the pertinent requirements of these acts, regulations, policies and guidelines are not being met, then a further review of the works shall be conducted, and suitable pollution control measures may be required by the Minister.

5. All reasonable efforts shall be taken to minimize the impact of the Schefferville area iron ore project on the environment. Such efforts include minimizing the area disturbed by the operation, minimizing air or water pollution, finding alternative uses, acceptable to the Director, for waste or rejected materials, and considering the requirement for the eventual rehabilitation of disturbed areas when planning the development of any area on the facility property.
6. LIM shall provide to the Department, within a reasonable time, any information, records, reports or access to data requested or specified by the Department.
7. LIM shall keep all records or other documents required by this Approval for a period of not less than three (3) years, beginning the day they were made. These records shall be made available for review by officials of the Department or the GSC when requested.
8. Should LIM wish to deviate in any way from the terms and conditions of this Certificate of Approval, a written request detailing the proposed deviation shall be made to the Minister. LIM shall comply with the most current terms and conditions until the Minister has authorized otherwise. In the case of meeting a deadline requirement, the request shall be made at least 60 days ahead of the applicable date as specified in this Approval or elsewhere by the Department.

## **Construction**

9. All construction activities shall be subject to the requirements of the Environmental Protection Plan (May 4, 2010 – as revised) for construction and operation activities. All proposed revisions to the plan shall be submitted to the director for review.
10. Any work that must be performed in a body of water below the high water mark shall be carried out during a period of low water levels.
11. All construction operations shall be carried out in a manner that minimizes damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.
12. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment shall be confined to dry stable areas.
13. All vehicles and equipment shall be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.
14. During the construction of concrete components, formwork shall be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
15. All areas affected by this project shall be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if necessary in the opinion of this Department.
16. Any alteration of a water body or work within 15 m of a water body shall be approved by the Water Resources Management Division of this Department. Alteration of a water body may include culvert installations, stream crossings,

outfalls, infilling; or bridge, dam, and wharf construction.

17. All culvert installations, stream crossings and alterations of water bodies are to be approved by the Water Resources Management Division of this Department.

## **Waste Management**

18. LIM shall submit a Waste Management Plan for their Schefferville project. With the goal of minimizing adverse effects on the environment, the Waste Management Plan shall: be comprehensive, including all operations within the Schefferville project; identify the types of waste materials (i.e. boiler ash, sewage, empty chemical packaging, etc.); provide general direction in dealing with the handling, storage, transport, treatment and disposal of waste materials; and incorporate the basic waste management principles of reduce, reuse, recycle, recover and residual disposal. An outline of the Plan shall be submitted to the Director for review by **October 31, 2010**. The outline shall include a schedule of dates for preparation and implementation for each section of the Plan. The completed Plan shall then be submitted to the Director for review by **January 21, 2011**. Every year the Waste Management Plan shall be reviewed and revised as necessary, accounting for expanding or alteration of activities. All proposed revisions shall be submitted to the Director for review. The Department will acknowledge receipt of the Plan and/or revisions, and shall provide any review comments within a reasonable time frame.

19. Disposal of hazardous waste in a municipal or regional waste disposal site in this Province is prohibited. Transporters of hazardous waste shall have an approval issued by the Minister. Those generating hazardous waste shall have a waste generators number issued by the Director and shall also complete the required information outlined in the Waste Manifest Form.

## **Open Burning**

20. Open burning of the materials listed in Table 1 is not permitted. Other materials shall not be burnt in open fires without the written permission from this Department.

**Table 1 - Material Not Approved for Open Burning**

Tires	Manure
Plastics	Rubber
treated lumber	tar paper
asphalt and asphalt products	railway ties
Drywall	paint and paint products
demolition waste	fuel and lubricant containers
hazardous waste	used oil
biomedical waste	animal cadavers
domestic waste	hazardous substances

trash, garbage, or other waste from commercial, industrial or municipal operations	materials disposed of as part of the removal or decontamination of equipment, buildings or other structures
--	---

## Noise

21. All efforts shall be made to minimize and control noise resulting from the construction activities. All vehicles hauling materials in the area shall have exhaust and muffling devices in good working order.

## Dust Suppression

22. LIM shall control dusting resulting from construction activities at the site. Use of dust suppressants other than water or calcium chloride shall require approval of the Director. Operators are encouraged to use best management practices when applying calcium chloride or any other approved dust suppressant.

## Pollution Control Equipment

23. All pollution control equipment shall be maintained and operated per the manufacturer's specifications for best performance.

## Spill Prevention and Containment

24. Areas in which chemicals are used or stored shall have impermeable floors and dykes or curbs and shall not have a floor drain system, nor shall it discharge to the environment. Areas inside the dykes or curbs shall have an effective secondary containment capacity of at least **110%** of the chemical storage tank capacity, in the case of a single storage container. If there is more than one storage container, the dyked area shall be able to retain no less than **110% of the capacity of the largest container or 100 % of the capacity of the largest container plus 10% of the aggregate capacity of all additional containers, whichever is greater.** These dyked areas shall be kept clear of material that may compromise the capacity of the dyke system. Once a year, the dykes shall be visually inspected for their liquid containing integrity, and repairs shall be made when required. Once every ten years, the dykes shall be inspected, by a means other than visual inspection, for their liquid containing integrity, and repairs shall be made when required.

25. All on site storage of petroleum shall comply with the ***Storage and Handling of Gasoline and Associated Products Regulations, 2003***, or its successor. Storage tank systems shall be registered with the Government Service Centre. All aboveground storage tanks shall be clearly and visibly labelled with their GAP registration numbers.

26. Where applicable, all tanks and fuel delivery systems shall be inspected to appropriate American Petroleum Institute or Underwriters' Laboratories of Canada standards, or any other standards acceptable to this Department. The required frequency of inspections may be changed at the discretion of the Director.

27. Refuelling and maintenance of vehicles and equipment shall, whenever possible, be undertaken on a prepared impermeable surface with an oil containment or collection system. When this is not possible, due care shall be taken to prevent spillage on the ground and to the surrounding environment, particularly streams and other water

bodies. The Contingency Plan for fuel storage shall detail the specific response actions in the event of a spill from refuelling or maintenance activities.

## Contingency Plans

28. A contingency plan for the construction activities of this project shall be submitted to the Director for review by **November 21, 2010**. The contingency plan shall clearly describe the actions to be taken in the event of a spill of a toxic or hazardous material. It shall include, as a minimum: notification and alerting procedures; duties and responsibilities of the “on-scene commander” and other involved staff; spill control and clean-up procedures; restoration of the spill site; information on disposal of contaminants; and resource inventory. Copies of the plan shall be placed in convenient areas throughout the facility so that employees can easily refer to it when needed. LIM shall ensure that all employees are aware of the plan and understand the procedures and the reporting protocol to be followed in the event of an emergency. An annual response exercise is recommended for response personnel. Every year, as a minimum, the plan shall be reviewed and revised as necessary. Any proposed significant revisions shall be submitted to the Director for review. Changes which are not considered significant include minor variations in equipment or personnel characteristics which do not effect implementation of the plan.
29. Every time LIM implements the *Contingency Plans* information shall be recorded for future reference. This will assist in reviewing and updating the plan. The record is to consist of all incidents with environmental implications, and include such details as: date; time of day; type of incident (i.e. liquid spill, gas leak, granular chemical spill, equipment malfunction, etc.); actions taken; problems encountered; and other relevant information that would aid in later review of the plan performance. Each incident report shall be submitted to the Director as per the **Reporting** section.

## Rehabilitation & Closure Plan

30. LIM shall satisfy all rehabilitation and closure planning and financial assurance requirements of the Mining Act.
31. The Rehabilitation and Closure Plan (May 12, 2010 – as amended) shall be reviewed annually by LIM and revised as necessary. All proposed revisions to the plan shall be submitted to the Director for review.

## Used Oil

32. Used oil shall be retained in an approved tank or closed container, and disposed of by a company licensed for handling and disposal of used oil products.

## Effluent Monitoring and Discharge

33. Not less than once per week and at least 24 hours apart, LIM shall collect grab samples at the outlet of Ruth Pit, the outlet of James Settling Pond into the Unnamed Tributary and the outlet of James Settling Pond into James Creek, and have them analysed for pH and TSS concentrations as required in Table 2. Analysis results shall be submitted as per the **Reporting** section.
34. Once per month and not less than 15 days apart, LIM shall collect grab samples at the outlet of Ruth Pit, the outlet of James Settling Pond into the Unnamed Tributary and the outlet of James Settling Pond into James Creek, and have them analysed for acute lethality and concentrations of the Effluent Discharge Criteria parameters listed in Table 3A. Analysis results shall be submitted as per the **Reporting** section.
35. LIM may reduce the frequency of testing for a parameter that is set out in the Effluent Discharge Criteria, with the exception of pH and TSS, to not less than once in each calendar quarter if that parameter's monthly mean concentration in the effluent is less than 10 percent of the applicable allowable limit for the 12 consecutive tests prior to the most recent test.
36. The frequency of testing shall return to the originally prescribed frequency for a parameter that is set out in Effluent Discharge Criteria if that parameter's monthly mean concentration is equal to or greater than 10 percent of applicable allowable limit.
37. LIM may reduce the frequency of conducting ALT's to once in each calendar quarter if the effluent is determined not to be acutely lethal over a period of 12 consecutive samples. If a grab sample is determined to be acutely lethal, the frequency returns to monthly.
38. If a sample is determined to be acutely lethal, another sample shall be collected as soon as possible and tested, using Section 6 of the Reference Method, to determine an LC<sub>50</sub>. Grab samples shall be collected bi-weekly, not less than 7 days apart, and an ALT (Section 6 of the Reference Method) shall be conducted on each sample, until it is determined that the effluent is not acutely lethal for three consecutive tests.
39. If effluent is determined to be acutely lethal for three consecutive ALTs, a toxicity identification evaluation (TIE) shall be implemented to identify the toxin, and from this develop measures to prevent or reduce the toxin.
40. LIM shall perform an Effluent Monitoring Program as per Table 2. Refer to Table 3A for the Effluent Discharge Criteria (EDC) parameters. Refer to Table 3B for EDC limits. Analytical results shall be submitted as per the **Reporting** section.

**Table 2 - Effluent Monitoring Program**

Ref.	Location	Parameters	Frequency
	Outlet of Ruth Pit	pH and TSS	Weekly
		ALT	Monthly
		EDC (Table 3A)	Monthly
	Outlet of James Settling Pond into the Unnamed Tributary	pH and TSS	Weekly
		ALT	Monthly
		EDC (Table 3A)	Monthly
		Flow	Continuously
	Outlet of James Settling Pond	pH and TSS	Weekly
		ALT	Monthly
		EDC	Monthly

**Table 3A – Effluent Discharge Criteria Parameters**

As	Cu
Pb	Ni
Zn	pH
TSS	Hardness as CaCO <sub>3</sub>
Alkalinity	Al
Cd	Fe
Hg	Mo
NH <sub>3</sub>	TPH
TDS	NO <sub>3</sub>

**Table 3B – Effluent Discharge Criteria**

Parameter	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Composite Sample	Maximum Authorized Concentration in a Grab Sample
Arsenic	0.50 mg/L	0.75 mg/L	1.00 mg/L
Copper	0.30 mg/L	0.45 mg/L	0.60 mg/L
Cyanide	1.00 mg/L	1.50 mg/L	2.00 mg/L
Lead	0.20 mg/L	0.30 mg/L	0.40 mg/L
Nickel	0.50 mg/L	0.75 mg/L	1.00 mg/L
Zinc	0.50 mg/L	0.75 mg/L	1.00 mg/L
Total Suspended Solids	15.00 mg/L	22.50 mg/L	30.00 mg/L
Radium 226	0.37 Bq/L	0.74 Bq/L	1.11 Bq/L
Acute Lethality	Toxic Pass		
pH	5.5 to 9		

## Water Chemistry Analysis

41. LIM shall perform a Water Chemistry Analysis Program as per Table 4, four times per calendar year and not less than thirty (30) days apart. All results shall be submitted to the Director as per the **Reporting** section.

Table 4 - Water Chemistry Analysis Program		
Ref.	Location	Parameters
	Ruth Pit	<b>General Parameters:</b> temperature, dissolved oxygen (DO), nitrate + nitrite, nitrate, nitrite, pH, TSS, colour, sodium, potassium, calcium, sulphide, magnesium, ammonia, alkalinity, sulphate, chloride, turbidity, reactive silica, orthophosphate, phosphorous, DOC, conductance, TDS (calculated), phenolics, carbonate ( $\text{CaCO}_3$ ), hardness ( $\text{CaCO}_3$ ), bicarbonate ( $\text{CaCO}_3$ )
	Slimy Lake	
	Bean Lake	
	James Creek	
	Redmond Lake	
	James Creek @ RT1	
	Unnamed Tributary @ RT2	
	JP1-6	
	RP1-5	
	Monitoring Wells <sup>1</sup> : MW11A,B,C JA-MW1 B,C JA-MW4B Well 1(Silver Yard) Red-MW4 Red-MW5B	<b>Metals Scan:</b> aluminium, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, mercury, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium,
1. TSS analysis is not required for groundwater samples.		

## Environmental Effects Monitoring

42. Study designs and subsequent reports for Environmental Effects Monitoring shall be developed by LIM and a copy of the study designs and reports shall be submitted to the Department.

## Analysis and QA/QC

43. Unless otherwise stated herein, all solids and liquids analysis performed pursuant to this Approval shall be done by either a contracted commercial laboratory or an in-house laboratory. Contracted commercial laboratories shall have a recognized form of accreditation. In-house laboratories have the option of either obtaining accreditation or submitting to an annual inspection by a representative of the Department, for which LIM shall be billed for each laboratory inspection in accordance with Schedule 1 of the **Accredited and Certified Laboratory Policy (PD:PP2001-01.01)**. Recommendations of the Director stemming from the annual inspections shall be addressed within 6 months; otherwise further analytical results shall not be accepted by the Director.

44. If LIM wishes to perform in-house laboratory testing and submit to an annual

inspection by the Department then a recognized form of proficiency testing recognition shall be obtained for compliance parameters for which this recognition exists. The compliance parameters are listed in the ***Effluent Discharge and Monitoring*** section. If using a commercial laboratory, LIM shall contact that commercial laboratory to determine and to implement the sampling and transportation QA/QC requirements for those activities.

45. The exact location of each sampling point shall remain consistent over the life of the monitoring programs. Using a GPS or similar device, the northing and easting of each sampling location shall be recorded and made available when requested.
46. LIM shall bear all expenses incurred in carrying out the environmental monitoring and analysis required under conditions of this Approval.

### **Monitoring Alteration**

47. The Director has the authority to alter monitoring programs or require additional testing at any time when:
  - pollutants might be released to the surrounding environment without being detected;
  - an adverse environmental effect may occur; or
  - it is no longer necessary to maintain the current frequency of sampling and/or the monitoring of parameters.
48. LIM may, at any time, request that monitoring program or requirements of this Approval be altered by:
  - requesting the change in writing to the Director; and
  - providing sufficient justification, as determined by the Director.

The requirements of this Approval shall remain in effect until altered, in writing, by the Director.

### **Reporting**

49. Monthly reports containing the environmental compliance monitoring and sampling information required in this Approval shall be received by the Director, in digital format (e-mail or CD), within 30 calendar days of the reporting month. All related laboratory reports shall be submitted with the monthly report, in spreadsheet format (Microsoft Excel or a format easily transferable to Excel), and either Adobe Portable Document Format (PDF) or hardcopy format. Digital report submissions, if e-mailed, shall be sent to the following address: <<statenv@gov.nl.ca>>
50. All incidents of:
  - *Contingency Plan* implementation; or
  - non-conformance of any condition within this approval; or

- spillage or leakage of a regulated substance; or
- whenever discharge criteria is, or is suspected to be, exceeded; or
- verbal/written complaints of an environmental nature from the public received by LIM related to the Schefferville project, whether or not they are received anonymously;

shall be immediately reported, within one working day, to a person or message manager by contacting this Department (St. John's office) by phoning (709) 729-2556, or faxing (709) 729-6969.

A written report including a detailed description of the incident, summary of contributing factors, and an action plan to prevent future incidents of a similar nature, shall be submitted to the Director. The action plan shall include a description of actions already taken and future actions to be implemented, and shall be submitted within thirty days of the date of the initial incident. The address for written report submission is:

Department of Environment and Conservation  
P.O. Box 8700  
St. John's, NL  
A1B 4J6  
Telephone: (709) 729-2556  
Facsimile: (709) 729-6969

51. Any spillage or leakage of gasoline or associated product shall be reported immediately through the Canadian Coast Guard at 1-(709)-772-2083.

### **Expiration**

52. This Certificate of Approval expires ***July 21, 2010***.
53. Should LIM wish to continue to construct the Schefferville Area Iron Ore project beyond this date, a written request shall be submitted to the Director for the renewal of this approval. Such request shall be made prior to ***January 21, 2012***.

cc: Mr. Kevin Power, P.Eng. - Head  
Environmental Protection Section  
Environment Canada  
6 Bruce Street  
Donovans Industrial Park  
Mount Pearl, NL  
A1N 4T3

Mr. Ken Russell - Manager  
Government Service Centre (GSC)  
13 Churchill Street  
Happy Valley Goose Bay, NL  
P. O. Box 3014 - Stn. B  
A0P 1E0

Mr. Rick Curran – Director  
Program and Support Services  
Department of Government Services  
P.O. Box 8700  
St. John's, NL  
A1B 4J6

Mr. Alex Smith, P. Eng. – Director  
Mineral Development Division  
Department of Natural Resources  
P.O. Box 8700  
St. John's, NL  
A1B 4J6



GOVERNMENT OF  
NEWFOUNDLAND AND LABRADOR  
Department of Environment and Conservation

## CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002 c E-14.2 Section 83

Issue Date: *September 8, 2010*

Approval No. AA10-095537

Expiration: *September 8, 2015*

File No. 731.400

Proponent: **Labrador Iron Mines**  
220 Bay Street  
Suite 700, Toronto, ON  
M5J 2W4

Attention: Linda Wrong - Vice President, Environment and Permitting

Re: **Schefferville Area Iron Ore Project Operations**

---

Approval is hereby given for operations for open pit mining at James North, James South, Redmond 2B and Redmond 5 deposits; a beneficiation facility; ore, waste rock and overburden stockpiles; settling ponds; access roads; worker's camp and other associated works in Labrador, near Schefferville, Quebec.

This certificate of approval does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Nothing in this certificate of approval negates any regulatory requirement placed on the proponent. Where there is a conflict between conditions in this certificate of approval and a regulation, the condition in the regulation shall take precedence. Approval from the Department of Environment and Conservation shall be obtained prior to any significant change in the design, construction, installation, or operation of the facility, including any future expansion of the works. This certificate of approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

This certificate of approval is subject to the terms and conditions as contained in Appendix 'A' attached hereto, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this certificate of approval null and void, may require the proponent to cease all activities associated with this certificate of approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, delete or modify conditions to correct errors in the certificate of approval or to address significant environmental or health concerns.

*Debra Pellerin*  
For MINISTER



## APPENDIX "A"

### TERMS AND CONDITIONS FOR APPROVAL No. AA10-095537

September 8, 2010

#### General

1. Approval is hereby given for operations for open pit mining at James North, James South, Redmond 2B and Redmond 5 deposits; a beneficiation facility; ore, waste rock and overburden stockpiles; settling ponds; access roads; worker's camp and other associated works in Labrador, near Schefferville, Quebec.
2. Any inquiries concerning this approval shall be directed to the St. John's office of the Pollution Prevention Division (telephone: (709) 729-2555; or facsimile: (709) 729-6969).
3. In this Certificate of Approval:
  - **accredited** means the formal recognition of the competence of a laboratory to carry out specific functions;
  - **acutely lethal** means that the effluent at 100% concentration kills more than 50% of the rainbow trout subjected to it during a 96-hour period, when tested in accordance with the Rainbow Trout test;
  - **Department** means the Department of Environment and Conservation and its successors;
  - **Director** means the Director of the Pollution Prevention Division of the Department;
  - **discharge criteria** means the maximum allowable levels for the parameters listed in Table 3B;
  - **GSC** means the Government Service Centre - Goose Bay;
  - **grab sample** means a quantity of undiluted sample collected at any given time. In this approval it refers to waste oil and effluent;
  - **licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;
  - **LIM** means Labrador Iron Mines Limited;
  - **malfunction** means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, wastewater treatment equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused in part by poor maintenance or careless operation are not malfunctions;
  - **Minister** means the Minister of the Department;

- **proficiency testing** means the use of inter-laboratory comparisons to determine the performance of individual laboratories for specific tests or measurements;
- **QA/QC** means Quality Assurance/Quality Control;
- **register(ed)**, in the context of storage tanks, means that information regarding the storage tank system has been submitted to a Government Service Centre office and a registration number has been assigned to the storage tank system.
- **regulated substance** means a substance subject to discharge limit(s) under the *Environmental Control Water and Sewage Regulations, 2003*;
- **Schefferville Area Iron Ore Project** means the area in western Labrador in which LIM is conducting mining and beneficiation operations and includes pit mines at James North, James South, Redmond 2B and Redmond 5;
- **spill or spillage** means a loss of gasoline or associated product in excess of 70 litres from a storage tank system, pipeline, tank vessel or vehicle, or of any volume of a regulated substance onto or into soil or a body of water;
- **storage tank system** means a tank and all vent, fill and withdrawal piping associated with it installed in a fixed location and includes a temporary arrangement;
- **TDS** means total dissolved solids;
- **TPH** means total petroleum hydrocarbons as measured by the Atlantic PIRI Method;
- **TSS** means total suspended solids;
- **used lubricating oil** means lubricating oil that as a result of its use, storage or handling, is altered so that it is no longer suitable for its intended purpose but is suitable for refining or other permitted uses;
- **used oil** means a used lubricating oil or waste oil; and
- **waste oil** means an oil that as a result of contamination by any means or by its use, is altered so that it is no longer suitable for its intended purpose.

4. All necessary measures shall be taken to ensure compliance with all applicable acts, regulations, policies and guidelines, including the following, or their successors:

- *Environmental Protection Act;*
- *Water Resources Act;*
- *Air Pollution Control Regulations, 2004;*
- *Environmental Control Water and Sewage Regulations, 2003;*
- *Halocarbon Regulations*
- *Storage and Handling of Gasoline and Associated Products Regulations, 2003;*
- *Used Oil Control Regulations; and*

- *Accredited and Credited Laboratory Policy*

This Approval provides terms and conditions to satisfy various requirements of the above listed acts, regulations, Departmental policies and guidelines. If it appears that all of the pertinent requirements of these acts, regulations, policies and guidelines are not being met, then a further review of the works shall be conducted, and suitable pollution control measures may be required by the Minister.

5. All reasonable efforts shall be taken to minimize the impact of the Schefferville area iron ore project on the environment. Such efforts include minimizing the area disturbed by the operation, minimizing air or water pollution, finding alternative uses, acceptable to the Director, for waste or rejected materials, and considering the requirement for the eventual rehabilitation of disturbed areas when planning the development of any area on the facility property.
6. LIM shall provide to the Department, within a reasonable time, any information, records, reports or access to data requested or specified by the Department.
7. LIM shall keep all records or other documents required by this Approval for a period of not less than three (3) years, beginning the day they were made. These records shall be made available for review by officials of the Department or the GSC when requested.
8. Should LIM wish to deviate in any way from the terms and conditions of this Certificate of Approval, a written request detailing the proposed deviation shall be made to the Minister. LIM shall comply with the most current terms and conditions until the Minister has authorized otherwise. In the case of meeting a deadline requirement, the request shall be made at least 60 days ahead of the applicable date as specified in this Approval or elsewhere by the Department.

### **Environmental Protection Plan**

9. All construction and operation activities shall be subject to the requirements of the Environmental Protection Plan (May 4, 2010 – as revised) for construction and operation activities. All proposed revisions to the plan shall be submitted to the director for review.

### **Construction**

10. Any work that must be performed in a body of water below the high water mark shall be carried out during a period of low water levels.
11. All construction operations shall be carried out in a manner that minimizes damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.
12. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment shall be confined to dry stable areas.
13. All vehicles and equipment shall be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.
14. During the construction of concrete components, formwork shall be properly

constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.

15. All areas affected by this project shall be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if necessary in the opinion of this Department.
16. Any alteration of a water body or work within 15 m of a water body shall be approved by the Water Resources Management Division of this Department. Alteration of a water body may include culvert installations, stream crossings, outfalls, infilling; or bridge, dam, and wharf construction.
17. All culvert installations, stream crossings and alterations of water bodies are to be approved by the Water Resources Management Division of this Department.

## **Waste Management**

18. LIM shall submit a Waste Management Plan for their Schefferville project. With the goal of minimizing adverse effects on the environment, the Waste Management Plan shall: be comprehensive, including all operations within the Schefferville project; identify the types of waste materials (i.e. boiler ash, sewage, empty chemical packaging, etc.); provide general direction in dealing with the handling, storage, transport, treatment and disposal of waste materials; and incorporate the basic waste management principles of reduce, reuse, recycle, recover and residual disposal. An outline of the Plan shall be submitted to the Director for review by **October 31, 2010**. The outline shall include a schedule of dates for preparation and implementation for each section of the Plan. The completed Plan shall then be submitted to the Director for review by **January 21, 2011**. Every year the Waste Management Plan shall be reviewed and revised as necessary, accounting for expanding or alteration of activities. All proposed revisions shall be submitted to the Director for review. The Department will acknowledge receipt of the Plan and/or revisions, and shall provide any review comments within a reasonable time frame.
19. Disposal of hazardous waste in a municipal or regional waste disposal site in this Province is prohibited. Transporters of hazardous waste shall have an approval issued by the Minister. Those generating hazardous waste shall have a waste generators number issued by the Director and shall also complete the required information outlined in the Waste Manifest Form.

## **Open Burning**

20. Open burning of the materials listed in Table 1 is not permitted. Other materials shall not be burnt in open fires without the written permission from this Department.

**Table 1 - Material Not Approved for Open Burning**

tires	manure
plastics	rubber
treated lumber	tar paper

asphalt and asphalt products	railway ties
drywall	paint and paint products
demolition waste	fuel and lubricant containers
hazardous waste	used oil
biomedical waste	animal cadavers
domestic waste	hazardous substances
trash, garbage, or other waste from commercial, industrial or municipal operations	materials disposed of as part of the removal or decontamination of equipment, buildings or other structures

## Noise

21. All efforts shall be made to minimize and control noise resulting from the construction activities. All vehicles hauling materials in the area shall have exhaust and muffling devices in good working order.

## Dust Suppression

22. LIM shall control dusting resulting from operational activities at the site. Use of dust suppressants other than water or calcium chloride shall require approval of the Director. Operators are encouraged to use best management practices when applying calcium chloride or any other approved dust suppressant.

## Pollution Control Equipment

23. All installed pollution control equipment shall be maintained and operated per the manufacturer's specifications for best performance.

24. The secondary crusher shall not operate unless the material reporting to the secondary crusher is wetted and washed in the scrubbers and the silica washed out and sent to rejects. This wet iron ore oversize is then crushed to the correct product size in the secondary crusher.

## Spill Prevention and Containment

25. Areas in which chemicals are used or stored shall have impermeable floors and dykes or curbs and shall not have a floor drain system, nor shall it discharge to the environment. Areas inside the dykes or curbs shall have an effective secondary containment capacity of at least **110%** of the chemical storage tank capacity, in the case of a single storage container. If there is more than one storage container, the dyked area shall be able to retain no less than **110% of the capacity of the largest container or 100 % of the capacity of the largest container plus 10% of the aggregate capacity of all additional containers, whichever is greater.** These dyked areas shall be kept clear of material that may compromise the capacity of the dyke system. Once a year, the dykes shall be visually inspected for their liquid containing integrity, and repairs shall be made when required. Once every ten years, the dykes shall be inspected, by a means other than visual inspection, for their liquid containing integrity, and repairs shall be made when required.

26. All on site storage of petroleum shall comply with the ***Storage and Handling of Gasoline and Associated Products Regulations, 2003***, or its successor. Storage tank systems shall be registered with the Government Service Centre. All aboveground storage tanks shall be clearly and visibly labelled with their GAP registration numbers.
27. Where applicable, all tanks and fuel delivery systems shall be inspected to appropriate American Petroleum Institute or Underwriters' Laboratories of Canada standards, or any other standards acceptable to this Department. The required frequency of inspections may be changed at the discretion of the Director.
28. Refuelling and maintenance of vehicles and equipment shall, whenever possible, be undertaken on a prepared impermeable surface with an oil containment or collection system. When this is not possible, due care shall be taken to prevent spillage on the ground and to the surrounding environment, particularly streams and other water bodies. The Contingency Plan for fuel storage shall detail the specific response actions in the event of a spill from refuelling or maintenance activities.

### **Contingency Plans**

29. A contingency plan for the operational activities of this project shall be submitted to the Director for review by ***November 21, 2010***. The contingency plan shall clearly describe the actions to be taken in the event of a spill of a toxic or hazardous material. It shall include, as a minimum: notification and alerting procedures; duties and responsibilities of the "on-scene commander" and other involved staff; spill control and clean-up procedures; restoration of the spill site; information on disposal of contaminants; and resource inventory. Copies of the plan shall be placed in convenient areas throughout the facility so that employees can easily refer to it when needed. LIM shall ensure that all employees are aware of the plan and understand the procedures and the reporting protocol to be followed in the event of an emergency. An annual response exercise is recommended for response personnel. Every year, as a minimum, the plan shall be reviewed and revised as necessary. Any proposed significant revisions shall be submitted to the Director for review. Changes which are not considered significant include minor variations in equipment or personnel characteristics which do not effect implementation of the plan.
30. Every time LIM implements the *Contingency Plans* information shall be recorded for future reference. This will assist in reviewing and updating the plan. The record is to consist of all incidents with environmental implications, and include such details as: date; time of day; type of incident (i.e. liquid spill, gas leak, granular chemical spill, equipment malfunction, etc.); actions taken; problems encountered; and other relevant information that would aid in later review of the plan performance. Each incident report shall be submitted to the Director as per the ***Reporting*** section.

### **Rehabilitation & Closure Plan**

31. LIM shall satisfy all rehabilitation and closure planning and financial assurance requirements of the Mining Act.
32. The Rehabilitation and Closure Plan (May 12, 2010 – as amended) shall be reviewed annually by LIM and revised as necessary. All proposed revisions to the plan shall be submitted to the Director for review.

## Used Oil

33. Used oil shall be retained in an approved tank or closed container, and disposed of by a company licensed for handling and disposal of used oil products.

## Effluent Monitoring and Discharge

34. Not less than once per week and at least 24 hours apart, LIM shall collect grab samples at the outlet of Ruth Pit, the outlet of James Settling Pond into the Unnamed Tributary and the outlet of James Settling Pond into James Creek, and have them analysed for pH and TSS concentrations as required in Table 2. Analysis results shall be submitted as per the **Reporting** section.

35. Once per month and not less than 15 days apart, LIM shall collect grab samples at the outlet of Ruth Pit, the outlet of James Settling Pond into the Unnamed Tributary and the outlet of James Settling Pond into James Creek, and have them analysed for acute lethality and concentrations of the Effluent Discharge Criteria parameters listed in Table 3A. Analysis results shall be submitted as per the **Reporting** section.

36. LIM may reduce the frequency of testing for a parameter that is set out in the Effluent Discharge Criteria, with the exception of pH and TSS, to not less than once in each calendar quarter if that parameter's monthly mean concentration in the effluent is less than 10 percent of the applicable allowable limit for the 12 consecutive tests prior to the most recent test.

37. The frequency of testing shall return to the originally prescribed frequency for a parameter that is set out in Effluent Discharge Criteria if that parameter's monthly mean concentration is equal to or greater than 10 percent of applicable allowable limit.

38. LIM may reduce the frequency of conducting ALT's to once in each calendar quarter if the effluent is determined not to be acutely lethal over a period of 12 consecutive samples. If a grab sample is determined to be acutely lethal, the frequency returns to monthly.

39. If a sample is determined to be acutely lethal, another sample shall be collected as soon as possible and tested, using Section 6 of the Reference Method, to determine an LC<sub>50</sub>. Grab samples shall be collected bi-weekly, not less than 7 days apart, and an ALT (Section 6 of the Reference Method) shall be conducted on each sample, until it is determined that the effluent is not acutely lethal for three consecutive tests.

40. If effluent is determined to be acutely lethal for three consecutive ALTs, a toxicity identification evaluation (TIE) shall be implemented to identify the toxin, and from this develop measures to prevent or reduce the toxin.

41. LIM shall perform an Effluent Monitoring Program as per Table 2. Refer to Table 3A for the Effluent Discharge Criteria (EDC) parameters. Refer to Table 3B for EDC limits. Analytical results shall be submitted as per the **Reporting** section.

**Table 2 - Effluent Monitoring Program**

Ref.	Location	Parameters	Frequency
	Outlet of Ruth Pit	pH and TSS	Weekly
		ALT	Monthly
		EDC (Table 3A)	Monthly
	Outlet of James Settling Pond into the Unnamed Tributary	pH and TSS	Weekly
		ALT	Monthly
		EDC (Table 3A)	Monthly
		Flow	Continuously
	Outlet of James Settling Pond	pH and TSS	Weekly
		ALT	Monthly
		EDC	Monthly

**Table 3A – Effluent Discharge Criteria Parameters**

As	Cu
Pb	Ni
Zn	pH
TSS	Hardness as CaCO <sub>3</sub>
Alkalinity	Al
Cd	Fe
Hg	Mo
NH <sub>3</sub>	TPH
TDS	NO <sub>3</sub>

**Table 3B – Effluent Discharge Criteria**

Parameter	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Composite Sample	Maximum Authorized Concentration in a Grab Sample
Arsenic	0.50 mg/L	0.75 mg/L	1.00 mg/L
Copper	0.30 mg/L	0.45 mg/L	0.60 mg/L
Cyanide	1.00 mg/L	1.50 mg/L	2.00 mg/L
Lead	0.20 mg/L	0.30 mg/L	0.40 mg/L
Nickel	0.50 mg/L	0.75 mg/L	1.00 mg/L
Zinc	0.50 mg/L	0.75 mg/L	1.00 mg/L
Total Suspended Solids	15.00 mg/L	22.50 mg/L	30.00 mg/L
Radium 226	0.37 Bq/L	0.74 Bq/L	1.11 Bq/L
Acute Lethality	Toxic Pass		
pH	5.5 to 9		

## Water Chemistry Analysis

42. LIM shall perform a Water Chemistry Analysis Program as per Table 4, four times per calendar year and not less than thirty (30) days apart. All results shall be submitted to the Director as per the **Reporting** section.

Table 4 - Water Chemistry Analysis Program		
Ref.	Location	Parameters
	Ruth Pit	<b>General Parameters:</b> temperature, dissolved oxygen (DO), nitrate + nitrite, nitrate, nitrite, pH, TSS, colour, sodium, potassium, calcium, sulphide, magnesium, ammonia, alkalinity, sulphate, chloride, turbidity, reactive silica, orthophosphate, phosphorous, DOC, conductance, TDS (calculated), phenolics, carbonate ( $\text{CaCO}_3$ ), hardness ( $\text{CaCO}_3$ ), bicarbonate ( $\text{CaCO}_3$ )
	Slimy Lake	
	Bean Lake	
	James Creek	
	Redmond Lake	
	James Creek @RT1	
	Unnamed Tributary @ RT2	
	JP1-6	
	RP1-5	
	Monitoring Wells <sup>1</sup> : MW11A,B,C JA-MW1 B,C JA-MW4B Well 1(Silver Yard) Red-MW4 Red-MW5B	<b>Metals Scan:</b> aluminium, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, mercury, nickel, selenium, silver, strontium, thallium, tin, titanium, uranium, vanadium,
1. TSS analysis is not required for groundwater samples.		

## Environmental Effects Monitoring

43. Study designs and subsequent reports for Environmental Effects Monitoring shall be developed by LIM and a copy of the study designs and reports shall be submitted to the Department.

## Analysis and QA/QC

44. Unless otherwise stated herein, all solids and liquids analysis performed pursuant to this Approval shall be done by either a contracted commercial laboratory or an in-house laboratory. Contracted commercial laboratories shall have a recognized form of accreditation. In-house laboratories have the option of either obtaining accreditation or submitting to an annual inspection by a representative of the Department, for which LIM shall be billed for each laboratory inspection in accordance with Schedule 1 of the **Accredited and Certified Laboratory Policy (PD:PP2001-01.01)**. Recommendations of the Director stemming from the annual inspections shall be addressed within 6 months; otherwise further analytical results shall not be accepted by the Director.

45. If LIM wishes to perform in-house laboratory testing and submit to an annual

inspection by the Department then a recognized form of proficiency testing recognition shall be obtained for compliance parameters for which this recognition exists. The compliance parameters are listed in the ***Effluent Discharge and Monitoring*** section. If using a commercial laboratory, LIM shall contact that commercial laboratory to determine and to implement the sampling and transportation QA/QC requirements for those activities.

46. The exact location of each sampling point shall remain consistent over the life of the monitoring programs. Using a GPS or similar device, the northing and easting of each sampling location shall be recorded and made available when requested. The coordinate system reference is to be WGS84, UTM Zone 19.
47. LIM shall bear all expenses incurred in carrying out the environmental monitoring and analysis required under conditions of this Approval.

### **Monitoring Alteration**

48. The Director has the authority to alter monitoring programs or require additional testing at any time when:
  - pollutants might be released to the surrounding environment without being detected;
  - an adverse environmental effect may occur; or
  - it is no longer necessary to maintain the current frequency of sampling and/or the monitoring of parameters.
49. LIM may, at any time, request that monitoring program or requirements of this Approval be altered by:
  - requesting the change in writing to the Director; and
  - providing sufficient justification, as determined by the Director.

The requirements of this Approval shall remain in effect until altered, in writing, by the Director.

### **Reporting**

50. Monthly reports containing the environmental compliance monitoring and sampling information required in this Approval shall be received by the Director, in digital format (e-mail or CD), within 30 calendar days of the reporting month. All related laboratory reports shall be submitted with the monthly report, in spreadsheet format (Microsoft Excel or a format easily transferable to Excel), and either Adobe Portable Document Format (PDF) or hardcopy format. Digital report submissions, if e-mailed, shall be sent to the following address: <<statenv@gov.nl.ca>>
51. All incidents of:
  - *Contingency Plan* implementation; or

- non-conformance of any condition within this approval; or
- spillage or leakage of a regulated substance; or
- whenever discharge criteria is, or is suspected to be, exceeded; or
- verbal/written complaints of an environmental nature from the public received by LIM related to the Schefferville project, whether or not they are received anonymously;

shall be immediately reported, within one working day, to a person or message manager by contacting this Department (St. John's office) by phoning (709) 729-2556, or faxing (709) 729-6969.

A written report including a detailed description of the incident, summary of contributing factors, and an action plan to prevent future incidents of a similar nature, shall be submitted to the Director. The action plan shall include a description of actions already taken and future actions to be implemented, and shall be submitted within thirty days of the date of the initial incident. The address for written report submission is:

Department of Environment and Conservation  
 P.O. Box 8700  
 St. John's, NL  
 A1B 4J6  
 Telephone: (709) 729-2556  
 Facsimile: (709) 729-6969

52. Any spillage or leakage of gasoline or associated product shall be reported immediately through the Canadian Coast Guard at 1-(709)-772-2083.

### **Expiration**

53. This Certificate of Approval expires ***September 8, 2015***.

54. Should LIM wish to continue to operate the Schefferville Area Iron Ore project beyond this date, a written request shall be submitted to the Director for the renewal of this approval. Such request shall be made prior to ***March 8, 2015***.

cc: Mr. Kevin Power, P.Eng. - Head  
Environmental Protection Section  
Environment Canada  
6 Bruce Street  
Donovans Industrial Park  
Mount Pearl, NL  
A1N 4T3

Mr. Ken Russell - Manager  
Government Service Centre (GSC)  
13 Churchill Street  
Happy Valley Goose Bay, NL  
P. O. Box 3014 - Stn. B  
A0P 1E0

Mr. Rick Curran – Director  
Program and Support Services  
Department of Government Services  
P.O. Box 8700  
St. John's, NL  
A1B 4J6

Mr. Alex Smith, P. Eng. – Director  
Mineral Development Division  
Department of Natural Resources  
P.O. Box 8700  
St. John's, NL  
A1B 4J6

## **APPENDIX B**

### **Part IV and V of the Environmental Protection Act**

(c) determine the manner in which a report of a release of a substance is to be made and the contents of the report.

[2002 cE-14.2 s12](#)

## **PART IV** **WASTE DISPOSAL AND LITTER**

[Back to Top](#)

### **Restrictions, guidelines and recyclable content**

**13.** The minister may

- (a) establish restrictions and prohibitions on waste management systems;
- (b) determine minimum content requirements for recycled and recyclable materials in specific substances or products and establish restrictions on the production or sale of products that cannot be reused or recycled;
- (c) develop codes and guidelines for the use and content of recyclable materials in the manufacture of new substances or products; and
- (d) require that waste management plans be submitted to the department.

[2002 cE-14.2 s13](#)

[Back to Top](#)

### **Litter and waste**

**14.** (1) The minister shall, in accordance with the regulations, encourage the prevention and reduction of litter with respect to

- (a) waste disposal practices at construction sites, commercial and service outlets and other places where litter is or may accumulate;
- (b) requiring organizers of public and private events to have available and maintain at the sites of the events an adequate number of receptacles for recyclable materials, litter and waste disposal;
- (c) regulating or prohibiting activities that result or may result in the unlawful disposal of litter or waste including the placement of flyers on utility poles, vehicles, buildings, structures or other things;
- (d) regulating the disposal of waste on land and on, in or under water and ice; and
- (e) generally providing for matters that will prevent or reduce litter.

(2) The minister may designate a material that is to be banned, reduced, composted, recycled or restricted in use.

(3) A person shall not sell or use a material designated under subsection (2) except as permitted by the minister.

[2002 cE-14.2 s14](#)

[Back to Top](#)

### **Waste disposal sites**

**15.** The minister may establish standards and requirements for waste disposal sites and waste management systems in the province.

[2002 cE-14.2 s15](#)

[Back to Top](#)

### **Prohibition**

**16.** A person shall not

- (a) release waste upon land whether or not that land is developed or covered by water or release waste in a building or structure unless that waste is disposed of in a receptacle or container placed or located specifically for the purposes of collection of that waste and in accordance with this or another Act of the province; or
- (b) use facilities or equipment for the collection, handling, treatment, transportation, storing, processing, use and disposal of waste that is not part of a waste disposal site or a waste management system for which an approval is issued.

[2002 cE-14.2 s16](#)

[Back to Top](#)

### **Prohibition**

**17.** (1) A person who is the owner of a motor vehicle in the province and any other person shall not abandon that motor vehicle in the province.

(2) For the purpose of this section, a motor vehicle shall be considered to be abandoned where that vehicle has been left unattended without lawful authority and appears to be abandoned by reason of its age, appearance, mechanical condition or lack of identification plates.

(3) For the purpose of this section, in the absence of evidence to the contrary, a person who is the last registered owner of an abandoned motor vehicle shall be considered to have been the owner of that motor vehicle at the time of its abandonment.

(4) For the purpose of subsection (3), a certificate issued by the Registrar of Motor Vehicles appointed under section 4 of the *Highway Traffic Act*, signed by him or her and stating that a person is the last registered owner of a motor vehicle is, in the absence of evidence to the contrary, proof of the fact so certified without proof of the signature or official character of the person appearing to have signed the certificate.

(5) A person who contravenes this section commits an offence and is liable on summary conviction to a fine of not less than \$1,000 and not more than \$5,000, or to a term of imprisonment of not more than 6 months or to both a fine and imprisonment.

(6) Where a person has been convicted under subsection (5), the court shall order that

- (a) the person remove the abandoned motor vehicle as directed by the minister; or
- (b) the person pay to the minister, the cost of the removal of the abandoned motor vehicle,

and the court shall order that

(c) the person's driver's licence is suspended for 6 months or until the abandoned motor vehicle has been removed or until payment has been made under paragraph (b), whichever is lesser.

(7) Where an order to suspend a person's driver's licence is made under paragraph (6)(c), sections 60 and 61 of the *Highway Traffic Act* apply, with the necessary changes, to the court which made that order.

(8) Section 7 of the *Provincial Offences Act* shall not apply in relation to an offence under this section.

(9) An information or complaint under subsection (1) may be made on or before a date 10 years from the date when the matter of the information or complaint arose or 10 years after September 1, 1993, whichever date is later.

[2002 cE-14.2 s17](#)

## PART V WASTE MANAGEMENT

[Back to Top](#)

### Definitions

#### 18. In this Part

- (a) "board" means the Multi-Materials Stewardship Board continued under section 19;
- (b) "reduction" means the elimination of packaging or reduction of the weight, volume or toxicity of packaging or an item;
- (c) "waste management" means the collection, transportation, handling, storage, treatment, utilization, diversion, recycling, reuse, recovery, reduction and disposal of waste material;
- (d) "waste management program" means a program containing provisions or requirements for waste management, and includes related research; and
- (e) "waste material" means
  - (i) refuse, garbage, rubbish, litter, scrap and discarded material, including tailings, effluent, sludge, sewage, offal, and machinery, and a product, vehicle or other item that is dumped, discarded, abandoned or otherwise disposed of,
  - (ii) a material or thing that may be a danger to the health of human beings, animals, wildlife or fish, or is of unsightly appearance, and
  - (iii) a substance designated as waste material in the regulations.

[2002 cE-14.2 s18](#)

[Back to Top](#)

### Board continued

19. (1) The Multi-Materials Stewardship Board continued under section 4 of the *Waste Management Act* is continued as a corporation.

(2) The board is an agent of the Crown.

(3) The board shall support and promote the protection, enhancement and wise use of the environment through waste management programs.

[2002 cE-14.2 s19](#)

[Back to Top](#)

### **Waste management program**

**20.** (1) The board may submit a proposal for a waste management program to the minister.

(2) In accordance with a written request by the minister, the board shall submit a proposal for a waste management program to the minister.

(3) Subject to the approval of the Lieutenant-Governor in Council, the minister may

- (a) approve all or part of a waste management program;
- (b) approve an amendment to a waste management program;
- (c) impose conditions on a waste management program;
- (d) direct the board to implement and operate a waste management program;
- (e) direct the board to include a provision or requirement in a waste management program; and
- (f) cancel a waste management program.

(4) The minister may reject all or part of a waste management program.

(5) The board shall not implement or operate a waste management program except in accordance with the approval of the minister.

(6) The minister may implement and operate a waste management program approved by the Lieutenant-Governor in Council.

(7) A program for waste management operated under the authority of the board at the time this Act comes into force is considered to be a waste management program approved under this section.

[2002 cE-14.2 s20](#)

[Back to Top](#)

### **Authority of minister**

**21.** The minister may

- (a) undertake or support and encourage research into waste management; and
- (b) require the board, a corporation, institution or government department or agency to collect and record data or other information on waste management, and to provide a report as required by the minister.

[2002 cE-14.2 s21](#)

# **APPENDIX F**

Sustainet Consultation Database



**Report Parameters:****Stakeholder Group: Innu of Labrador****Start Date:** 1 May 2005**End Date:** 21 Jun 2011**Action Type:** all actions

Meeting	Merged Event
1 Dec 2005	<p><b>Participants:</b> Ben Michel Labrador Innu</p> <p><b>Team Members:</b> Joseph Lanzon Dan O'Rourke</p> <p><b>Summary:</b> Meeting with Grand Chief - Innu of Labrador. Discussion on project and benefits for Labrador.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> </ul>

Meeting	Merged Event
4 May 2006 Sept-Iles	<p><b>Participants:</b> Daniel Ashini Labrador Innu Ben Michel Labrador Innu Dave Nuke Labrador Innu</p> <p><b>Team Members:</b> Bill Hooley John Kearney Veikko Koskella Joseph Lanzon Terence McKillen Dan O'Rourke</p> <p><b>Summary:</b> LIM meets jointly with Labrador Innu Association and Uashat Innu Council. Review of project proposal. Aboriginal issues revolve around ensuring economic benefit accrues to their communities as they all felt they were abandoned by former IOC operations. Ben Michel outlined a vision for pan-provincial cooperation among the aboriginal groups and thought it should be possible to have a single negotiating table when it came time to negotiate the economic benefits from the project.</p> <p>Separate presentation made to the Uashat community. Issues raised related to jobs and protection of the environment with respect to ensuring that the communities can continue to "live off the land".</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Transportation: Aboriginal</li> <li>- Economic: Impact Benefits Agreement (IBA)</li> <li>- Economic: Memorandum of Understanding</li> </ul>

Meeting	Merged Event
10 May 2006 Wabush	<p><b>Participants:</b> Daniel Ashini Labrador Innu Ben Michel Labrador Innu</p> <p><b>Team Members:</b> John Kearney Joseph Lanzon Terence McKillen</p> <p><b>Summary:</b> Meeting with Labrador Innu Association. Review of project development and issues for LIA. Mr. Michel spoke of his vision for development of Labrador and the extension of a rail link from Labrador City to Goose Bay and further north to open up the country for development.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> <li>- Economic: Memorandum of Understanding</li> </ul>

Meeting	Merged Event
18 May 2006 Montreal	<p><b>Participants:</b> Daniel Ashini</p> <p><b>Summary:</b> Meeting to discuss project and Labrador based and Innu connected contractors. Uashat community anxious that LIM allow consultants</p>

Meeting	Merged Event
18 May 2006 Montreal	
Labrador Innu Dave Nuke Labrador Innu <b>Team Members:</b> Joseph Lanzon Terence McKillen Dan O'Rourke	and contractor with whom their Development Corporation has entered into partnerships to have opportunity to bid on any contracts. LIM discussed the necessity of securing a qualified diamond drill company for a summer drill program. Mr. Nuke (LIA) was not in favour of LIM using Goose Bay-based Cartwright Diamond Drilling Company. <b>Issues Raised:</b> - Economic: Economic Development - Economic: Impact Benefits Agreement (IBA) - Economic: Memorandum of Understanding
Phone Call	Merged Event
19 May 2006	
<b>Participants:</b> Dave Nuke Labrador Innu <b>Team Members:</b> Terence McKillen	<b>Summary:</b> Gave advice on potential Drill Contractors and other Labrador contractors. <b>Issues Raised:</b> - Economic: Economic Development
Meeting	Merged Event
30 Aug 2006 Montreal	
<b>Participants:</b> Daniel Ashini Labrador Innu Leo F Dillon Advisor - Labrador Innu Ben Michel Labrador Innu Dave Nuke Labrador Innu <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Discussion on possibility of having single negotiating table. Mr. Michel reiterated his belief and desire to have a single negotiating table, however, it was still necessary for him to consult with the Naskapi and the Innu of Matimekush. No specific issues emerged other than economic development and jobs for the communities. <b>Issues Raised:</b> - Economic: Economic Development - Economic: Employment Opportunities
Email	Merged Event
3 Apr 2007	
<b>Participants:</b> Daniel Ashini Labrador Innu <b>Team Members:</b> Bill Hooley Joseph Lanzon Terence McKillen	<b>Summary:</b> Set up meeting with Daniel Ashini. <b>Issues Raised:</b> - Economic: Memorandum of Understanding <b>Attachments:</b> - sustainet5-26.2lim_daniel_a_presentationnotes_march_30_07-1.doc - sustainet5-3.doc
Email	Merged Event
6 Apr 2007	
<b>Participants:</b> Labrador Innu <b>Team Members:</b>	<b>Summary:</b> Project update. <b>Issues Raised:</b> - Economic: General Project Updates

<b>Email</b> 6 Apr 2007	<b>Merged Event</b>
Terence McKillen Dan O'Rourke	<b>Attachments:</b> - sustainet5-5.doc

<b>Email</b> 8 Apr 2007	<b>Merged Event</b>
<b>Participants:</b> Labrador Innu <b>Team Members:</b> Joseph Lanzon Dan O'Rourke	<b>Summary:</b> Band meeting April 11. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: General Project Updates <b>Attachments:</b> - sustainet5-6.doc

<b>Email</b> 24 Jul 2007	<b>Merged Event</b>
<b>Participants:</b> Daniel Ashini Labrador Innu Leo F Dillon Advisor - Labrador Innu Labrador Innu <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> MOU draft changes. No new issues. LIA is unlikely to participate in direct jobs on site but would participate through LIA businesses and through partnerships with contractors, etc. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: Impact Benefits Agreement (IBA) <b>Attachments:</b> - sustainet5-15.doc

<b>Email</b> 14 Sep 2007	<b>Merged Event</b>
<b>Participants:</b> Daniel Ashini Labrador Innu Labrador Innu <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Revised MOU. <b>Issues Raised:</b> - Economic: Memorandum of Understanding <b>Attachments:</b> - sustainet5-20.1lim_innudraft_mou_september_11_ldi.doc - sustainet5-20.doc

<b>Email</b> 22 Sep 2007	<b>Merged Event</b>
<b>Participants:</b> Leo F Dillon Advisor - Labrador Innu Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu <b>Team Members:</b> Terence McKillen	<b>Summary:</b> Election results. <b>Issues Raised:</b> - Social: Aboriginal Involvement <b>Attachments:</b> - sustainet5-22.doc

Email	Merged Event
<b>Participants:</b> Labrador Innu <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Schefferville and Naskapi draft MOU and December 4th to 5th meeting. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: Memorandum of Understanding <b>Attachments:</b> - sustainet5-23.doc

Email	Merged Event
<b>Participants:</b> Labrador Innu <b>Team Members:</b> Erick Chavez John Kearney Joseph Lanzon Terence McKillen	<b>Summary:</b> December 6th to 7th Schefferville travel arrangements and meeting with Labrador Innu. <b>Issues Raised:</b> - Social: Aboriginal Involvement <b>Attachments:</b> - sustainet5-25.doc

Email	Merged Event
<b>Participants:</b> Peter Penashue Deputy Grand Chief - Labrador Innu <b>Team Members:</b> Matthew Coon Come Joseph Lanzon Terence McKillen	<b>Summary:</b> December meeting in Goose Bay. <b>Issues Raised:</b> - Social: Aboriginal Involvement <b>Attachments:</b> - sustainet5-24.doc

Meeting	Merged Event
<b>Participants:</b> Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu Chief Anastasia Quepee Labrador Innu <b>Team Members:</b> Erick Chavez Matthew Coon Come John Kearney Joseph Lanzon Terence McKillen	<b>Summary:</b> Introduction to new Council and Innu Leadership. LIA introduced economic development corporation and the businesses associated with their community. They feel that it is unrealistic to assume that very many of their community would seek jobs in Schefferville area operations but their businesses would very definitely wish to bid on provision of goods and services.  It was noted that the LIA partnership with SNC Lavalin for engineering work in the Province was nearing completion and that LIM had already engaged SNC to prepare a Technical Report and to continue with engineering design work. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA) - Economic: Memorandum of Understanding

Meeting	Merged Event
<b>Participants:</b> Innu of Labrador <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Labrador Innu business opportunities IBA discussion. Partnership on procurement. <b>Issues Raised:</b> - Economic: Economic Development - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Grand Chief Marc Innu Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu Chief Anastasia Quepee Labrador Innu Paul Rich Innu Development Corp <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA process and final MOU negotiations. MOU provides for community support for the project and focuses on economic participation, opportunity for Innu businesses, community consultation on issues such as training, environmental, heritage and cultural protection, etc. MOU executed. <b>Team Response:</b> Committee's structure and percentage benefit distribution. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Innu of Labrador <b>Team Members:</b> Matthew Coon Come Joseph Lanzon	<b>Summary:</b> Negotiating IBA. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu Chief Anastasia Quepee Labrador Innu <b>Team Members:</b> Matthew Coon Come Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA schedule preparation. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

<b>Meeting</b> 8 May 2008 Halifax	<b>Merged Event</b>
<p><b>Participants:</b> Gerry Kerr Advisor - Labrador Innu Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu</p> <p><b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> Negotiation table for IBA. No new issues.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Phone Call</b> 13 May 2008	<b>Merged Event</b>
<p><b>Participants:</b> Paul Rich Innu Development Corp</p> <p><b>Team Members:</b> Terence McKillen</p>	<p><b>Summary:</b> Update on Innu-SNC JV</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Economic Development</li> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Meeting</b> 4 Jun 2008 Happy Valley-Goose Bay	<b>Merged Event</b>
<p><b>Participants:</b> Wayne Kelsie Innu Development Ltd. Partnership Paula Reid Innu Nation</p> <p><b>Team Members:</b> Linda Wrong</p>	<p><b>Summary:</b> Project overview and discussion of environmental program.</p> <p><b>Stakeholder Comments:</b> Keen interest in project and to support education, training and other apprentice programs.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Education</li> <li>- Economic: General Project Updates</li> <li>- Social: Training</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- <a href="#">meeting_with_paula_reid_and_idlp-_june_4_2008.doc</a></li> </ul>

<b>Email</b> 25 Jun 2008	<b>Merged Event</b>
<p><b>Participants:</b> Labrador Innu</p> <p><b>Team Members:</b> Joseph Lanzon Linda Wrong</p>	<p><b>Summary:</b> Update on IBA discussions with Labrador Innu.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- <a href="#">sustainet0-7.txt</a></li> </ul>

<b>Meeting</b> 4 Jul 2008	<b>Merged Event</b>
<p><b>Participants:</b> Peter Penashue Deputy Grand Chief - Labrador Innu</p> <p><b>Team Members:</b></p>	<p><b>Summary:</b> Project overview.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> </ul>

<b>Meeting</b> 4 Jul 2008	<b>Merged Event</b>
Joseph Lanzon	

<b>Meeting</b> 8 Jul 2008	<b>Merged Event</b>
<b>Participants:</b> Gerry Kerr Advisor - Labrador Innu <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Final amendments to IBA document. Ready for signature.

<b>Commitment</b> 17 Jul 2008 Quebec City	<b>Merged Event</b>
<b>Participants:</b> Innu of Labrador <b>Team Members:</b> John Kearney Joseph Lanzon Terence McKillen	<b>Summary:</b> Signing of Impact Benefit Agreement (IBA). <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

<b>Meeting</b> 13 Oct 2008 Sept-Iles	<b>Merged Event</b>
<b>Participants:</b> Innu of Labrador <b>Team Members:</b> Marc Duclos Joseph Lanzon	<b>Summary:</b> Business opportunities <b>Issues Raised:</b> - Economic: Employment Opportunities

<b>Meeting</b> 30 Oct 2008 St. John	<b>Merged Event</b>
<b>Participants:</b> Peter Penashue Deputy Grand Chief - Labrador Innu <b>Team Members:</b> John Kearney Joseph Lanzon Terence McKillen Linda Wrong	<b>Summary:</b> Discussion of the entire project, job and commercial opportunities and the impact for the province as a whole, for Labrador and specifically for the Central and Northern part of Labrador. <b>Stakeholder Comments:</b> Minister Pottle pointed out the significant job losses in Northern Labrador due to the uranium moratorium. Minister Hickey recommended that focus should be on Central Labrador rather than Western Labrador. <b>Issues Raised:</b> - Economic: Economic Development - Economic: Employment Opportunities

<b>Phone Call</b> 31 Oct 2008 Schefferville	<b>Merged Event</b>
<b>Participants:</b> Joseph Dominique	<b>Summary:</b> Survey Calls for Hunting Camps in Schefferville <b>Stakeholder Comments:</b> Called up the following 'hunting camps' that were

Phone Call	Merged Event
<p>31 Oct 2008 Schefferville</p> <p><b>Caribou Hunter - Innu Nation</b></p> <p><b>Team Members:</b> Paul Thibaudeau</p>	<p>revealed by Internet search. All were either disconnected numbers or were no longer in business:</p> <ol style="list-style-type: none"> <li>1. Club Campeau Inc (418) 585-3720</li> <li>2. Jack Hume Adventures Inc. (418) 585-2417</li> <li>3. Labrador Hunting Safari (418) 585-3145 (208 Gagnon)</li> <li>4. Pavillion Riviere de la Baleine (418) 585-3145</li> <li>5. Pourvoirie Labrador 153 AP Low (418) 585-2749</li> <li>6. Ungava Caribou Expeditions 150 Lac Chantal (418) 585-3890</li> </ol>

Meeting	Merged Event
<p>21 Nov 2008 Goose-Bay</p> <p><b>Participants:</b> Brian King Manager, Business Development - Innu Business development Centre Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu Chief Anastasia Quepee Labrador Innu</p> <p><b>Team Members:</b> John Kearney Joseph Lanzon</p>	<p><b>Summary:</b> Meeting with Innu Development Corp. Aboriginal procurement discussion.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Transportation: Aboriginal</li> <li>- Transportation: LabRail</li> </ul>

Email	Merged Event
<p>17 Feb 2009</p> <p><b>Participants:</b> Paul Rich Innu Development Corp</p> <p><b>Team Members:</b> Marc Duclos</p>	<p><b>Summary:</b> Pursuant to the IBA, preliminary tender document for 2.5 miles track at Silver Yards were sent to the Innu Development Corporation along with two other companies. Full document to be available in Mid-March 2009 when follow-up meeting is planned.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- bid_document-silver_yard.pdf</li> <li>- email_to_paul_rich_-tender_document-project_silver_yard.htm</li> <li>- email_to_pnr_rail_works_-tender_document-project_silver_yard-feb_17_2009.htm</li> <li>- email_to_rail_cantech-tender_document-project_silver_yard-feb_2009.htm</li> </ul>

Meeting	Merged Event
13 Mar 2009 Montreal	
<b>Participants:</b> Paul Rich Innu Development Corp <b>Team Members:</b> Marc Duclos	<b>Summary:</b> Bid review process for the 2.5 mile track at Silver Yard. <b>Issues Raised:</b> - Transportation: Economic

Email	Merged Event
23 Apr 2009	
<b>Participants:</b> Paula Reid Innu Nation <b>Team Members:</b> Linda Wrong	<b>Summary:</b> Email to Paula Reid to arrange phone call to give project update. <b>Issues Raised:</b> - Economic: General Project Updates

Meeting	Merged Event
16 Jun 2009	
<b>Participants:</b> Peter Penashue Deputy Grand Chief - Labrador Innu <b>Team Members:</b> Bill Hooley Joseph Lanzon	<b>Summary:</b> Meeting with LIM and Innu on TRT railway infrastructure improvement. <b>Stakeholder Comments:</b> Following scenarios discussed: <ol style="list-style-type: none"> <li>1. The Innu be the sole contractor for the up-grade.</li> <li>2. Financial alternatives are not the only motivator to the Innu</li> <li>3. Innu involvement with TRT and for LIM to ask management if they can accept that the Innu of Labrador be partners beyond the completion of the rail up-grade.</li> </ol> <b>Team Response:</b> To set up a partnership with the Innu and LIM to seek Federal funding to up-grade 211 km of rail line that go through Labrador. <b>Issues Raised:</b> - Transportation: TRT

Meeting	Merged Event
22 Jul 2009 Calgary	
<b>Participants:</b> Peter Penashue Deputy Grand Chief - Labrador Innu Chief Anastasia Quepee Labrador Innu <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Preliminary IBA implementation meeting with aboriginal leaders. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
22 Jul 2009 Calgary	
<b>Participants:</b>	<b>Summary:</b> Meeting with Labrador Innu in preparation for later lunch meeting

Meeting	Merged Event
<p>22 Jul 2009 Calgary</p> <p><b>Participants:</b> Peter Penashue Deputy Grand Chief - Labrador Innu Chief Anastasia Quepee Labrador Innu <b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	<p>with other aboriginal groups from Quebec.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> </ul>

Letter	Merged Event
<p>25 Aug 2009</p> <p><b>Participants:</b> Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu <b>Team Members:</b> Terence McKillen</p>	<p><b>Summary:</b> Copy of LIM's revised EIS sent to Grand Chief and Deputy Grand Chief of Innu Nation of Labrador.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- eis_letter_lia_20090824.pdf</li> </ul>

Meeting	Merged Event
<p>17 Sep 2009 Montreal</p> <p><b>Participants:</b> Gerry Kerr Advisor - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu <b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> Discussion with Innu of Labrador. Infrastructure and IBA committee.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting	Merged Event
<p>2 Nov 2009 LIM Toronto Office</p> <p><b>Participants:</b> Chief Anastasia Gerry Kerr Advisor - Labrador Innu Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu Luke Rich Co-CEO - Innu</p>	<p><b>Summary:</b> Open-book contracting and IBA review process.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting	Merged Event
<p>2 Nov 2009</p> <p>LIM Toronto Office</p> <p><b>Development Partnership</b></p> <p><b>Team Members:</b></p> <p>Marc Duclos Daniel Dufort Bill Hooley Joseph Lanzon Terence McKillen Linda Wrong</p>	

Meeting	Merged Event
<p>5 Nov 2009</p> <p><b>Participants:</b></p> <p>Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu</p> <p><b>Team Members:</b></p> <p>Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> Contracting avenues and IBA contracting changes.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting	Merged Event
<p>9 Dec 2009</p> <p><b>Participants:</b></p> <p>Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu</p> <p><b>Team Members:</b></p> <p>Joseph Lanzon</p>	<p><b>Summary:</b> Meeting with Innu of Labrador.</p> <p><b>Stakeholder Comments:</b> - Innu should start considering other contractors and to be flexible.</p> <ul style="list-style-type: none"> <li>- Jobs to Matimekush and Naskapi be a priority for Innu companies and contractors that comply with NFL.</li> <li>- There will be no contract announcements and awards before Christmas if no early Cabinet release.</li> </ul> <p><b>Team Response:</b> Peter Penashue and Mark Nui will follow up with NFL Government contacts.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Employment Opportunities</li> </ul>

Meeting	Merged Event
<p>29 Jan 2010</p> <p><b>Participants:</b></p> <p>Luke Rich Co-CEO - Innu</p> <p><b>Team Members:</b></p> <p>Development Partnership Joseph Lanzon</p>	<p><b>Summary:</b> Joseph Lanzon explained the sensitivity about the cell and technology contract issue and asked Luke Rich to speak to the Naskapi and assure them that no such contract was issued and that it was only a capability document.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Economic Development</li> </ul>

Meeting	Merged Event
<p>24 Mar 2010</p> <p><b>Participants:</b></p> <p>Paul Rich</p>	<p><b>Summary:</b> Discussion regarding Innu of Labrador's participation in the Land Claim Overlap Commission.</p>

Meeting 24 Mar 2010	Merged Event
Innu Development Corp <b>Team Members:</b> Joseph Lanzon	<b>Issues Raised:</b> - Social: Land Claims/Political

Phone Call 22 Apr 2010	Merged Event
<b>Participants:</b> Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Election postponed to September. Both Chief and Grand Chief were reconfirmed in their position for now. <b>Issues Raised:</b> - Social: Aboriginal Involvement

Meeting 12 May 2010	Merged Event
<b>Participants:</b> Mark Nui Grand Chief - Labrador Innu Peter Penashue Deputy Grand Chief - Labrador Innu <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Discussing Land Overlap Commission and positive confirmation of participation by Innu of Labrador. <b>Issues Raised:</b> - Social: Land Claims/Political

Dinner Meeting 23 Nov 2010 Ottawa	Merged Event
<b>Participants:</b> Jeremy Andrew Sebastien Benuen Chief - Sheshatshui Innu First Nation Simon Peter Gregoire Councillor - Sheshatshui Innu First Nation Bart Jack Innu of Labrador Mashini Innu of Labrador Yvette Michel Innu of Labrador Andrew Penashue Councillor - Sheshatshui Innu First Nation Joseph Riche Grand Chief - Innu of	<b>Summary:</b> Meeting with Innu of Labrador. IBA implementation. <b>Issues Raised:</b> - Economic: General Project Updates - Economic: Impact Benefits Agreement (IBA)

<b>Dinner Meeting</b> 23 Nov 2010 Ottawa	<b>Merged Event</b>
Labrador <b>Team Members:</b> John Kearney Joseph Lanzon	
<b>Letter</b> 13 May 2011	<b>Merged Event</b>
<b>Participants:</b> Joseph Riche Grand Chief - Innu of Labrador <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Letter to Innu of Labrador on LIM's 2011 exploration program update. <b>Issues Raised:</b> - Economic: IBA Implementation <b>Attachments:</b> - letter_grand_chief_riche_expl_update_2011.pdf

**Report Parameters:****Stakeholder Group: Conseil Nation Innu de Matemikush-Lac John****Start Date:** 1 May 2005**End Date:** 21 Jun 2011**Action Type:** all actions

Meeting	Merged Event
Meeting 28 Jun 2006 Ottawa	
<b>Participants:</b> Chief Andre Chief - Matimekush Innu <b>Team Members:</b> John Kearney Joseph Lanzon Dan O'Rourke	<b>Summary:</b> Project update. Issues for Matimekush community are jobs, sustainable economic development and ensuring that the community benefits from mine development this time. Discussion on the economic benefit for TSH railway. <b>Issues Raised:</b> - Economic: General Project Updates
Meeting 12 Feb 2007 Schefferville	Merged Event
<b>Participants:</b> Rodrigue McKenzie Matimekush <b>Team Members:</b> Joseph Lanzon Dan O'Rourke	<b>Summary:</b> MOU negotiations. <b>Issues Raised:</b> - Economic: Memorandum of Understanding
Email 6 Apr 2007	Merged Event
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Terence McKillen Dan O'Rourke	<b>Summary:</b> Project update. <b>Issues Raised:</b> - Economic: General Project Updates <b>Attachments:</b> - sustainet5-5.doc
Meeting 5 Aug 2007 Schefferville	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Initial meeting sessions with newly elect Chief Real McKenzie. Review project proposal and importance of TSH railway. Chief recognised that jobs and sustainable economic development are important for his community. Young community with high unemployment. Despite importance of jobs and economy, the land must also be protected. They have to live with IOC's legacy. <b>Team Response:</b> LIM mining briefing and economic opportunities in partnership with Innu of Labrador. <b>Issues Raised:</b> - Economic: Economic Development - Economic: Employment Opportunities

Email 22 Aug 2007	Merged Event
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Joseph Lanzon Terence McKillen Dan O'Rourke	<b>Summary:</b> Meeting planning to Schefferville. <b>Issues Raised:</b> - Economic: General Project Updates <b>Attachments:</b> - sustainet5-14.doc

Meeting 9 Sep 2007 Quebec City	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Meeting with Chief Real McKenzie and other Band Council members. <b>Team Response:</b> Seasonal jobs and contracts and business negotiations with Gestion Innu.  In September 2007, LIM opens Schefferville negotiating office. To also start receiving resumes and training planning. Rodrigue McKenzie becomes Senior Officer for relations with Aboriginal communities. <b>Issues Raised:</b> - Economic: Economic Development - Economic: Employment Opportunities

Email 19 Nov 2007	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Schefferville and Naskapi draft MOU and December 4th to 5th meeting. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: Memorandum of Understanding <b>Attachments:</b> - sustainet5-23.doc

Email 23 Nov 2007	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Erick Chavez John Kearney Joseph Lanzon Terence McKillen	<b>Summary:</b> December 6th to 7th Schefferville travel arrangements and meeting with Labrador Innu. <b>Issues Raised:</b> - Social: Aboriginal Involvement <b>Attachments:</b> - sustainet5-25.doc

Meeting 6 Dec 2007 Schefferville	Merged Event
<b>Participants:</b> Council Matimekush	<b>Summary:</b> Meeting with Matimekush - Council and Community. Review project update and use of TSH railway. Council members indicated support for LIM proposal and reiterated need to participate in economic benefit this

Meeting	Merged Event
<p>6 Dec 2007 Schefferville</p> <p><b>Chief Real McKenzie</b> <b>Chief - Innu Matimekush-Lac John</b> <b>Team Members:</b> Erick Chavez Matthew Coon Come John Kearney Joseph Lanzon Terence McKillen</p>	<p>time.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Economic: Economic Development</li> </ul>

Meeting	Merged Event
<p>25 Feb 2008 Quebec City</p> <p><b>Participants:</b> Chief Matimekush Council Matimekush <b>Team Members:</b> John Kearney Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> Project update. Discussion on TSH Railway.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> <li>- Transportation: TRT</li> </ul>

Meeting	Merged Event
<p>3 Mar 2008 PDAC Toronto</p> <p><b>Participants:</b> Chief - Montagnais-Schefferville <b>Team Members:</b> Marc Duclos Joseph Lanzon</p>	<p><b>Summary:</b> Chief of Montagnais - Sept-Îles and Chief of Montagnais - Schefferville. Rail discussion.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Memorandum of Understanding</li> </ul>

Commitment	Merged Event
<p>13 Mar 2008 Youth Centre</p> <p><b>Participants:</b> Council Matimekush <b>Team Members:</b> Matthew Coon Come John Kearney Joseph Lanzon Terence McKillen Linda Wrong</p>	<p><b>Summary:</b> Signing of MOU - with Matimekush. MOU provides for community support for the project and emphasizes job opportunities, business participation, development of the TSH railway, economic participation, and training as well as consultation with the community over environmental, cultural and heritage issues.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Memorandum of Understanding</li> </ul>

Email	Merged Event
<p>4 Apr 2008</p> <p><b>Participants:</b></p>	<p><b>Summary:</b> Resource/machinery and helpers discussions.</p>

Email	Merged Event
<p>4 Apr 2008</p> <p><b>Participants:</b> Daniel Andre Helper - Schefferville Community <b>Team Members:</b> Rodrigue Mckenzie Derek Parks Linda Wrong</p>	<p><b>Issues Raised:</b> - Social: Aboriginal Involvement</p> <p><b>Attachments:</b> - sustainet1-30.txt</p>

Email	Merged Event
<p>4 Apr 2008</p> <p><b>Participants:</b> Schefferville Community <b>Team Members:</b> Rodrigue Mckenzie Linda Wrong</p>	<p><b>Summary:</b> Plans to attend conference and plans to meet with community elders.</p> <p><b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: Economic Development - Economic: General Project Updates</p> <p><b>Attachments:</b> - sustainet1-29.txt</p>

Email	Merged Event
<p>21 Apr 2008</p> <p><b>Participants:</b> Schefferville Community <b>Team Members:</b> Rodrigue Mckenzie Terence McKillen Derek Parks Linda Wrong</p>	<p><b>Summary:</b> Request for program helpers.</p> <p><b>Issues Raised:</b> - Economic: Employment Opportunities - Economic: General Project Updates</p> <p><b>Attachments:</b> - sustainet5-8.doc</p>

Email	Merged Event
<p>14 May 2008</p> <p><b>Participants:</b> Schefferville Community <b>Team Members:</b> Rodrigue Mckenzie Linda Wrong</p>	<p><b>Summary:</b> Community meeting reminder and details.</p> <p><b>Issues Raised:</b> - Economic: General Project Updates</p> <p><b>Attachments:</b> - sustainet1-19.txt</p>

Meeting	Merged Event
<p>26 May 2008 Montreal</p> <p><b>Participants:</b> Council Matimekush Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Marc Duclos Joseph Lanzon</p>	<p><b>Summary:</b> Review of LIM Project.</p> <p><b>Issues Raised:</b> - Transportation: Aboriginal - Economic: Economic Development</p>

<b>Email</b> 26 May 2008	<b>Merged Event</b>
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Rodrigue Mckenzie Linda Wrong	<b>Summary:</b> Clarification of LIM Schefferville visit and LIM's offer to provide graduation robes. <b>Issues Raised:</b> - Social: Education - Economic: General Project Updates <b>Attachments:</b> - sustainet1-16.txt

<b>Meeting</b> 4 Jun 2008 Toronto	<b>Merged Event</b>
<b>Participants:</b> Nadir Andre Lawyer - BCF <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Discussion on commercial agreement arising from MOU. <b>Issues Raised:</b> - Economic: Economic Development

<b>Email</b> 14 Jun 2008	<b>Merged Event</b>
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Erick Chavez Rodrigue Mckenzie Terence McKillen Linda Wrong	<b>Summary:</b> Schefferville visit by Linda Wrong. <b>Issues Raised:</b> - Social: Education - Economic: General Project Updates <b>Attachments:</b> - sustainet3-23.txt

<b>Email</b> 18 Jun 2008	<b>Merged Event</b>
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Rodrigue Mckenzie Linda Wrong	<b>Summary:</b> Program update. <b>Issues Raised:</b> - Economic: Employment Opportunities - Economic: General Project Updates <b>Attachments:</b> - sustainet1-10.txt

<b>Meeting</b> 28 Jun 2008 Schefferville	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush-Lac John <b>Team Members:</b> Marc Duclos Bill Hooley Joseph Lanzon	<b>Summary:</b> Meeting with Chief Real McKenzie. <b>Issues Raised:</b> - Transportation: Aboriginal - Economic: Employment Opportunities - Economic: Impact Benefits Agreement (IBA) - Economic: Memorandum of Understanding

<b>Meeting</b> 4 Jul 2008	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Project overview. <b>Issues Raised:</b> - Economic: General Project Updates
<b>Email</b> 9 Jul 2008	<b>Merged Event</b>
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Joseph Lanzon Rodrigue Mckenzie Linda Wrong	<b>Summary:</b> Update on laptops; guidelines for community support next year. LIM waiting to organize meeting with trappers/traditional knowledge. <b>Issues Raised:</b> - Social: Education - Economic: General Project Updates <b>Attachments:</b> - sustainet3-5.txt
<b>Email</b> 16 Jul 2008	<b>Merged Event</b>
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Erick Chavez Joseph Lanzon Rodrigue Mckenzie Terence McKillen Linda Wrong	<b>Summary:</b> Newsletters and appearances on local radio station to provide project updates. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: General Project Updates - Social: Social Problems in Relation to Mine Development <b>Attachments:</b> - sustainet1-1.txt
<b>Email</b> 18 Jul 2008	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon Linda Wrong	<b>Summary:</b> Project development. <b>Issues Raised:</b> - Economic: General Project Updates
<b>Email</b> 18 Jul 2008	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon Linda Wrong	<b>Summary:</b> Update to Chief Real. <b>Attachments:</b> - sustainet3-0.txt

Email	Merged Event
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Marc Duclos Bill Hooley John Kearney Joseph Lanzon Terence McKillen Linda Wrong	<b>Summary:</b> Information on Aboriginal-owned cell phone provider. <b>Attachments:</b> - sustainet2-5.txt

Email	Merged Event
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Marc Duclos Joseph Lanzon Rodrigue Mckenzie Terence McKillen Linda Wrong	<b>Summary:</b> Project update. <b>Stakeholder Comments:</b> Community members' concerns about fishing on Houston property, strategies to enhance community knowledge on the project, elders meeting moved to Aug. 11, put reference names on invoices, directions for gas receipts, revised drill schedule, environmental monitoring forms, summer students, part-time helper in Schefferville, air monitoring help Aug-Oct. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Environment: Air Quality - Economic: Employment Opportunities - Environment: Fish/Habitat - Environment: General Environment - Economic: General Project Updates <b>Attachments:</b> - geostat_interviewing_workers.htm - sustainet2-2.txt

Public Communication	Merged Event
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Linda Wrong	<b>Summary:</b> First Nations Yearbook advertisement: plans in Schefferville. <b>Issues Raised:</b> - Social: Aboriginal Involvement <b>Attachments:</b> - sustainet5-13.1lim_first_nation_yearbook_pg_43-45_.pdf

Public Meeting	Merged Event
<b>Participants:</b> Schefferville Community <b>Team Members:</b> Joseph Lanzon Rodrigue Mckenzie Derek Parks Linda Wrong	<b>Summary:</b> Project Overview, traditional knowledge information review and sharing with Elders, discussion of all project issues particularly environmental and including presentation of baseline information, confirmation of wildlife, avifauna presence, caribou, etc. <b>Stakeholder Comments:</b> - community concerned about work opportunities - many are out of work - two members discussed the recent signing of the Labrador Innu IBA and if this means that they will miss out on economic opportunities - two members mentioned Sept-Iles families beaver lot rights - at end of day-long meeting, Elders rose and stated their support for the LIM

Public Meeting	Merged Event
	<p>team and confirmed that they had confidence in the environmental work conducted and LIM's commitment to environmental and social responsibility</p> <p><b>Team Response:</b> - team explained the EA process and the procedures for permitting a mine in Labrador  - Joseph discussed the beaver lot issues and Labrador IBA</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Environment: Beaver Lots</li> <li>- Economic: Economic Development</li> <li>- Economic: General Project Updates</li> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting	Merged Event
<p><b>Participants:</b>  Chief Real McKenzie  Chief - Innu Matimekush-Lac John</p> <p><b>Team Members:</b>  Rodrigue McKenzie  John Rogers  Paul Thibaudeau</p>	<p><b>Summary:</b> Project update.</p> <p><b>Stakeholder Comments:</b> We were delayed until 1PM meeting with Chief McKenzie, but he was very supportive of the project and pointed out the need to understand the sensitivity of political issues.</p> <p>There were several issues raised by Chief McKenzie:</p> <ol style="list-style-type: none"> <li>1. He noted that the Innu currently have profit sharing with SNC Lavellin and Air Inuit, and wanted to know if this would be the case with Labrador Iron Mines?</li> <li>2. Naskapi have the Hydro-Quebec (HQ) agreement and Maniheck on the Labrador side will provide the power, but HQ will distribute it – the arrangement is, in Chief McKenzie's words, "complicated". HQ is still providing the electricity to the Innu for 2.3 cents per kilowatt but they want to bump it up to 6.8 cents per kilowatt. There is a two year wait to sit down with HQ to figure out how to resolve the power issue, since the dam was IOC construction and they had a prior agreement with the Innu.</li> <li>3. Real issue, beyond talking to people about the LIM project is are the land claims issues. The Innu nation has 11 communities, 9 in Quebec, 2 in Labrador and they don't all necessarily agree on how the mining arrangements and power arrangements will work for everyone. The disagreements are as follows: <ol style="list-style-type: none"> <li>3a. Some of the Innu communities are ready to extinguish their rights – they may not consult with other Innu communities first</li> <li>3b. Lower North Shore and Sept-Îles communities are upset about how things are going and may do an injunction against mining</li> <li>3c. Not sure how much the Innu nation will get as a cut for the dam exploitation with Labrador (5 to 10% was the figure I heard from you). There is some concern about how Premier Danny Williams is approaching the situation.</li> <li>3d. The key issue is mistrust among these communities, the need for transparency with Labrador Iron Mines and solid commitments.</li> </ol> </li> </ol> <p>As a final comment, Chief McKenzie stated that it was good that there could</p>

Meeting	Merged Event
<p><b>Meeting</b> 20 Aug 2008 Innu Band Office</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Economic: Economic Development</li> <li>- Economic: Employment Opportunities</li> <li>- Economic: Impact Benefits Agreement (IBA)</li> <li>- Social: Land Claims/Political</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- chief_real_mckenzie_information.doc</li> </ul> <p><b>Action Set By:</b> Paul Thibaudeau   <b>Assigned To:</b> Paul Thibaudeau  <b>Deadline:</b> 5 Sep 2008 12:10 PM   <b>Date Resolved:</b> 5 Sep 2008 12:10 PM  <b>Action Requested:</b> Email with transcription of notes asking for clarification of issues.  <b>Action Taken:</b> Email sent with notes. No reply.</p>	

Meeting	Merged Event
<p><b>Meeting</b> 20 Aug 2008 Conseil de la Nation Innu Matimekush-Lac John</p> <p><b>Participants:</b> Marc Jean Pierre Employment Officer - Conseil de la Nation Innu Matimekush-Lac John</p> <p><b>Team Members:</b> Paul Thibaudeau</p>	<p><b>Summary:</b> Discussions with Marc Jean Pierre.</p> <p><b>Stakeholder Comments:</b> Mr. Jean Pierre raised several issues surrounding mining development in the region:</p> <ol style="list-style-type: none"> <li>1. Problem with the IOC – most Innut who worked for them got base labour jobs doing the mopping and shovelling – they had 200 to 300 whites working and only 30 to 50 native people</li> <li>2. Current the Innu nation itself can provide only a bit of work to the community (services, including electrician, cleaning and administrative work) but there just are not enough jobs to go around.</li> <li>3. Innu Nation would need help for training costs and to set up the skill programs so that Innu people can learn and work for LIM. They have engineers, surveyors, heavy equipment operation – ready to learn, ready to work. Key problem is the high expense to train people, particularly in heavy machinery operation (costs 500,000\$ to train 12 people). Need to get women involved as well in all aspects of training</li> <li>4. He is worried that LIM and the relationship to Labrador might affect what can come to the Innu of Schefferville. There are also the ongoing political issues that could get in way of successful economic development (he did not specify what those issues were).</li> </ol> <p>Mr. Jean Pierre indicated that he could provide full Labour Force Information about the numbers of skilled workers, capacities and concerns, but not before September 15.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Historical: Concerns about Past Development</li> <li>- Economic: Economic Development</li> </ul>

Meeting 20 Aug 2008 Conseil de la Nation Innu Matimekush-Lac John	Merged Event
<ul style="list-style-type: none"> <li>- Economic: Employment Opportunities</li> <li>- Social: Infrastructure Request</li> <li>- Social: Land Claims/Political</li> <li>- Social: Training</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- marc_jean_pierre_information.doc</li> </ul> <p><b>Action Set By:</b> Paul Thibaudeau <b>Assigned To:</b> Paul Thibaudeau  <b>Deadline:</b> 5 Sep 2008 1:08 PM <b>Date Resolved:</b> 5 Sep 2008 1:08 PM  <b>Action Requested:</b> Send email to stakeholder and ask for further information about number of workers in Innu nation and training requirements.  <b>Action Taken:</b> Sent email. Followed up with phone calls and faxes. Finally received information November 4, 2008.</p>	

Meeting 21 Aug 2008 Schefferville Airport	Merged Event
<p><b>Participants:</b> Sylvain Vollant Recreation Director - Nation Innu Matimekush-Lac John</p> <p><b>Team Members:</b> Paul Thibaudeau</p> <p><b>Summary:</b> Policing service and recreation facilities for youth.  <b>Stakeholder Comments:</b> Mr. Vollant also works with policing services for Schefferville. He stated that there are four effective police officers as handled by the Surete du Quebec; the town is watched over effectively – key problems observed are drugs and some mischief/vandalism.</p> <p>As recreation director he notes the key problem is getting enough funding to keep the arena going - their budget is \$30,000 per year which shortens the amount of time they can be open. In the winter of 2007-2008, for example, they were only able to open the arena in January. The arena is very old and not well insulated – an inspector stated that it would last, at most, five years. A new arena would cost about \$7 million to build.</p> <p>Key problems observed in community:</p> <ul style="list-style-type: none"> <li>a. Lack of things for kids to do, particularly if arena is closed. This may explain the higher vandalism rates in the community.</li> <li>b. Parents don't come to the arena with their kids, treating it as a babysitting service</li> </ul> <p>Mr. Vollant estimated that a proper arena budget would require a new arena and then a budget of about 500,000\$ per year to allow for 20 staff to be employed full-time year round. While he does not expect LIM to do this, he does think that any economic development in the region would help provide jobs and other opportunities for youth, and that would be very good for the community as a whole.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Economic Development</li> <li>- Economic: Employment Opportunities</li> <li>- Social: Social Problems in Relation to Mine Development</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- sylvain_vollant_information.doc</li> </ul> <p><b>Action Set By:</b> Paul Thibaudeau <b>Assigned To:</b> Paul Thibaudeau  <b>Deadline:</b> 5 Sep 2008 2:50 PM <b>Date Resolved:</b> 5 Sep 2008 2:50 PM  <b>Action Requested:</b> Sent email with interview notes to request confirmation that information is correct.</p>	

<b>Meeting</b> 21 Aug 2008 Schefferville Airport	<b>Merged Event</b>
<b>Action Taken:</b> Sent notes to Mr. Vollant. No reply.	

<b>Meeting</b> 10 Oct 2008	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Marc Duclos Joseph Lanzon	<b>Summary:</b> Project update <b>Issues Raised:</b> - Economic: General Project Updates

<b>Meeting</b> 13 Oct 2008 Sept-Iles	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Marc Duclos Joseph Lanzon	<b>Summary:</b> Business opportunities <b>Issues Raised:</b> - Economic: Employment Opportunities

<b>Meeting</b> 13 Oct 2008	<b>Merged Event</b>
<b>Participants:</b> Council Matimekush <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> AGM Band members meeting in Matimekush. Project update. <b>Issues Raised:</b> - Economic: Economic Development - Economic: Impact Benefits Agreement (IBA)

<b>Phone Call</b> 3 Nov 2008 Schefferville	<b>Merged Event</b>
<b>Participants:</b> Marc Jean Pierre Employment Officer - Conseil de la Nation Innu Matimekush-Lac John <b>Team Members:</b> Paul Thibaudeau	<b>Summary:</b> Occupation discussions <b>Stakeholder Comments:</b> Spoke on the phone to make a final plea for follow-up information promised in early September. I faxed to him a list of potential job types that might be used by LIM and asked him to fill in the numbers of Innu persons trained or needing training (but would be interested) in fulfilling positions like those.  He responded the next day with a faxed copy of the information requested (as attached). <b>Issues Raised:</b> - Economic: Employment Opportunities <b>Attachments:</b> - innu_occupation_information.doc

<b>Public Meeting</b> 28 Nov 2008 Salle du Court Municipal - Schefferville	<b>Merged Event</b>
<p><b>Participants:</b> Schefferville Community</p> <p><b>Team Members:</b> Joseph Lanzon Rodrigue McKenzie Terence McKillen Linda Wrong</p>	<p><b>Summary:</b> Public Meeting pursuant to the EIS process in Schefferville. Community seemed to be very supportive. The Administrator of Schefferville asked that she be consulted as far ahead of time as possible with respect to demands that might be placed on municipal services.</p> <p><b>Stakeholder Comments:</b> Meeting attended by about 12 - 14 people including the Town Administrator. All present were supportive of the development. The Administrator requested that reference to the town should properly be the "Municipality of Schefferville".</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> </ul>

<b>Letter</b> 14 Jan 2009	<b>Merged Event</b>
<p><b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John</p> <p><b>Team Members:</b> Terence McKillen</p>	<p><b>Summary:</b> Formal request to proceed with negotiations for IBA</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Meeting</b> 31 Mar 2009 Schefferville	<b>Merged Event</b>
<p><b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John</p> <p><b>Team Members:</b> Bill Hooley Joseph Lanzon Linda Wrong</p>	<p><b>Summary:</b> Discussion on IBA and appointing an IBA Matimekush Committee/team.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Meeting</b> 9 Jun 2009	<b>Merged Event</b>
<p><b>Participants:</b> Band Manager - Innu- Matimekush</p> <p><b>Team Members:</b> Glen Coyne Josee Lafreniere</p>	<p><b>Summary:</b> Discussion on hiring of women and issues of resumes and favouritism.</p> <p><b>Team Response:</b> 1. LIM agreed to give Band a list of all resumes on file. 2. Any hiring would first be discussed with Band Officials and then they will go through list.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Employment Opportunities</li> </ul> <p><b>Action Set By:</b> Glen Coyne <b>Assigned To:</b> Glen Coyne <b>Deadline:</b> 10 Jun 2009 11:42 AM <b>Date Resolved:</b> <b>Action Requested:</b> Send list of resumes to Band Office. <b>Action Taken:</b></p>

Meeting	Merged Event
<b>Participants:</b> Andre Binette Legal Council to Matimekush - <b>Team Members:</b> Marc Duclos Joseph Lanzon	<b>Summary:</b> Starting IBA negotiations with the Matimekush Community. <b>Team Response:</b> Overall briefing to Andre Binette about mining project and rail upgrade. Negotiations scheduled to begin mid July. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John Sylvain Vollant Recreation Director - Nation Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Joint meeting with ITUM and Matimekush on following: <ul style="list-style-type: none"> <li>- Preliminary discussions for IBA consultation meeting</li> <li>- EIS submission</li> <li>- Community benefit discussions.</li> </ul> <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> </ul>

Meeting	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John Sylvain Vollant Recreation Director - Nation Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Preliminary IBA implementation meeting with aboriginal leaders. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John Sylvain Vollant Recreation Director - Nation Innu Matimekush- Lac John <b>Team Members:</b>	<b>Summary:</b> Meeting with Matimekush on following: <ul style="list-style-type: none"> <li>- Overview of LIM project and cooperation among all aboriginal groups (Labrador Innu, Matimekush, ITUM and Naskapi).</li> <li>- Free trade zone discussion on the New Dawn Agreement.</li> <li>- Not using LIM as a leverage for land claims against the Newfoundland Government.</li> </ul> <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Economic: General Project Updates</li> <li>- Social: Land Claims/Political</li> </ul>

<b>Meeting</b> 22 Jul 2009 Calgary	<b>Merged Event</b>
Joseph Lanzon Terence McKillen	

<b>Letter</b> 25 Aug 2009	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Terence McKillen	<b>Summary:</b> Copy of LIM's revised EIS sent to Chief Real McKenzie of Innu Matimekush. <b>Issues Raised:</b> - Economic: General Project Updates <b>Attachments:</b> - eis_letter_matimekush_20090824.pdf

<b>Meeting</b> 26 Aug 2009	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John Francois Moffette Band Member- Matimekush/ QC Dep't of Indian Affairs - Matimekush/Gov't of QC <b>Team Members:</b> Marc Duclos Daniel Dufort Bill Hooley	<b>Summary:</b> Updating Chief Real and Matimekush Band Council members on LIM's revised EIS. Explanation of the percentage of jobs/business agreed between the NFL Government and LIM that will be allocated to residents of NFL. <b>Issues Raised:</b> - Economic: Employment Opportunities - Economic: General Project Updates

<b>Meeting</b> 7 Dec 2009	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Discussing issue of LIM House transfer - details on signature on deed.  Conference call was organized with Francois Moffett. However, Mr. Moffett never called in. <b>Issues Raised:</b> - Economic: Economic Development

<b>Meeting</b> 8 Dec 2009	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Meeting with Chief Real to request resuming IBA negotiations. He said that he had to deal with land claims first and will let us know if in the new year. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Nadir Andre Lawyer - BCF <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Nadir informed Joseph Lanzon that former Legal Consul Andre Binnett is no longer working on the IBA file for Matimekush and Nadir will get a new mandate in the next few weeks to represent the Matimekush in the IBA negotiations. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Follow-up discussion with Indian and Northern Affairs Ministerial Office for Matimekush land claim issues - Commission to deal with overlapping land claims. <b>Issues Raised:</b> - Social: Land Claims/Political

Meeting	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Matimekush land claim overlap commission - support from all participating aboriginal partners. <b>Issues Raised:</b> - Social: Land Claims/Political

Meeting	Merged Event
<b>Participants:</b> Nadir Andre Lawyer - BCF <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Discussing IBA demands email from Matimekush to Marc Duclos. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Nadir Andre Lawyer - BCF <b>Team Members:</b> Marc Duclos Bill Hooley John Kearney Joseph Lanzon	<b>Summary:</b> Matimekush IBA negotiations meeting in Toronto. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> 29 Apr 2010 Quebec City	<b>Summary:</b> IBA negotiations for LIM and Schefferville Mines.

Meeting 29 Apr 2010 Quebec City	Merged Event
Nadir Andre Lawyer - BCF <b>Team Members:</b> Daniel Dufort John Kearney Joseph Lanzon	<b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting 12 May 2010	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John Francois Moffette Band Member- Matimekush/ QC Dep't of Indian Affairs - Matimekush/Gov't of QC <b>Team Members:</b> Glen Coyne Rodrigue McKenzie	<b>Summary:</b> Discussing heavy equipment needs for season. Aboriginal labour also discussed. <b>Stakeholder Comments:</b> They would like to know in advance what LIM's needs would be. <b>Team Response:</b> LIM team invited the Chief to visit the spur line construction site. Visit arranged for May 13th 2010.  <b>Issues Raised:</b> - Economic: Economic Development

Site Tour 13 May 2010	Merged Event
<b>Participants:</b> Alexandre McKenzie Councillor - Matimekush Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Glen Coyne Rodrigue McKenzie	<b>Summary:</b> Chief Real McKenzie and Councillor Alexandre McKenzie of the Innu Matimekush were taken on a site tour of the spur line construction. <b>Stakeholder Comments:</b> Visitors were impressed with the speed of the construction. <b>Team Response:</b> Glen Coyne and Rodrigue McKenzie from the LIM Schefferville team conducted the tour. <b>Issues Raised:</b> - Economic: General Project Updates

Meeting 1 Jun 2010 Quebec City	Merged Event
<b>Participants:</b> Nadir Andre Lawyer - BCF Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Marc Duclos John Kearney Joseph Lanzon	<b>Summary:</b> Negotiating meeting with Matimekush. (Dinner) <b>Issues Raised:</b> - More Information: Community Consultation

<b>Phone Call</b> 8 Jul 2010	<b>Merged Event</b>
<p><b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John</p> <p><b>Team Members:</b> John Kearney</p>	<p><b>Summary:</b> Telephone discussion with Chief Real.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Meeting</b> 9 Jul 2010 Fairmont Hotel - La Malbaie, QC	<b>Merged Event</b>
<p><b>Participants:</b> Chief Betsiamites Betsiamites Paul Vollant Band Member - Betsiamites</p> <p><b>Team Members:</b> John Kearney</p>	<p><b>Summary:</b> Informal discussion - Innu Strategic Alliance.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- More Information: Community Consultation</li> </ul>

<b>Phone Call</b> 19 Jul 2010	<b>Merged Event</b>
<p><b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John</p> <p><b>Team Members:</b> Marc Duclos John Kearney</p>	<p><b>Summary:</b> Telephone discussions with Chief Real McKenzie</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- More Information: Community Consultation</li> </ul>

<b>Joint Meeting</b> 7 Aug 2010 Sept-Iles	<b>Merged Event</b>
<p><b>Participants:</b> Council Innu Matimekush- Lac John Innu Matimekush-Lac John</p> <p><b>Team Members:</b> Marc Duclos John Kearney</p>	<p><b>Summary:</b> Joint meeting with Matimekush and Uashat Band Councils.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- More Information: Community Consultation</li> </ul>

<b>Meeting</b> 26 Aug 2010 Montreal	<b>Merged Event</b>
<p><b>Participants:</b> Mario Charpentier Lawyer - BCF Chief Real McKenzie Chief - Innu Matimekush- Lac John</p>	<p><b>Summary:</b> Negotiation meeting.</p> <p><b>Stakeholder Comments:</b> Mr. Rosario Pinette Joined meeting by phone.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- More Information: Community Consultation</li> </ul>

<b>Meeting</b> 26 Aug 2010 Montreal	<b>Merged Event</b>
<b>Team Members:</b> Marc Duclos John Kearney	

<b>Meeting</b> 1 Sep 2010 Schefferville	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Marc Duclos Frank Johnson John Kearney	<b>Summary:</b> Meeting with Chief Real McKenzie - Matimekush. <b>Issues Raised:</b> - More Information: Community Consultation

<b>Public Meeting</b> 2 Sep 2010 Schefferville	<b>Merged Event</b>
<b>Participants:</b> Council Innu Matimekush- Lac John Innu Matimekush-Lac John <b>Team Members:</b> Marc Duclos John Kearney	<b>Summary:</b> Public Meeting with Matimekush Band Council. <b>Stakeholder Comments:</b> Matimekush agreed to lift barricade. <b>Issues Raised:</b> - More Information: Community Consultation

<b>Meeting</b> 20 Oct 2010 Montreal	<b>Merged Event</b>
<b>Participants:</b> Nadir Andre Lawyer - BCF Mario Charpentier Lawyer - BCF Pierre Dozois Lawyer - BCF <b>Team Members:</b> Marc Duclos John Kearney Joseph Lanzon	<b>Summary:</b> Meeting with Matimekush Lawyers.

<b>Meeting</b> 28 Oct 2010 Band Council Office - Schefferville	<b>Merged Event</b>
<b>Participants:</b> David Andre Negotiator - Matimekush	<b>Summary:</b> IBA Negotiations with Matimekush. Discussing LIM's proposed contribution towards repairs and upgrade of Arena. <b>Stakeholder Comments:</b> Minutes of meeting attached.

Meeting	Merged Event
<p>28 Oct 2010 Band Council Office - Schefferville</p> <p>Pierre Dozois Lawyer - BCF Chief Real McKenzie Chief - Innu Matimekush- Lac John</p> <p><b>Team Members:</b> John Kearney Joseph Lanzon Terence McKillen</p>	<p><b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)</p> <p><b>Attachments:</b> - iba_notes_20101027-matimekush.docx</p>

Meeting	Merged Event
<p>17 Nov 2010 Schefferville</p> <p><b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John</p> <p><b>Team Members:</b> Bill Hooley Rodrigue McKenzie</p>	<p><b>Summary:</b> Discussing progress with IBA and jobs.</p> <p><b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)</p>

Meeting	Merged Event
<p>25 Nov 2010 Quebec City</p> <p><b>Participants:</b> David Andre Negotiator - Matimekush</p> <p><b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> IBA negotiations with Matimekush. LIM met with David Andre and BCF Lawyers on November 25th and 26th.</p> <p><b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)</p>

Meeting	Merged Event
<p>7 Dec 2010 Montreal</p> <p><b>Participants:</b> David Andre Negotiator - Matimekush</p> <p><b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> IBA negotiations with Matimekush. LIM met with David Andre and BCF Lawyers on December 7th and 8th.</p> <p><b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)</p>

Meeting	Merged Event
<p>15 Dec 2010 LIM Toronto Office</p> <p><b>Participants:</b> Michel Landry Deloitte &amp; Touche</p> <p><b>Team Members:</b> Bill Hooley</p>	<p><b>Summary:</b> LIM meeting with Michel Landry, Financial Advisor for Matimekush IBA negotiating team.</p> <p><b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)</p>

<b>Meeting</b> 15 Dec 2010 LIM Toronto Office	<b>Merged Event</b>
Joseph Lanzon Richard Pinkerton	

<b>Meeting</b> 20 Jan 2011 Schefferville	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Glen Coyne Rowan Maule Rodrigue McKenzie	<b>Summary:</b> An impromptu meeting with Chief Real to try to resolve issue between Francois McKenzie and Glen Coyne. <b>Issues Raised:</b> - General: Employment Issue <b>Attachments:</b> - meeting_schefferville_20_01_11.doc

<b>Meeting</b> 28 Jan 2011 Montreal	<b>Merged Event</b>
<b>Participants:</b> David Andre Negotiator - Matimekush Nadir Andre Lawyer - BCF Pierre Dozois Lawyer - BCF <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA negotiating meeting with Matimekush. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

<b>Meeting</b> 28 Feb 2011 Montreal	<b>Merged Event</b>
<b>Participants:</b> Nadir Andre Lawyer - BCF Pierre Dozois Lawyer - BCF <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA negotiating meeting with Matimekush. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

<b>Letter</b> 13 May 2011	<b>Merged Event</b>
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush- Lac John <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Letter to Matimekush - Lac John on LIM's 2011 exploration program update. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA) <b>Attachments:</b> - letter_chief_real_expl_update_2011.pdf

Conference 16 May 2011	Merged Event
<b>Participants:</b> Chief Real McKenzie Chief - Innu Matimekush-Lac John <b>Team Members:</b> John Kearney	<b>Summary:</b> Conference call with Matimekush and New Millenium.

Meeting 24 May 2011 Montreal	Merged Event
<b>Participants:</b> Pierre Dozois Lawyer - BCF Chief Real McKenzie Chief - Innu Matimekush-Lac John <b>Team Members:</b> Marc Duclos John Kearney	<b>Summary:</b> Meeting with Matimekush.

Joint Meeting 6 Jun 2011 Schefferville	Merged Event
<b>Participants:</b> Council Matimekush Chief Real McKenzie Chief - Innu Matimekush-Lac John <b>Team Members:</b> Marc Duclos John Kearney Joseph Lanzon Linda Wrong	<b>Summary:</b> Joint meeting with LIM, Matimekush Band Council and New Millenium/Tata Steel. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Public Meeting 6 Jun 2011 Schefferville Community Arena	Merged Event
<b>Participants:</b> Community Innu Matimekush-Lac John Innu Matimekush-Lac John Chief Real McKenzie Chief - Innu Matimekush-Lac John <b>Team Members:</b> John Kearney	<b>Summary:</b> LIM signing IBA with Innu Matimekush-Lac John. Tour of Arena Repairs. <b>Issues Raised:</b> - Social: Discrimination - Social: Relationships - Social: Respect - General: The Future

Site Tour 7 Jun 2011 LIM Bean Lake Camp	Merged Event
<p><b>Participants:</b>            Council Innu Matimekush-Lac John            Innu Matimekush-Lac John            Chief Real McKenzie            Chief - Innu Matimekush-Lac John</p> <p><b>Team Members:</b>            John Kearney</p>	<p><b>Summary:</b> 1. Chief Real McKenzie and Band Members visited LIM camp.            2. LIM project update by John Kearney.            3. Speech by Chief Real McKenzie.</p> <p><b>Issues Raised:</b>            - General: Working Together with Respect</p>

**Report Parameters:****Stakeholder Group: Naskapi Nation of Kawawachikamach****Start Date:** 1 May 2005**End Date:** 21 Jun 2011**Action Type:** all actions

Community Visit 30 May 2005 Kawawachikamach	Merged Event
<b>Participants:</b> Chief Philip Einish John Mameamskum Naskapi <b>Team Members:</b> Erick Chavez Gerry Gauthier John Kearney Terence McKillen	<b>Summary:</b> Introductory visit to Schefferville. Reviewed project proposal. No major issues raised. Do not want to see any new mining resulting in the visual "eyesore" left behind by IOC. Aboriginals effectively shut out by IOC operations. <b>Issues Raised:</b> - Economic: General Project Updates
Meeting 28 Jun 2006 Ottawa	Merged Event
<b>Participants:</b> John Mameamskum Naskapi <b>Team Members:</b> John Kearney Joseph Lanzon Dan O'Rourke	<b>Summary:</b> Project update. Discussion on TSH railway. <b>Issues Raised:</b> - Economic: General Project Updates
Meeting 13 Feb 2007 Kawa	Merged Event
<b>Participants:</b> John Mameamskum Naskapi <b>Team Members:</b> Joseph Lanzon Dan O'Rourke	<b>Summary:</b> Review project development with Naskapi Leadership and Band Members. Discussed economic stimulus from TSH railway. <b>Issues Raised:</b> - Economic: Economic Development
Email 6 Apr 2007	Merged Event
<b>Participants:</b> John Mameamskum Naskapi <b>Team Members:</b> Joseph Lanzon Terence McKillen Dan O'Rourke	<b>Summary:</b> Possible letter from John M. dated April 4 <b>Issues Raised:</b> - Economic: General Project Updates <b>Attachments:</b> - sustainet5-4.doc

<b>Email</b> 20 Jun 2007	<b>Merged Event</b>
<b>Participants:</b> John Mameamskum Naskapi <b>Team Members:</b> Bill Hooley John Kearney Joseph Lanzon Terence McKillen	<b>Summary:</b> TRT MOU. <b>Issues Raised:</b> - Economic: General Project Updates <b>Attachments:</b> - sustainet5-11.1.pdf - sustainet5-11.doc

<b>Meeting</b> 12 Oct 2007 Toronto	<b>Merged Event</b>
<b>Participants:</b> Chief Philip Einish <b>Team Members:</b> John Kearney Terence McKillen	<b>Summary:</b> Overview of project. Chief Einish indicated community need for jobs and development. Need to protect the environment. <b>Issues Raised:</b> - Economic: Employment Opportunities - Environment: General Environment - Economic: General Project Updates

<b>Meeting</b> 29 Oct 2007 Montreal	<b>Merged Event</b>
<b>Participants:</b> Robert Pratt Legal Counsel - <b>Team Members:</b> John Kearney Joseph Lanzon	<b>Summary:</b> Naskapi MOU discussion. <b>Issues Raised:</b> - Economic: Memorandum of Understanding

<b>Meeting</b> 7 Dec 2007 Kawawachikamach	<b>Merged Event</b>
<b>Participants:</b> Chief Philip Einish <b>Team Members:</b> Erick Chavez Matthew Coon Come John Kearney Joseph Lanzon Terence McKillen	<b>Summary:</b> Community visit and presentation to Chief and Administrators. MOU discussion. <b>Issues Raised:</b> - Economic: General Project Updates - Economic: Impact Benefits Agreement (IBA) - Economic: Memorandum of Understanding

<b>Meeting</b> 14 Mar 2008 Kawa	<b>Merged Event</b>
<b>Participants:</b> Chief Philip Einish <b>Team Members:</b> John Kearney Joseph Lanzon Terence McKillen	<b>Summary:</b> Project update and presentation of final MOU for signature. MOU provides for community support for the project and emphasizes job opportunities, business participation, development of the TSH railway, economic participation, and training as well as consultation with the community over environmental, cultural and heritage issues. <b>Issues Raised:</b>

<b>Meeting</b> 14 Mar 2008 Kawa	<b>Merged Event</b>
	<ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> <li>- Economic: Memorandum of Understanding</li> </ul>

<b>Commitment</b> 22 Apr 2008	<b>Merged Event</b>
<b>Participants:</b> Chief Philip Einish <b>Team Members:</b> John Kearney Terence McKillen	<b>Summary:</b> Sign MOU <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Economic: Memorandum of Understanding</li> </ul>

<b>Email</b> 27 Apr 2008	<b>Merged Event</b>
<b>Participants:</b> John Mameamskum Naskapi <b>Team Members:</b> Terence McKillen Derek Parks Linda Wrong	<b>Summary:</b> Reimbursement and rental rates. Community helpers. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> </ul> <b>Attachments:</b> <ul style="list-style-type: none"> <li>- sustainet5-9.doc</li> </ul>

<b>Email</b> 30 May 2008	<b>Merged Event</b>
<b>Participants:</b> John Mameamskum Naskapi <b>Team Members:</b> John Kearney Linda Wrong	<b>Summary:</b> Discussion of education and dates of Schefferville vist. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Social: Education</li> <li>- Economic: General Project Updates</li> </ul> <b>Attachments:</b> <ul style="list-style-type: none"> <li>- sustainet0-10.txt</li> </ul>

<b>Email</b> 2 Jun 2008	<b>Merged Event</b>
<b>Participants:</b> John Mameamskum Naskapi <b>Team Members:</b> John Kearney	<b>Summary:</b> Discussion of educational support from LIM for Kawa schools. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Social: Education</li> </ul> <b>Attachments:</b> <ul style="list-style-type: none"> <li>- sustainet0-9.txt</li> </ul>

<b>Email</b> 11 Jun 2008	<b>Merged Event</b>
<b>Participants:</b> Linda Poitras Naskapi Development Corporation <b>Team Members:</b> Bill Hooley John Kearney Joseph Lanzon	<b>Summary:</b> Schefferville Graduation. Linda Wrong attends and provides awards to graduates. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Social: Education</li> </ul> <b>Attachments:</b> <ul style="list-style-type: none"> <li>- sustainet3-24.txt</li> </ul>

Email 11 Jun 2008	Merged Event
Terence McKillen John Rogers Linda Wrong	

Email 14 Jun 2008	Merged Event
<b>Participants:</b> Linda Poitras Naskapi Development Corporation <b>Team Members:</b> Erick Chavez Rodrigue Mckenzie Terence McKillen Linda Wrong	<b>Summary:</b> Schefferville visit by Linda Wrong. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Social: Education</li> <li>- Economic: General Project Updates</li> </ul> <b>Attachments:</b> <ul style="list-style-type: none"> <li>- sustainet3-23.txt</li> </ul>

Meeting 18 Aug 2008 Kawawachikamach	Merged Event
<b>Participants:</b> Ruby Sandy Robinson Administrative Director - Naskapi Development Corporation <b>Team Members:</b> Rodrigue Mckenzie Paul Thibaudeau	<b>Summary:</b> Discussion with Ruby Sandy Robinson of Naskapi Development Corporation. <b>Stakeholder Comments:</b> Few key comments from Ruby Robinson: <ol style="list-style-type: none"> <li>1. There has been a noticeable decrease in the number of caribou in the region. She further indicated that the Mistinibi camp had been rented out to mining companies and that there are two uranium mining camps in operation.</li> <li>2. The land was historically disrupted by pit mines - so she would like to make sure that LIM is careful to do the appropriate clean-up afterwards, unlike the IOC.</li> <li>3. There are potentially more social problems when there are booming economic conditions.</li> <li>4. There should be a priority to hire Innus and Naskapi for the operations as they live here and will always be here.</li> <li>5. She feels the order for work in the Naskapi region should be as follows:           <ul style="list-style-type: none"> <li>- First see if there are Naskapi who are qualified</li> <li>- If not, take Innu next</li> <li>- If not, take non-Aboriginals as the last choice.</li> </ul> </li> <li>6. She stated that the Naskapi Development Corporation (NDC) has a few companies and services that they offer, including a construction company, the Maniken store, Radio services, Tshiuetin Transport services.</li> <li>7. Issue of language and cultural protection is central to the NDC and they are very concerned about the impacts development may have on this.</li> <li>8. Need solid impact benefit agreements because the Naskapi did not have that with the IOC and suffered because of it. Wants job opportunities for youth.</li> </ol> <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Historical: Concerns about Past Development</li> <li>- Economic: Economic Development</li> </ul>

Meeting	Merged Event
18 Aug 2008 Kawawachikamach	<ul style="list-style-type: none"> <li>- Economic: Employment Opportunities</li> <li>- Social: Social Problems in Relation to Mine Development</li> <li>- Economic: Use of External Contractors</li> <li>- Environment: Wildlife/Habitat</li> </ul>

Meeting	Merged Event
<b>Participants:</b> Chief Philip Einish <b>Team Members:</b> Rodrigue Mckenzie Paul Thibaudeau	<p><b>Summary:</b> Met with Chief Phillip Einish.</p> <p><b>Stakeholder Comments:</b> Rodrigue and I met with Chief Einish at Kawa first and asked for his approval of the list and his recommendations. He was pleased that we were doing this study and involving an Innu/Naskapi person in the process. He said the following:</p> <ol style="list-style-type: none"> <li>1. When we meet other groups we should be aware of the territory issue and how NEQA is to be respected. These issues will need to be addressed with regards to the mining developments as well.</li> <li>2. He and the council would like to visit the sites to see what Labrador Iron Mines is doing and how the work is proceeding. The reasons for this are as follows:           <ol style="list-style-type: none"> <li>2a. Back in the days of the IOC there were many Elders who had never seen an open-pit mine and when they were given a show in the mid-1970s they were shocked by the amount of environmental devastation</li> <li>2b. Chief Einish stated that he went to the LabMag DSO Project in Spring 2007 and was aware of the stringent environmental regulations</li> <li>2c. There are mostly native people working at LabMag and there is a good relationship.</li> <li>2d. Chief Einish sees mining as very important, stating, "There's no potential here [for other types of economic development]– mining is the only open door", and that people here are eager for other work; the council would like to get Kawachikamach up to an 80% employment rate.</li> <li>3. Need to preserve the territory and secure a future for the Naskapi youth</li> <li>3c. Suggested talking to children about mining occupations.</li> <li>3d. Protecting heritage is also important. Chief Einish noted that LIM arrange to fly two Elders and himself to an old fort from the 1850s to mark it on the GPS and take pictures of the site.</li> </ol> </li> </ol> <p>Chief Einish concluded the meeting by suggesting that we speak with Ruby Sandy Robinson and George Guanish.</p> <p><b>Team Response:</b> 3a. Chief Einish would like the information that is collected in this report (once fully written) to be translated into Naskapi so that the Elders can know this (Rodrigue McKenzie, LIM's Community Liaison, stated that he would take responsibility for this).</p> <p>Chief Einish noted that there was a real need for economic development. Rodrigue agreed with him and stated that the Innu also had the same problem for the Innu, as there are 90 people on the Innu reserve who want jobs and call him on a frequent basis to get that information.</p> <p><b>Issues Raised:</b>            - Cultural: Traditional Language Use</p> <p><b>Attachments:</b></p>

<b>Meeting</b> 19 Aug 2008 Kawawachikamach	<b>Merged Event</b>
- chief_philip_einish_information.doc	

<b>Meeting</b> 19 Aug 2008 Kawawachikamach	<b>Merged Event</b>
<p><b>Participants:</b> Ruby Sandy Robinson Administrative Director - Naskapi Development Corporation</p> <p><b>Team Members:</b> Rodrigue McKenzie Paul Thibaudeau</p>	<p><b>Summary:</b> Meeting with Ruby Sandy Robinson and Rodrigue McKenzie about community.</p> <p><b>Stakeholder Comments:</b> Mrs. Sandy-Robinson had several comments regarding the proposed LIM project, as follows:</p> <ol style="list-style-type: none"> <li>1. Since mining exploration has begun the number of caribou in the region have dropped; migration patterns are changing.</li> <li>2. Land was badly disrupted by the IOC pit mines and she would like LIM to take care to clean up the mine after they are done.</li> <li>3. Concerned about the rise of drug use during 'booming economic times'. She notes that when the train starting coming up to Schefferville twice per week there were more problems with drugs.</li> <li>4. It is very important to hire local Native peoples, because the Innu and Naskapi will always be here and they would like the opportunity to work. She said that Naskapi Management Services would help with selecting appropriate workers for LIM - first qualified Naskapis, then Innu and finally non-natives.</li> <li>5. When the Naskapi signed the 1978 NEQA there was no impact and benefits agreement with the IOC. With LIM she would like to see some benefits for the community including language and culture protection as well as training programs for youth to enhance local skills and opportunities. She recalls how some young people in the 1970s would quit school to work for the IOC in low end jobs and she would like that situation to be avoided.</li> </ol> <p>She recommended that we speak to Samson Einish and Theresa Chemaganish. She agreed to provide documentation and lists of businesses and services by early September, 2008 once emailed by Paul Thibaudeau.</p> <p>Mrs. Sandy-Robinson listed the organizations that are owned and/or operated by the NDC:</p> <ul style="list-style-type: none"> <li>-A construction company</li> <li>-Several hunting camps that could be rented out to companies for accomodations.</li> <li>-Manikin general store</li> <li>-Radio Station</li> <li>-Tshuetien Rail</li> </ul> <p><b>Team Response:</b> Rodrigue agreed with Mrs. Sandy Robinson about the need to enhance local skills and involve the local Aboriginal communities in the development process.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Economic: Employment Opportunities</li> </ul>

Meeting	Merged Event
<p>19 Aug 2008 Kawawachikamach</p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> <li>- Social: Social Problems in Relation to Mine Development</li> <li>- Cultural: Traditional Language Use</li> <li>- Social: Training</li> </ul> <p><b>Action Set By:</b> Paul Thibaudeau <b>Assigned To:</b> Paul Thibaudeau  <b>Deadline:</b> 15 Sep 2008 11:26 AM <b>Date Resolved:</b> 15 Sep 2008 11:27 AM  <b>Action Requested:</b> I stated that I would phone up Mrs. Sandy-Robinson on September 15 2008 to ask for a list of businesses and services.  <b>Action Taken:</b> I phoned up Mrs. Sandy-Robinson and was told to call up the Administration Office in Sept-Iles. I did so a few times, left messages - no one replied.</p>	

Meeting	Merged Event
<p>19 Aug 2008 Kawawachikamach</p> <p><b>Participants:</b> Theresa Chemaganish Training and Management Facilitator - Management Board, NDC</p> <p><b>Team Members:</b> Rodrigue Mckenzie Paul Thibaudeau</p>	<p><b>Summary:</b> Training and education  <b>Stakeholder Comments:</b> Ms. Chemaganish is part of several groups:  - Member of Local Management Board  - Nation Representative  - Works with NDC and NAC School in training  - Social Assistance Committee Member  - Member of outreach with Sampson</p> <p>She works with local people to help them take local training and arrange for outside people to come in and provide training for gaining certificates. There are several problems facing the local working population:</p> <ol style="list-style-type: none"> <li>1. Low education levels and the need for practical skills training. You need to have your Secondary 5 or pass the GED exam; without those things done you have a much harder time to pass.</li> <li>2. Hard for heavy equipment operators to get their provincial license because while it takes six weeks to get the basic license it can take one year out of town courses to get the provincial license</li> </ol> <p>To enhance heavy equipment training her organization helped to arrange the bringing in an outside person to train 20 students in theory - these students had to go to Sept-Iles for the practical tests. Some challenges with bringing in trainers are:</p> <ol style="list-style-type: none"> <li>a. Need at least twenty students to be able to hold a course in a community, so you tend to be limited in course offerings. As Ms. Chemaganish noted, you can get 20 people who want to be heavy equipment operators but not 20 hairdressers.</li> <li>b. Need translation from English/French into Naskapi for some terms used in machinery operation - there can be a language barrier at times.</li> </ol> <p>The Management Board has helped with several training and development initiatives in Kawa including:</p> <ul style="list-style-type: none"> <li>- Enhancing carpentry, communications and computer skills (was not elaborated upon)</li> <li>- The Management Board put the money into the labour to build the recreation</li> </ul>

Meeting	Merged Event
Meeting 19 Aug 2008 Kawawachikamach	<p>centre – they have input in funding for most of things that are running at Kawa (was not elaborated upon)</p> <p>-The board provides the training for the life guards for the pool and for the recreation staff</p> <p>-Biggest achievement of the Board was the setting up of the daycare – they did all the training and then expanded and renovated the Daycare space and had staff ready to run it.</p> <p>Ms. Chemaganish noted that the First Nations Human Development Commission of Quebec (French/English) at a summit in 2006 stated that it would set up a centre at Pointe Bleue for all the First Nations of Quebec. She would like to know if this centre could have an outreach program to Kawa or if it would have a residence so that students could take their families with them when they undergo training.</p> <p>She indicated that she could provide more detailed information about what programs the Management Board funds and what kinds of skills are provided for in training.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Economic Development</li> <li>- Social: Education</li> <li>- Economic: Employment Opportunities</li> <li>- Social: Training</li> </ul> <p><b>Action Set By:</b> Paul Thibaudeau <b>Assigned To:</b> Paul Thibaudeau  <b>Deadline:</b> 4 Sep 2008 5:10 PM <b>Date Resolved:</b> 4 Sep 2008 5:10 PM  <b>Action Requested:</b> Paul Thibaudeau to send an email to Ms. Chemaganish requesting more detailed information about what programs the Management Board funds and what kinds of skills are provided for in training.</p> <p><b>Action Taken:</b> Email and telephone followup performed - no responses.</p>
Meeting 19 Aug 2008 Band Office, Kawawachikamach	<p><b>Participants:</b> Sampson Einish  <b>Team Members:</b> Rodrigue Mckenzie Paul Thibaudeau</p> <p><b>Summary:</b> Naskapi Nation employment  <b>Stakeholder Comments:</b> Mr. Einish works as the employment liaison officer for the Naskapi Nation. He has dealings with the Commission Construction du Quebec and the Naskapi Department of Public Works. He also has extensive experience working with Emploi Quebec.</p> <p>Mr. Einish has a few concerns and questions about LIM's operations:</p> <ol style="list-style-type: none"> <li>1. He states that he had trouble finding out information about Bloom Lake; apparently the Naskapi can not get into work there because of the Innu.</li> <li>2. Mr. Einish would like LIM to have a resource person that he could contact that would provide information about how many jobs they have and what other types of jobs are required by LIM.</li> <li>3. What kinds of financial guarantees (such as royalties and job opportunities)</li> </ol>

Meeting	Merged Event
	<p><b>Participants:</b> Sampson Einish  <b>Team Members:</b> Rodrigue Mckenzie Paul Thibaudeau</p> <p><b>Summary:</b> Naskapi Nation employment  <b>Stakeholder Comments:</b> Mr. Einish works as the employment liaison officer for the Naskapi Nation. He has dealings with the Commission Construction du Quebec and the Naskapi Department of Public Works. He also has extensive experience working with Emploi Quebec.</p> <p>Mr. Einish has a few concerns and questions about LIM's operations:</p> <ol style="list-style-type: none"> <li>1. He states that he had trouble finding out information about Bloom Lake; apparently the Naskapi can not get into work there because of the Innu.</li> <li>2. Mr. Einish would like LIM to have a resource person that he could contact that would provide information about how many jobs they have and what other types of jobs are required by LIM.</li> <li>3. What kinds of financial guarantees (such as royalties and job opportunities)</li> </ol>

Meeting 19 Aug 2008 Band Office, Kawawachikamach	Merged Event
	<p>would the Naskapi get from LIM?</p> <p>4. Could the Naskapi invest in LIM like they can in New Millenium?</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Access - Roads</li> <li>- Economic: Economic Development</li> <li>- Economic: Employment Opportunities</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- sampson_einish_information.doc</li> </ul> <p><b>Action Set By:</b> Paul Thibaudeau <b>Assigned To:</b> Paul Thibaudeau  <b>Deadline:</b> 4 Sep 2008 4:00 PM <b>Date Resolved:</b> 4 Sep 2008 10:00 AM  <b>Action Requested:</b> Send an email asking for more concrete information about human resources and job skills that the community has.  <b>Action Taken:</b> Email was sent on September 4, 2008 with phone follow-up and message left. No reply.</p>

Meeting 19 Aug 2008 Kawawachikamach	Merged Event
<p><b>Participants:</b>            Barry Einish            Computer Technician -            Naskapi Imuun Inc.</p> <p><b>Team Members:</b>            Rodrigue Mckenzie            Paul Thibaudeau</p>	<p><b>Summary:</b> Discussion with Barry Einish.</p> <p><b>Stakeholder Comments:</b> Works for Imuun to provide computer services to the community. They have the following projects developing:</p> <ol style="list-style-type: none"> <li>1. They want to provide cell phone service in addition to high speed internet access, but the problem with that process is that cell-phone would eat up bandwidth.</li> <li>2. There is currently a limit of bandwidth that could be addressed by the following possible solutions:           <ol style="list-style-type: none"> <li>a. Can use a 'gateway system' to allow for packet switching (essentially a software solution)</li> <li>b. Can run fibre optic cable up here – would cost \$15 million?</li> <li>c. Hydro-Quebec might have an internet over powerline system</li> </ol> </li> </ol> <p>Naskapi Imuun to provide internet service as well as repair and assembling computers, but they are having difficulty keeping up with demand because of the following limitations:</p> <ol style="list-style-type: none"> <li>1. You need shelving and additional desk space to work</li> <li>2. Need a cooling room for server stationing</li> <li>3. Need more personnel and more training – but you can't get the funding for an additional person</li> </ol> <p>Mr. Einish stated that this business could have a similar counterpart in the Innu nation, and resources could be shared between the two nations to help everyone in the region.</p> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- barry_einish_information.doc</li> </ul> <p><b>Action Set By:</b> Paul Thibaudeau <b>Assigned To:</b> Paul Thibaudeau</p>

Meeting	Merged Event
19 Aug 2008 Kawawachikamach	<b>Deadline:</b> 4 Sep 2008 1:00 PM <b>Date Resolved:</b> 4 Sep 2008 1:00 PM <b>Action Requested:</b> Sending an email to ask for clarification about details of computer support business. <b>Action Taken:</b> Email was sent with a copy of what was said by Mr. Einish. I asked for clarification of Internet service details. No reply.

Meeting	Merged Event
21 Aug 2008 Kawawachikamach	<p><b>Participants:</b> Jimmy James Einish Deputy Chief and Director of Recreation - Band Council of Naskapi Nation of Kawawachikamach</p> <p><b>Team Members:</b> Rodrigue Mckenzie Paul Thibaudeau</p> <p><b>Summary:</b> Meeting with Deputy Chief/Recreation Director. <b>Stakeholder Comments:</b> Mr. Einish noted that need for funds to enhance recreation delivery by the hiring of additional animators. He was hopeful that economic development in partnership with LIM could help accomplish this, stating that the IOC had provided lots of facilities and activities for people.</p> <p>He also stated that local parents were irresponsible and did not watch after their children, leaving them in activities for other people to raise. He would like LIM to sponsor equipment for recreation. He would also like to see some more jobs for Aboriginal people within any mining development.</p> <p>He stated that no follow-up was required.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Economic: Donation Requests</li> <li>- Economic: Employment Opportunities</li> <li>- Social: Infrastructure Request</li> </ul>

Meeting	Merged Event
21 Aug 2008 Kawawachikamach	<p><b>Participants:</b> Samuel Pien Director - Naskapi Police Force</p> <p><b>Team Members:</b> Rodrigue Mckenzie Paul Thibaudeau</p> <p><b>Summary:</b> Discussion re: Naskapi Police Force. <b>Stakeholder Comments:</b> Mr. Pien says that the Naskapi Police Force is short-staffed - they have to share jurisdictional duties with the Surete du Quebec from Kawawachikamach to Matimekush (and the SQ handles Matimekush to Schefferville).</p> <p>He stated that if LIM were to invest in local facilities (such as additional recreational facilities for children) that would be great for reducing crime and vandalism, but it should be done evenly between Kawa and Schefferville, so that youth stay in their communities for fun.</p> <p>He had nothing further to add and stated that no follow-up would be necessary.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Donation Requests</li> <li>- Social: Infrastructure Request</li> <li>- Social: Social Problems in Relation to Mine Development</li> </ul>

Meeting	Merged Event
<p><b>Participants:</b> Paul Mameamskum Councillor and Director - Naskapi Nation Band Council and Department of Public Works</p> <p><b>Team Members:</b> Rodrigue Mckenzie Paul Thibaudeau</p>	<p><b>Summary:</b> Description of some Public Works equipment and functional characteristics.</p> <p><b>Stakeholder Comments:</b> Mr. Mameamskum stated that he has lots of skilled labour and can provide a full breakdown. This was a very brief discussion while he was at a construction site. He wanted Paul Thibaudeau to email him a request for more information.</p> <p><b>Team Response:</b> Paul Thibaudeau said he would email a request for more information.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Economic: Employment Opportunities</li> </ul> <p><b>Action Set By:</b> Paul Thibaudeau <b>Assigned To:</b> Paul Thibaudeau  <b>Deadline:</b> 4 Sep 2008 5:27 PM <b>Date Resolved:</b> 4 Sep 2008 5:27 PM  <b>Action Requested:</b> Email follow-up request for more information.  <b>Action Taken:</b> Sent email for further information. Had phone calls and eventually received information by November 4, 2008 for equipment rental. Remaining information was gathered by private research.</p>

Meeting	Merged Event
<p><b>Participants:</b> Chief Philip Einish Paul Mameamskum Councillor and Director - Naskapi Nation Band Council and Department of Public Works Paul Renzoni General Advisor - Atmacinta Consultants</p> <p><b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> Meeting with Naskapi to negotiate IBA agreement based on existing MoU. Introductory meeting to review status of Project and cover general issues of mutual concern.</p> <p>Mr. Renzoni undertook to provide Minutes of the meeting and a list of actions for each party.</p>

Meeting	Merged Event
<p><b>Participants:</b> Naskapi Nation of Kawawachikamach Chief Philip Einish Paul Renzoni General Advisor - Atmacinta Consultants</p> <p><b>Team Members:</b> Bill Hooley Joseph Lanzon Linda Wrong</p>	<p><b>Summary:</b> Meeting to discuss February 11 letter from Naskapi to Province of NL and to see what their concerns are and provide project update.</p> <p><b>Stakeholder Comments:</b> 1) LIM expressed concern about the fact that the Nation did not express any concerns or issues to LIM before preparing and sending the letter to the Province of NL despite all the communication that has taken place.</p> <p>2) Nation did not really know full extent of letter contents and did not fully understand implications on project or community associated with taking this action.</p> <p>3) After brief discussion, Nation does not have any environmental concerns with respect to project and will prepare a letter of support for project and send to Province of NL.</p> <p><b>Team Response:</b> 1) LIM explained again all environmental baseline work</p>

Meeting	Merged Event
<p>30 Mar 2009 Band Council Office, Kawa</p>	<p>including caribou studies and committed to providing caribou information to the Nations in area.</p> <p>2) Now that any concerns are satisfied, LIM is awaiting the new letter to Province, due April 8th from Nation.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Environment: General Environment</li> <li>- Social: Land Claims/Political</li> </ul>

Email	Merged Event
<p>16 Apr 2009</p> <p><b>Participants:</b> Paul Renzoni General Advisor - Atmacinta Consultants</p> <p><b>Team Members:</b> Linda Wrong</p>	<p><b>Summary:</b> Emailed Mr. Renzoni to follow up on appointing a representative for the Naskapi Nation to act as a contact for LIM for traditional knowledge liaison, etc. which was discussed at a previous meeting.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Cultural: Traditional Knowledge</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- environmental_contact_in_the_naskapi_nation_of_kawawachikamach-april_16_2009.htm</li> </ul>

Email	Merged Event
<p>27 Apr 2009</p> <p><b>Participants:</b> Paul Mameamskum Councillor and Director - Naskapi Nation Band Council and Department of Public Works Paul Renzoni General Advisor - Atmacinta Consultants</p> <p><b>Team Members:</b> Bill Hooley John Kearney Joseph Lanzon Terence McKillen Linda Wrong</p>	<p><b>Summary:</b> Job posting for Naskapi Environmental Liaison Officer.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Environment: General Environment</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- email-paul_renzoni-re_naskapi_environmental_contact-090427.htm</li> <li>- naskapi_job_posting_-lim-environmentalliaison_-law(rev090427).pdf</li> </ul>

Email	Merged Event
<p>12 May 2009</p> <p><b>Participants:</b> Paul Renzoni General Advisor - Atmacinta Consultants</p> <p><b>Team Members:</b> Terence McKillen</p>	<p><b>Summary:</b> Draft copy of Cooperation Agreement (IBA) sent to Paul Renzoni, Negotiator for Naskapi Nation.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Phone Call	Merged Event
<p>4 Jun 2009</p> <p><b>Participants:</b></p>	<p><b>Summary:</b> Discussion with Paul Renzoni (Naskapi Advisor).</p>

Phone Call	Merged Event
<p>Paul Renzoni General Advisor - Atmacinta Consultants</p> <p><b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	<p><b>Stakeholder Comments:</b> 1. Mr. Renzoni requested a word version of the draft Cooperation Agreement.</p> <p>2. A meeting was requested.</p> <p><b>Team Response:</b> 1. Draft Agreement sent by email on June 4th by Terence McKillen.</p> <p>2. It was agreed to meet in Montreal on Thursday, June 18th at 10:00 am. Paul Renzoni to arrange location for meeting.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> </ul>

Meeting	Merged Event
<p>Chief Philip Einish Robert Pratt Legal Counsel - Paul Renzoni General Advisor - Atmacinta Consultants</p> <p><b>Team Members:</b> Marc Duclos Joseph Lanzon</p>	<p><b>Summary:</b> IBA negotiation meeting with Naskapi. Reviewing IBA draft presented by Terence McKillen to the Naskapi negotiating team.</p> <p><b>Stakeholder Comments:</b> The Naskapi team submitted a new IBA draft review of terms and conditions.</p> <p>Parties to meet again in three weeks' time.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Presentations	Merged Event
<p>John Mameamskum Naskapi</p> <p><b>Team Members:</b> Glen Coyne Tara Schrama</p>	<p><b>Summary:</b> LIM team members Tara Schrama and Glen Coyne attended the Kawa High School graduation. Gifts (watches) and congratulatory letters were presented to graduates.</p> <p><b>Stakeholder Comments:</b> Watches were well received.</p> <p><b>Team Response:</b> Tara Schrama presented the watches and made a short speech congratulating the graduates.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Education</li> </ul>

Meeting	Merged Event
<p>21 Jul 2009 Calgary</p> <p><b>Participants:</b> Councilor Naskapi Chief Philip Einish Jimmy James Einish Deputy Chief and Director of Recreation - Band Council of Naskapi Nation of Kawawachikamach</p> <p><b>Team Members:</b> Joseph Lanzon</p>	<p><b>Summary:</b> Meeting with Naskapi on following:</p> <ul style="list-style-type: none"> <li>- Preliminary discussion for IBA consultation meeting</li> <li>- EIS submission</li> <li>- Community benefit discussion</li> </ul> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> </ul>

<b>Meeting</b> 21 Jul 2009 Calgary	<b>Merged Event</b>
Terence McKillen	

<b>Meeting</b> 22 Jul 2009 Calgary	<b>Merged Event</b>
<b>Participants:</b> Chief Philip Einish Jimmy James Einish Deputy Chief and Director of Recreation - Band Council of Naskapi Nation of Kawawachikamach <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Preliminary IBA implementation meeting with aboriginal leaders. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

<b>Meeting</b> 22 Jul 2009 Calgary	<b>Merged Event</b>
<b>Participants:</b> Councilor Naskapi Chief Philip Einish Jimmy James Einish Deputy Chief and Director of Recreation - Band Council of Naskapi Nation of Kawawachikamach <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Meeting with Naskapi on the following: - Overview of LIM project and cooperation among all aboriginal groups (Labrador Innu, Matimekush, ITUM and Naskapi). - Free trade zone discussion on the New Dawn Agreement. - Not using LIM as a leverage for land claims against the Newfoundland Government. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: General Project Updates - Social: Land Claims/Political

<b>Email</b> 7 Aug 2009	<b>Merged Event</b>
<b>Participants:</b> Paul Renzoni General Advisor - Atmacinta Consultants <b>Team Members:</b> Linda Wrong	<b>Summary:</b> Email to Paul Renzoni and Stella Pien regarding Naskapi Environmental Contact applicants. <b>Issues Raised:</b> - Economic: Employment Opportunities <b>Attachments:</b> - fw_naskapi_environmental_contact-_aug_07_2009.htm

<b>Letter</b> 25 Aug 2009	<b>Merged Event</b>
<b>Participants:</b> Chief Louis Einish Chief - Naskapi Nation of Kawawachikamach <b>Team Members:</b> Terence McKillen	<b>Summary:</b> Copy of LIM's revised EIS sent to Chief Louis Einish of the Naskapi Nation. Also congratulating him on recent election as Chief. <b>Issues Raised:</b> - Economic: General Project Updates <b>Attachments:</b> - eis_letter_kawa_20090824.pdf

Meeting	Merged Event
<b>Participants:</b> Paul Mameamskum Councillor and Director - Naskapi Nation Band Council and Department of Public Works <b>Team Members:</b> Richard Daigle Joanne Robinson	<b>Summary:</b> Met with Kawa Department of Public Works to enquire about hiring a loader operator for the hydrogeological test program (water management portion/pipeline installation). <b>Stakeholder Comments:</b> An operator was available. <b>Issues Raised:</b> - Economic: Employment Opportunities

Meeting	Merged Event
<b>Participants:</b> John Mameamskum Naskapi Robert Pratt Legal Counsel - Paul Renzoni General Advisor - Atmacinta Consultants <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA draft negotiations with Naskapi. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Chief Phil Einish Chief - Naskapi John Mameamskum Naskapi Robert Pratt Legal Counsel - Paul Renzoni General Advisor - Atmacinta Consultants <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA draft negotiations with Naskapi. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Phone Call	Merged Event
<b>Participants:</b> Chief Louis Einish Chief - Naskapi Nation of Kawawachikamach <b>Team Members:</b>	<b>Summary:</b> Chief requested \$1000 support for junior hockey tournament <b>Team Response:</b> Agreed to request and cheque was issued. <b>Issues Raised:</b> - Economic: Donation Requests

Phone Call 16 Oct 2009 Terence McKillen	Merged Event
---	--------------

Meeting 28 Oct 2009 Montreal	Merged Event
<p><b>Participants:</b>            Abraham Chemaganish            Councillor - Naskapi            Chief Phil Einish            Chief - Naskapi            John Mameamskum            Naskapi            Robert Pratt            Legal Counsel -  <b>Team Members:</b>            Joseph Lanzon            Terence McKillen</p>	<p><b>Summary:</b> IBA meeting with Naskapi. Draft 3 discussions.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting 8 Dec 2009	Merged Event
<p><b>Participants:</b>            Chief Louis Einish            Chief - Naskapi Nation of Kawawachikamach  <b>Team Members:</b>            Joseph Lanzon</p>	<p><b>Summary:</b> Meeting with Naskapi Chief to have update on IBA negotiations. They like our first draft and we are hoping to further discuss issues with their lawyers on the next week.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting 29 Jan 2010	Merged Event
<p><b>Participants:</b>            Chief Louis Einish            Chief - Naskapi Nation of Kawawachikamach            John Mameamskum            Naskapi  <b>Team Members:</b>            Joseph Lanzon</p>	<p><b>Summary:</b> Meeting with Naskapi Consul members at the Northern Lights Conference.</p> <p><b>Stakeholder Comments:</b> The Naskapi are concerned that Innu of Labrador have been awarded the technology and cell phones contract.</p> <p><b>Team Response:</b> Joseph Lanzon confirmed that no such contract was awarded and that the Innu of Labrador were presenting their capability on technology and cell phones and not a contract.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Economic Development</li> </ul>

Meeting 12 Feb 2010	Merged Event
<p><b>Participants:</b>            Robert Pratt            Legal Counsel -            Paul Renzoni            General Advisor -            Atmacinta Consultants  <b>Team Members:</b>            Joseph Lanzon</p>	<p><b>Summary:</b> Naskapi IBA negotiations.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Meeting</b> 12 Feb 2010	<b>Merged Event</b>
Terence McKillen	

<b>Phone Call</b> 22 Mar 2010	<b>Merged Event</b>
<b>Participants:</b> Chief Louis Einish Chief - Naskapi Nation of Kawawachikamach <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Donation request from Naskapi for Carnival. <b>Team Response:</b> Follow-up: LIM made donation of \$1000 to Naskapi Recreation Committee for Carnival. <b>Issues Raised:</b> - Economic: Donation Requests <b>Attachments:</b> - letter-naskapi_carnival_donation-apr_23-2010.pdf

<b>Meeting</b> 26 Mar 2010	<b>Merged Event</b>
<b>Participants:</b> Robert Pratt Legal Counsel - Paul Renzoni General Advisor - Atmacinta Consultants <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Naskapi IBA meeting in Montreal. Final clause by clause review. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

<b>Meeting</b> 30 Mar 2010	<b>Merged Event</b>
<b>Participants:</b> John Mameamskum Naskapi Paul Renzoni General Advisor - Atmacinta Consultants <b>Team Members:</b> Joseph Lanzon Terence McKillen Neil Steenberg	<b>Summary:</b> IBA document exchange. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

<b>Meeting</b> 31 Mar 2010	<b>Merged Event</b>
<b>Participants:</b> John Mameamskum Naskapi Paul Renzoni General Advisor - Atmacinta Consultants <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA document exchange. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Robert Pratt Legal Counsel - Paul Renzoni General Advisor - Atmacinta Consultants <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Naskapi IBA negotiations <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> John Mameamskum Naskapi Paul Renzoni General Advisor - Atmacinta Consultants <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA document exchange with Naskapi. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Naskapi Band Council Naskapi Chief Louis Einish Chief - Naskapi Nation of Kawawachikamach John Mameamskum Naskapi <b>Team Members:</b> Marc Duclos John Kearney Joseph Lanzon Terence McKillen	<b>Summary:</b> Signing of IBA with Naskapi. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Donation	Merged Event
<b>Participants:</b> Annie Chescappio President, Women Suicide Workshop - Naskapi Louise Mameanskum Naskapi <b>Team Members:</b> Terence McKillen	<b>Summary:</b> Sponsorship for Naskapi women to attend workshop on Suicide Prevention in Montreal. LIM agreed to donate \$1000. <b>Issues Raised:</b> - Economic: Donation Requests <b>Attachments:</b> - suicide_prevention_20101021_(2).pdf - suicide_prevention_20101021_(in).pdf - suicide_prevention_20101027_(in).pdf

<b>Donation</b> 4 Nov 2010	<b>Merged Event</b>
	<ul style="list-style-type: none"> <li>- suicide_prevention_20101027_1_(in).pdf</li> <li>- suicide_prevention_20101104.pdf</li> </ul>

<b>Letter</b> 21 Dec 2010	<b>Merged Event</b>
<p><b>Participants:</b> Chief Louis Einish Chief - Naskapi Nation of Kawawachikamach</p> <p><b>Team Members:</b> Joseph Lanzon</p>	<p><b>Summary:</b> Letter to Chief Louis Einish of Naskapi Nation confirming LIM's contribution of \$199,528 (monetary and in-kind) towards project proposal "Development of work skills for the mining industry in the Schefferville Region". (letter attached).</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Donation Requests</li> <li>- Social: Training</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- lim_naskapi_skills_development_dec_21-2010.pdf</li> </ul>

<b>Letter</b> 13 May 2011	<b>Merged Event</b>
<p><b>Participants:</b> Chief Louis Einish Chief - Naskapi Nation of Kawawachikamach</p> <p><b>Team Members:</b> Joseph Lanzon</p>	<p><b>Summary:</b> Letter to Naskapi Nation on LIM's 2011 exploration program update.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- letter_chief_einish_expl_update_2011.pdf</li> </ul>

<b>Meeting/Presentation/Site Tour</b> 7 Jun 2011 LIM Schefferville Site	<b>Merged Event</b>
<p><b>Participants:</b> Naskapi Band Council Naskapi Chief Louis Einish Chief - Naskapi Nation of Kawawachikamach John Mameamskum Naskapi Paul Renzoni General Advisor - Atmacinta Consultants</p> <p><b>Team Members:</b> John Kearney Joseph Lanzon Linda Wrong</p>	<p><b>Summary:</b> Visit from Naskapi Nation. Lunch at camp and mine site tour. PowerPoint presentation on future projects by LIM.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> </ul>

**Report Parameters:**

**Stakeholder Group:** Conseil Nation Innu Takuakan Uashat Mak Mani-Utenam

**Start Date:** 1 May 2005

**End Date:** 21 Jun 2011

**Action Type:** all actions

Meeting	Merged Event
<b>Participants:</b> Uashat Band Council Gilbert Pilot Uashat <b>Team Members:</b> Joseph Lanzon Dan O'Rourke	<b>Summary:</b> Initial MOU discussion and project introduction. No significant issues other than jobs and economic benefits. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: General Project Updates
<b>Phone Call</b> 2 Dec 2005	Merged Event

Phone Call	Merged Event
<b>Participants:</b> Gilbert Pilot Uashat <b>Team Members:</b> Terence McKillen	<b>Summary:</b> Reviewed Anglesey press release and discussed scope of project. Asked to set up a meeting with Development Corporation and Band Council. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: General Project Updates

Meeting	Merged Event
<b>Participants:</b> Chief Andree Chief - Uashat Gilbert Pilot Uashat <b>Team Members:</b> Bill Hooley John Kearney Veikko Koskella Joseph Lanzon Terence McKillen Dan O'Rourke	<b>Summary:</b> LIM meets jointly with Labrador Innu Association and Uashat Innu Council. Review of project proposal. Aboriginal issues revolve around ensuring economic benefit accrues to their communities as they all felt they were abandoned by former IOC operations. Ben Michel outlined a vision for pan-provincial cooperation among the aboriginal groups and thought it should be possible to have a single negotiating table when it came time to negotiate the economic benefits from the project.  Separate presentation made to the Uashat community. Issues raised related to jobs and protection of the environment with respect to ensuring that the communities can continue to "live off the land". <b>Issues Raised:</b> - Transportation: Aboriginal - Economic: Impact Benefits Agreement (IBA) - Economic: Memorandum of Understanding

Phone Call	Merged Event
<b>Participants:</b> Gilbert Pilot Uashat <b>Team Members:</b> Terence McKillen	<b>Summary:</b> To set up Wabush meeting with Ben Michel and Uashat Chief. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA) - Economic: Memorandum of Understanding

Meeting	Merged Event
<b>Participants:</b> Gilbert Pilot Uashat <b>Team Members:</b>	<b>Summary:</b> Meeting to discuss project and Labrador based and Innu connected contractors. Uashat community anxious that LIM allow consultants and contractor with whom their Development Corporation has entered into partnerships to have opportunity to bid on any contracts. LIM discussed the

Meeting	Merged Event
<b>Meeting</b> 18 May 2006 Montreal	<b>Participants:</b> Joseph Lanzon Terence McKillen Dan O'Rourke <b>Summary:</b> necessity of securing a qualified diamond drill company for a summer drill program. Mr. Nuke (LIA) was not in favour of LIM using Goose Bay-based Cartwright Diamond Drilling Company. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Economic: Economic Development</li> <li>- Economic: Impact Benefits Agreement (IBA)</li> <li>- Economic: Memorandum of Understanding</li> </ul>

Phone Call	Merged Event
<b>Participants:</b> Gilbert Pilot Uashat <b>Team Members:</b> Terence McKillen	<b>Summary:</b> Contractor for rail study. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Economic: Economic Development</li> </ul>

Meeting	Merged Event
<b>Meeting</b> 28 Jun 2006 Ottawa	<b>Participants:</b> Gilbert Pilot Uashat <b>Team Members:</b> John Kearney Joseph Lanzon Dan O'Rourke <b>Summary:</b> Project update. Issues for Matimekush community are jobs, sustainable economic development and ensuring that the community benefits from mine development this time. Discussion on the economic benefit for TSH railway. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> </ul>

Meeting	Merged Event
<b>Meeting</b> 30 Aug 2006 Montreal	<b>Participants:</b> Gilbert Pilot Uashat <b>Team Members:</b> Joseph Lanzon Terence McKillen <b>Summary:</b> Discussion on possibility of having single negotiating table. Mr. Michel reiterated his belief and desire to have a single negotiating table, however, it was still necessary for him to consult with the Naskapi and the Innu of Matimekush. No specific issues emerged other than economic development and jobs for the communities. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Economic: Economic Development</li> <li>- Economic: Employment Opportunities</li> </ul>

Meeting	Merged Event
<b>Meeting</b> 5 Nov 2006 Montreal	<b>Participants:</b> Chief Andree Chief - Uashat Gilbert Pilot Uashat <b>Team Members:</b> Joseph Lanzon <b>Summary:</b> Meetings with Band Members and Councilors. Project update. <b>Issues Raised:</b> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> </ul>

Meeting 5 Nov 2006 Montreal	Merged Event
Dan O'Rourke	

Meeting 4 Jan 2007 Quebec City	Merged Event
<b>Participants:</b> Gilbert Pilot Uashat <b>Team Members:</b> Joseph Lanzon Dan O'Rourke	<b>Summary:</b> Economic development initiatives to help Schefferville. Mining project update. <b>Issues Raised:</b> - Economic: Economic Development

Presentations 16 Jan 2007 Sept-Iles	Merged Event
<b>Participants:</b> Uashat Band Council <b>Team Members:</b> Joseph Lanzon Terence McKillen Dan O'Rourke	<b>Summary:</b> Public presentation to new Council of Uashat. LIM reviewed proposed project development and took the new council through the substantive consultation process already initiated with the former Chief and Council. <b>Issues Raised:</b> - Economic: General Project Updates

Meeting 12 Feb 2007 Schefferville	Merged Event
<b>Participants:</b> Chief Andree Chief - Uashat <b>Team Members:</b> Joseph Lanzon Dan O'Rourke	<b>Summary:</b> MOU negotiations. <b>Issues Raised:</b> - Economic: Memorandum of Understanding

Email 3 Apr 2007	Merged Event
<b>Participants:</b> Chief Andree Chief - Uashat <b>Team Members:</b> Bill Hooley Joseph Lanzon Terence McKillen	<b>Summary:</b> Set up meeting with Daniel Ashini. <b>Issues Raised:</b> - Economic: Memorandum of Understanding <b>Attachments:</b> - sustainet5-26.2lim_daniel_a_presentationnotes_march_30_07-1.doc - sustainet5-3.doc

Email 8 Apr 2007	Merged Event
<b>Participants:</b> Chief Andree Chief - Uashat <b>Team Members:</b>	<b>Summary:</b> Band meeting April 11. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: General Project Updates

<b>Email</b> 8 Apr 2007	<b>Merged Event</b>
Joseph Lanzon Dan O'Rourke	<b>Attachments:</b> - sustainet5-6.doc

<b>Meeting</b> 11 Apr 2007 Schefferville	<b>Merged Event</b>
<b>Participants:</b> Chief Andree Chief - Uashat <b>Team Members:</b> Matthew Coon Come Joseph Lanzon Rodrigue Mckenzie Dan O'Rourke	<b>Summary:</b> Schefferville negotiation meeting. <b>Stakeholder Comments:</b> Band's request for funds. Possible strategy to have Sept-Iles and Schefferville as single negotiating table. The Band will always inform Band members through public meetings. <b>Team Response:</b> LIM to help Band access federal funding and to have their involvement in the environmental process. <b>Issues Raised:</b> - Social: Aboriginal Involvement - Economic: Impact Benefits Agreement (IBA)

<b>Meeting</b> 16 May 2007 Montreal	<b>Merged Event</b>
<b>Participants:</b> Gilbert Pilot Uashat <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Preparations for LIM's corporate presentations in Sept-Iles. <b>Issues Raised:</b> - Economic: General Project Updates

<b>Meeting</b> 6 Aug 2007	<b>Merged Event</b>
<b>Participants:</b> George Ernest Chief - Uashat <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Meeting with newly elected Band Council members and Chief George Ernest. <b>Issues Raised:</b> - Economic: Memorandum of Understanding

<b>Other</b> 28 Sep 2007	<b>Merged Event</b>
<b>Participants:</b> Chief Andree Chief - Uashat <b>Team Members:</b> Joseph Lanzon Dan O'Rourke	<b>Summary:</b> Participated in Youth Retreat organized by Band Councils for Uashat and Matimekush. Presentation of project. <b>Issues Raised:</b> - Economic: Employment Opportunities

<b>Meeting</b> 25 Feb 2008 Quebec City	<b>Merged Event</b>
<b>Participants:</b> Chief Uashat Council	<b>Summary:</b> Project update. Discussion on TSH Railway. <b>Issues Raised:</b> - Economic: General Project Updates - Transportation: TRT

Meeting	Merged Event
<p>Meeting 25 Feb 2008 Quebec City</p> <p><b>Uashat</b> <b>Team Members:</b> John Kearney Joseph Lanzon Terence McKillen</p>	

Meeting	Merged Event
<p>Meeting 3 Mar 2008 PDAC Toronto</p> <p><b>Participants:</b> Chief - Montagnais - Sept- Iles <b>Team Members:</b> Marc Duclos Joseph Lanzon</p>	<p><b>Summary:</b> Chief of Montagnais - Sept-Iles and Chief of Montagnais - Schefferville. Rail discussion.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Memorandum of Understanding</li> </ul>

Meeting	Merged Event
<p>Meeting 22 Apr 2008</p> <p><b>Participants:</b> Chief Georges Ernest Gregoire Uashat <b>Team Members:</b> Joseph Lanzon</p>	<p><b>Summary:</b> MOU schedule preparation.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Memorandum of Understanding</li> </ul>

Meeting	Merged Event
<p>Meeting 2 Jun 2008 Sept-Iles</p> <p><b>Participants:</b> Uashat Band Council <b>Team Members:</b> Matthew Coon Come Marc Duclos Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> MOU Negotiation. The community is interested in jobs and business development. Families that hold trap line lots may need to be compensated.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Transportation: Aboriginal</li> </ul>

Meeting	Merged Event
<p>Meeting 4 Jul 2008</p> <p><b>Participants:</b> Chief Georges Ernest Gregoire Uashat <b>Team Members:</b> Joseph Lanzon</p>	<p><b>Summary:</b> Project overview.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> </ul>

Meeting	Merged Event
<b>Participants:</b> Michel Hudon Advisor - Colby, Monet, Demers, delage & Crevier Patricia Ochman O'Reilly & Associates Rosario Pinette Negotiator - ITUM <b>Team Members:</b> Marc Duclos Joseph Lanzon Terence McKillen	<p><b>Summary:</b> First meeting to negotiate MoU/IBA agreement. LIM reviewed the Project and the agreements entered into with the Labrador Innu Association, the Innu of Matimekush, the Naskapi, TSH Railway, etc. LIM outlined the process whereby the Project is reviewed by the Province of Newfoundland and Labrador and other Federal agencies under EIS.</p> <p>It was agreed that the parties would execute a Confidentiality Agreement to enable exchange of documentation not in the public domain.</p> <p><b>Stakeholder Comments:</b> Uashaunnuat are the owners of the land and there will be no Project without their consent. The ancestral rights predate the formation of Newfoundland.</p> <p>ITUM wanted to know if LIM had signed an agreement with TSH Railway. Raised the requirement for \$105M over 5 years for upgrade and improvements (UMA Report).</p> <p>ITUM requested 43-101 resource report</p> <p><b>Team Response:</b> LIM has to follow Federal and Provincial laws, regulations and guidelines. Uashaunnuat claims of ancestral ownership are not for LIM to determine.</p> <p>LIM indicated that the Hatch Mott McDonald Report came to a different conclusion with respect to required capital. The TSH railway can carry ore trains today.</p> <p>LIM indicated that SGS-Geostat are working on such a report.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> <li>- Social: Land Claims/Political</li> <li>- Transportation: TRT</li> </ul>
<b>Meeting</b> 30 Jan 2009 LIM	<b>Merged Event</b>

Meeting	Merged Event
<b>Participants:</b> Michel Hudon Advisor - Colby, Monet, Demers, delage & Crevier Patricia Ochman O'Reilly & Associates Rosario Pinette Negotiator - ITUM <b>Team Members:</b> Marc Duclos Joseph Lanzon Terence McKillen	<p><b>Summary:</b> Meeting to discuss MoU and IBA issues. The parties executed a Confidentiality Agreement.</p> <p><b>Stakeholder Comments:</b> Rosario Pinette asked for details of the IBA Agreement with the Innu of Labrador.</p> <p>Mr. Hudon presented a draft MoU document for consideration.</p> <p><b>Team Response:</b> Mr. McKillen indicated the terms of the IBA were confidential.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> <li>- Economic: Memorandum of Understanding</li> </ul>
<b>Meeting</b> 11 Feb 2009 O	<b>Merged Event</b>

Meeting	Merged Event
<b>Participants:</b> Michel Hudon	<p><b>Summary:</b> Additional discussion on MoU and IBA issues. Reviewed second or third draft of MoU document presented by ITUM. Agreed on all terms except</p>

Meeting	Merged Event
<b>Meeting</b> 11 Feb 2009 O <b>Participants:</b> Advisor - Colby, Monet, Demers, delage & Crevier Patricia Ochman O'Reilly & Associates Rosario Pinette Negotiator - ITUM <b>Team Members:</b> Joseph Lanzon Terence McKillen	for compensation. ITUM to turn around a final draft.

Meeting	Merged Event
<b>Meeting</b> 19 Mar 2009 By telephone <b>Participants:</b> Michel Hudon Advisor - Colby, Monet, Demers, delage & Crevier Patricia Ochman O'Reilly & Associates Rosario Pinette Negotiator - ITUM <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Meeing to review Pro-Forma Cash Flow data sent to ITUM by LIM. LIM pointed out that ITUM keeps changing the MoU between drafts. Mr. Hudon suggesed that perhaps LIM should circulate draft IBA document rather than proceed with the MoU.

Email	Merged Event
<b>Email</b> 22 Apr 2009 <b>Participants:</b> Patricia Ochman O'Reilly & Associates <b>Team Members:</b> Terence McKillen	<b>Summary:</b> Draft copy of Cooperation & Benefit Agreement (IBA) sent to Patricia Ochman, Negotiator for Innu ITUM. <b>Stakeholder Comments:</b> Requested French translation on April 29th. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Meeting</b> 14 May 2009 Sept-Iles <b>Participants:</b> Mike McKenzie Deputy Chief - Uashat Patricia Ochman O'Reilly & Associates Jean-Guy Pinette Councilor - Uashat Rosario Pinette Negotiator - ITUM <b>Team Members:</b> Marc Duclos Joseph Lanzon	<b>Summary:</b> LIM briefing for Uashat on the rail strategy. <b>Issues Raised:</b> - Economic: General Project Updates - Transportation: General Rail

Meeting	Merged Event
<p><b>Participants:</b>            Mike McKenzie            Deputy Chief - Uashat            Patricia Ochman            O'Reilly &amp; Associates            Rosario Pinette            Negotiator - ITUM  <b>Team Members:</b>            Marc Duclos            Joseph Lanzon</p>	<p><b>Summary:</b> Discussions on the railway infrastructure and the vision LIM has vis-a-vis TSH and the Spur line connecting to TSH.  <b>Stakeholder Comments:</b> The recent changes at the head of TSH have left both the band council and the President of TSH with a lot of unanswered questions.</p> <p>Tommy Volant stated that there is no money to be made with the signature of a document and a cash bonus for it (MOU or IBA). He said that the real money is in the railway.</p> <p>Tommy Volant openly expressed his desire to acquire the Centre Ferro to turn this into a station and a maintenance centre for the railway.</p> <p><b>Team Response:</b> Meeting lasted 2 hours and Marc Duclos spoke exclusively about the railway use, Silver Yard spur line and the role of TSH. There were no mention about rates or the IBA.</p> <p>Marc explained that he had an excellent meeting with Bob Jackson. The discussions on haulage rate initiated with Richard Bell following LIM's letter of February 9th, 2009 were back to square one.</p> <p>Marc informed Tommy Volant that LIM was not interested to sell the Centre Ferro. (Centre Ferro is a strategic acquisition and will serve LIM in the future). However, Marc spoke with Bob Jackson about an extended lease for the Centre Ferro.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Transportation: General Rail</li> </ul>

Meeting	Merged Event
<p><b>Participants:</b>            Chief Georges Ernest            Gregoire            Uashat            Jonathan McKenzie            Band Councilor - Uashat            Mike McKenzie            Deputy Chief - Uashat  <b>Team Members:</b>            Joseph Lanzon            Terence McKillen</p>	<p><b>Summary:</b> Joint meeting with ITUM and Matimekush on following:</p> <ul style="list-style-type: none"> <li>- Preliminary discussions for IBA consultation meeting</li> <li>- EIS submission</li> <li>- Community benefit discussions.</li> </ul> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> </ul>

Meeting	Merged Event
<p><b>Participants:</b>            Chief Georges Ernest            Gregoire            Uashat            Jonathan McKenzie            Band Councilor - Uashat            Mike McKenzie</p>	<p><b>Summary:</b> Preliminary IBA implementation meeting with aboriginal leaders.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting	Merged Event
<p>22 Jul 2009 Calgary</p> <p><b>Deputy Chief - Uashat</b> <b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	

Meeting	Merged Event
<p>22 Jul 2009 Calgary</p> <p><b>Participants:</b> Chief Georges Ernest Gregoire Uashat <b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> Meeting with ITUM on IBA specific negotiation issues and budget requests.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

Meeting	Merged Event
<p>22 Jul 2009 Calgary</p> <p><b>Participants:</b> Chief Georges Ernest Gregoire Uashat Jonathan McKenzie Band Councilor - Uashat Mike McKenzie Deputy Chief - Uashat <b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> Meeting with ITUM on following:</p> <ul style="list-style-type: none"> <li>- Overview of LIM project and cooperation among all aboriginal groups (Labrador Innu, Matimekush, ITUM and Naskapi).</li> <li>- Free trade zone discussion on the New Dawn Agreement.</li> <li>- Not using LIM as a leverage for land claims against the Newfoundland Government.</li> </ul> <p><b>Stakeholder Comments:</b> Also in attendance were two elder women.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Social: Aboriginal Involvement</li> <li>- Economic: General Project Updates</li> <li>- Social: Land Claims/Political</li> </ul>

Letter	Merged Event
<p>25 Aug 2009</p> <p><b>Participants:</b> Chief Georges Ernest Gregoire Uashat <b>Team Members:</b> Terence McKillen</p>	<p><b>Summary:</b> Copy of LIM's revised EIS sent to Chief Gregoire of ITUM.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> </ul> <p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>- eis_letter_itum_20090824.pdf</li> </ul>

Meeting	Merged Event
<p>15 Sep 2009</p> <p><b>Participants:</b> Patricia Ochman O'Reilly &amp; Associates Rosario Pinette Negotiator - ITUM <b>Team Members:</b> Joseph Lanzon</p>	<p><b>Summary:</b> IBA negotiations with ITUM. Ongoing IBA review.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Meeting</b> 15 Sep 2009	<b>Merged Event</b>
Terence McKillen	

<b>Meeting</b> 29 Jun 2010 Quebec City	<b>Merged Event</b>
<p><b>Participants:</b>            Mike McKenzie            Deputy Chief - Uashat            Patricia Ochman            O'Reilly &amp; Associates            Rosario Pinette            Negotiator - ITUM            Yves Rock            Band Council Member - ITUM</p> <p><b>Team Members:</b>            Marc Duclos            John Kearney</p>	<p><b>Summary:</b> ITUM negotiations meeting.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Meeting</b> 8 Jul 2010 Sept-Iles	<b>Merged Event</b>
<p><b>Participants:</b>            Chief Georges Ernest Gregoire            Uashat            Mike McKenzie            Deputy Chief - Uashat            Patricia Ochman            O'Reilly &amp; Associates            Rosario Pinette            Negotiator - ITUM            Yves Rock            Band Council Member - ITUM</p> <p><b>Team Members:</b>            Marc Duclos            John Kearney</p>	<p><b>Summary:</b> ITUM negotiation meeting.</p> <p><b>Team Response:</b> (Mike McKenzie; Yves Rock; Chief Gregoire were only present part time for the meeting.)</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Meeting</b> 9 Jul 2010 Fairmont Hotel - La Malbaie, QC	<b>Merged Event</b>
<p><b>Participants:</b>            Chief Betsiamites            Betsiamites            Paul Vollant            Band Member - Betsiamites</p> <p><b>Team Members:</b>            John Kearney</p>	<p><b>Summary:</b> Informal discussion - Innu Strategic Alliance.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- More Information: Community Consultation</li> </ul>

Meeting	Merged Event
<b>Meeting</b> 10 Jul 2010 Fairmont Hotel - La Malbaie, QC	
<b>Participants:</b> Andre Joseph Band Council Member - ITUM Jonathan McKenzie Band Councilor - Uashat Yves Rock Band Council Member - ITUM <b>Team Members:</b> John Kearney Joseph Lanzon	<b>Summary:</b> Meeting ITUM Band Council. <b>Issues Raised:</b> - More Information: Community Consultation

Meeting	Merged Event
<b>Meeting</b> 21 Jul 2010 Quebec City	
<b>Participants:</b> Maria Morrisete Assistant Negotiator - Uashat Patricia Ochman O'Reilly & Associates Rosario Pinette Negotiator - ITUM <b>Team Members:</b> Marc Duclos John Kearney	<b>Summary:</b> Meeting with Uashat. <b>Issues Raised:</b> - More Information: Community Consultation

Meeting	Merged Event
<b>Meeting</b> 5 Aug 2010 Sept-Iles	
<b>Participants:</b> Rosario Pinette Negotiator - ITUM <b>Team Members:</b> Marc Duclos John Kearney	<b>Summary:</b> Meeting with Chief Negotiator of ITUM. <b>Issues Raised:</b> - More Information: Community Consultation

Joint Meeting	Merged Event
<b>Joint Meeting</b> 7 Aug 2010 Sept-Iles	
<b>Participants:</b> Uashat Band Council <b>Team Members:</b> Marc Duclos John Kearney	<b>Summary:</b> Joint meeting with Matimekush and Uashat Band Councils. <b>Issues Raised:</b> - More Information: Community Consultation

<b>Meeting</b> 26 Aug 2010 Montreal	<b>Merged Event</b>
<p><b>Participants:</b> Chief Georges Ernest Gregoire Uashat Patricia Ochman O'Reilly &amp; Associates Rosario Pinette Negotiator - ITUM</p> <p><b>Team Members:</b> Marc Duclos John Kearney</p>	<p><b>Summary:</b> Negotiation meeting.  <b>Stakeholder Comments:</b> Mr. Rosario Pinette Joined meeting by phone.  <b>Issues Raised:</b>  - More Information: Community Consultation</p>

<b>Meeting</b> 9 Sep 2010 Sept-Iles	<b>Merged Event</b>
<p><b>Participants:</b> Chief Georges Ernest Gregoire Uashat Yves Rock Band Council Member - ITUM</p> <p><b>Team Members:</b> Marc Duclos John Kearney Joseph Lanzon Terence McKillen</p>	<p><b>Summary:</b> Meeting with Uashat.  <b>Issues Raised:</b>  - More Information: Community Consultation</p>

<b>Dinner Meeting</b> 15 Sep 2010 Montreal	<b>Merged Event</b>
<p><b>Participants:</b> Armand McKenzie Band Member - Uashat James O'Reilly Lawyer - O'Reilly &amp; Associates Patricia Ochman O'Reilly &amp; Associates Rosario Pinette Negotiator - ITUM Yves Rock Band Council Member - ITUM</p> <p><b>Team Members:</b> Marc Duclos John Kearney</p>	<p><b>Summary:</b> Dinner meeting with Uashat in Montreal</p>

Meeting 16 Sep 2010 Montreal	Merged Event
<p><b>Participants:</b></p> <p>Armand McKenzie Band Member - Uashat James O'Reilly Lawyer - O'Reilly &amp; Associates Patricia Ochman O'Reilly &amp; Associates Rosario Pinette Negotiator - ITUM Yves Rock Band Council Member - ITUM</p> <p><b>Team Members:</b></p> <p>Marc Duclos John Kearney</p>	<p><b>Summary:</b> Meeting with LIM, ITUM and NL Government delegation.</p>

Meeting 17 Sep 2010 Montreal	Merged Event
<p><b>Participants:</b></p> <p>James O'Reilly Lawyer - O'Reilly &amp; Associates Patricia Ochman O'Reilly &amp; Associates</p> <p><b>Team Members:</b></p> <p>Marc Duclos John Kearney</p>	<p><b>Summary:</b> Meeting with Uashat</p>

Meeting 20 Oct 2010 Montreal - O'Reilly's Office	Merged Event
<p><b>Participants:</b></p> <p>Joanne Staff - O'Reilly &amp; Associates Lynne Fontainne Negotiator - Rosario's Office Jonathan McKenzie Band Councilor - Uashat James O'Reilly Lawyer - O'Reilly &amp; Associates Patricia Ochman O'Reilly &amp; Associates Rosario Pinette Negotiator - ITUM Ken Rock</p>	<p><b>Summary:</b> Meeting and dinner with Uashat.</p>

<b>Meeting</b> 20 Oct 2010 Montreal - O'Reilly's Office	<b>Merged Event</b>
Lawyer - Uashat Band Roland St. Onge Band Councillor - Uashat <b>Team Members:</b> Marc Duclos John Kearney Joseph Lanzon	
<b>Phone Call</b> 3 Dec 2010	<b>Merged Event</b>
<b>Participants:</b> James O'Reilly Lawyer - O'Reilly & Associates <b>Team Members:</b> John Kearney	<b>Summary:</b> Telephone discussions with ITUM.
<b>Conference</b> 6 Dec 2010	<b>Merged Event</b>
<b>Participants:</b> James O'Reilly Lawyer - O'Reilly & Associates Patricia Ochman O'Reilly & Associates <b>Team Members:</b> Marc Duclos John Kearney	<b>Summary:</b> Conference call with ITUM Representatives. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)
<b>Phone Call</b> 13 Dec 2010	<b>Merged Event</b>
<b>Participants:</b> James O'Reilly Lawyer - O'Reilly & Associates <b>Team Members:</b> John Kearney	<b>Summary:</b> Telephone discussion with James O'Riley, representing the Uashat. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)
<b>Phone Call</b> 15 Dec 2010	<b>Merged Event</b>
<b>Participants:</b> James O'Reilly Lawyer - O'Reilly & Associates <b>Team Members:</b> John Kearney	<b>Summary:</b> Lengthy phone discussions with James O'Riley, Representative for the Uashat. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Commitment	Merged Event
<b>Participants:</b> Chief Georges Ernest Gregoire Uashat <b>Team Members:</b> John Kearney	<b>Summary:</b> Agreement-in-Principle between LIM and ITUM. (Press releases of both parties attached)  <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA) <b>Attachments:</b> - itum_press_release_a_i_p_dec20_2010.pdf - lim-itum_revis-fran_ais.pdf - lim-itum_revised_dec_20_2010.pdf

Meeting	Merged Event
<b>Participants:</b> Lynne Fontainne Negotiator - Rosario's Office Morgan Kendall Lawyer - Uashat Armand McKenzie Band Member - Uashat Mike McKenzie Deputy Chief - Uashat James O'Reilly Lawyer - O'Reilly & Associates Patricia Ochman O'Reilly & Associates Rosario Pinette Negotiator - ITUM Ken Rock Lawyer - Uashat Band <b>Team Members:</b> John Kearney	<b>Summary:</b> John Kearney meeting with ITUM - Teleconference at O'Reilly's office. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Morgan Kendall Lawyer - Uashat Armand McKenzie Band Member - Uashat Patricia Ochman O'Reilly & Associates Ken Rock Lawyer - Uashat Band <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA meeting with Uashat in Montreal. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Morgan Kendall Lawyer - Uashat Armand McKenzie Band Member - Uashat Patricia Ochman O'Reilly & Associates Ken Rock Lawyer - Uashat Band <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA negotiating meeting with ITUM. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Armand McKenzie Band Member - Uashat Mike McKenzie Deputy Chief - Uashat <b>Team Members:</b> John Kearney Terence McKillen	<b>Summary:</b> Meeting with ITUM <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Morgan Kendall Lawyer - Uashat Armand McKenzie Band Member - Uashat Patricia Ochman O'Reilly & Associates Ken Rock Lawyer - Uashat Band <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA negotiating meeting with ITUM. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<b>Participants:</b> Morgan Kendall Lawyer - Uashat Armand McKenzie Band Member - Uashat	<b>Summary:</b> IBA negotiating meeting with ITUM. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

Meeting	Merged Event
<p>28 Feb 2011 Montreal</p> <p>Patricia Ochman O'Reilly &amp; Associates Ken Rock Lawyer - Uashat Band</p> <p><b>Team Members:</b> Joseph Lanzon Terence McKillen</p>	

Reception	Merged Event
<p>6 Mar 2011 Intercontinental Hotel, Toronto</p> <p><b>Participants:</b> Ronald Fontaine Councillor - Uashat Chief Georges Ernest Gregoire Uashat Armand McKenzie Band Member - Uashat</p> <p><b>Team Members:</b> Bill Hooley John Kearney Joseph Lanzon</p>	<p><b>Summary:</b> Chief of Uashat and two other representatives attended LIM's Reception during PDAC.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> </ul>

Conference	Merged Event
<p>6 Mar 2011 Toronto</p> <p><b>Participants:</b> Ronald Fontaine Councillor - Uashat Chief Georges Ernest Gregoire Uashat Armand McKenzie Band Member - Uashat</p> <p><b>Team Members:</b> Bill Hooley John Kearney Joseph Lanzon</p>	<p><b>Summary:</b> Chief of Uashat and two other Representatives visited LIM booth at PDAC (March 6th - 9th).</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: General Project Updates</li> </ul>

Meeting	Merged Event
<p>8 Mar 2011 LIM Toronto Office</p> <p><b>Participants:</b> Ronald Fontaine Councillor - Uashat Chief Georges Ernest Gregoire Uashat</p>	<p><b>Summary:</b> Meeting with Uashat. Presence at PDAC.</p> <p><b>Issues Raised:</b></p> <ul style="list-style-type: none"> <li>- Economic: Impact Benefits Agreement (IBA)</li> </ul>

<b>Meeting</b> 8 Mar 2011 LIM Toronto Office	<b>Merged Event</b>
Armand McKenzie Band Member - Uashat <b>Team Members:</b> John Kearney	

<b>Commitment</b> 14 Mar 2011 LIM Toronto Office	<b>Merged Event</b>
<b>Participants:</b> Morgan Kendall Lawyer - Uashat Armand McKenzie Band Member - Uashat Jonathan McKenzie Band Councilor - Uashat Mike McKenzie Deputy Chief - Uashat Ken Rock Lawyer - Uashat Band <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA negotiating meeting with ITUM. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

<b>Conference</b> 8 Apr 2011 Teleconference	<b>Merged Event</b>
<b>Participants:</b> Morgan Kendall Lawyer - Uashat Armand McKenzie Band Member - Uashat Patricia Ochman O'Reilly & Associates Ken Rock Lawyer - Uashat Band <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> IBA discussions with ITUM. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA)

<b>Letter</b> 13 May 2011	<b>Merged Event</b>
<b>Participants:</b> Chief Georges Ernest Gregoire Uashat <b>Team Members:</b> Joseph Lanzon	<b>Summary:</b> Letter to Uashat on LIM's 2011 exploration program update. <b>Issues Raised:</b> - Economic: Impact Benefits Agreement (IBA) <b>Attachments:</b> - letter_chief_gregoire_expl_update_2011.pdf

Dinner Meeting 24 May 2011 Montreal	Merged Event
<b>Participants:</b> Arthur Uashat Armand McKenzie Band Member - Uashat Mike McKenzie Deputy Chief - Uashat <b>Team Members:</b> John Kearney	<b>Summary:</b> Meeting with Uashat.

Phone Call 9 Jun 2011	Merged Event
<b>Participants:</b> Armand McKenzie Band Member - Uashat Ken Rock Lawyer - Uashat Band <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Telephone conversation with Ken Rock and Armand Mackenzie of ITUM. Discussed issue of lay-off of three ITUM members at Centre Ferro (Johnny Mackenzie, Arthur and Mike Mackenzie's brother) LIM undertook to investigate and report back (file attached June 13 email from TNMcK to Ken Rock)  <b>Issues Raised:</b> - General: Employment Issue <b>Attachments:</b> - <a href="#">13_june-2011-_e-mail_to_ken_rock.pdf</a>

Phone Call 15 Jun 2011	Merged Event
<b>Participants:</b> Ken Rock Lawyer - Uashat Band <b>Team Members:</b> Joseph Lanzon Terence McKillen	<b>Summary:</b> Telephone conversation with Ken Rock of ITUM. Follow-up on issue of employment of three individuals.  <b>Stakeholder Comments:</b> The individuals are members of the Mackenzie "family" and some of the community, Deputy Chief and some counsellors are getting heated over this issue which could affect ratification of the IBA. Ken Rock undertook to speak with the individuals regarding work practice and attitude if LIM can provide specific documentation.  <b>Team Response:</b> LIM advised Ken Rock that these individuals are trouble makers using their position as "family members" to demand work without any interest in doing a good job. LIM undertook to find a solution within a matter of days and revert to Ken Rock next Wednesday (June 22). Joseph Lanzon will visit Sept-Iles within the next two weeks. Frank Johnson can create jobs at Centre Ferro under close supervision and will ensure documentation of any issues arising.  <b>Issues Raised:</b> - General: Employment Issue

**Report Parameters:**

**Stakeholder Group: Metis of Labrador (NunatuKavut)**

**Start Date:** 1 May 2005

**End Date:** 21 Jun 2011

**Action Type:** all actions

Meeting	Merged Event
<p><b>Meeting</b></p> <p>14 Jun 2011 LIM Toronto Office</p> <p><b>Participants:</b> Kevin Aylward CEO - NDC Inc. Chris Montague Chief - Metis of Labrador</p> <p><b>Team Members:</b> Terence McKillen</p>	<p><b>Summary:</b> Meeting with Chris Montague, Chief – Metis of Labrador and Kevin Aylward, CEO NDC Inc.</p> <p><b>Stakeholder Comments:</b> The Labrador Metis (NunatuKavut) see themselves as the Southern Inuit people. They have submitted formal land claims to Provincial and Federal governments. They base the claim on a purported August 21, 1765 treaty entered in to by the Inuit and Capt. James Cook of HMS Niger and HMS Gurnsey and represented by a chart of Chateau Bay showing Inuit kayaks meeting the British naval ships.</p> <p>They want to share in the wealth and development of the resources of Labrador and to have employment and business opportunities in LIM's projects.</p> <p><b>Team Response:</b> LIM agreed to stay in touch and possibly meet in Goose Bay at the Mining Convention.</p> <p><b>Issues Raised:</b> - Economic: Economic Development</p>