APPENDIX R

Public information Session Presentation

Labrador Iron Mines Limited

LIM

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IRON ORE IN WEST-CENTRAL LABRADOR

The Re-establishment of Direct Shipping Iron Ore Production

Public Consultation Meetings

Wabush, Labrador City & Happy Valley-Goose Bay, NL - November 26-27, 2008

Agenda

TSX : LIR

- Who We Are:
  - Company
  - Team
  - Project
- Area History
- Existing Infrastructure
- Resource Estimate
- Details of Mining Phases
- Description of Mine Activities
- 2008 Activities
- Environment & Socio-Economic Studies
- Jobs & Business Opportunities
- Training, Education
- Summary

Who We Are

Labrador Iron Mines Limited (“LIM”):

- A Canadian-based exploration and mine development company
- Interests in an estimated 90 million tonnes of high grade iron ore in west-central Labrador, formerly part of the iron ore reserves and resources established by the Iron Ore Company of Canada (IOCC)
- LIM has the necessary capital available to bring the project into initial production
- Subject to completion of permitting process, first production is targeted 2009
- LIM is managed by a team of experienced mining professionals and is working with qualified NL based contractors, consultants and suppliers

Who We Are

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Labrador Iron Mines Limited Team Presenters:

- Terence McKillen, Executive Vice President
- Linda Wrong, P.Geo., Vice President, Environment and Permitting
- Joseph Lanzon, Manager, Government & Community Affairs

- LIM team members have prior experience in Newfoundland and Labrador, including the former IOCC operations
- Project is supported by Innu Nation of Labrador (IBA)
- LIM has contracted consultants, technical services and supplies from Labrador and will accelerate this with the start of construction/operations
- LIM has provided jobs and business opportunities for Labrador throughout the exploration and evaluation phases and will continue to do so with mine development

Who We Are

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The Project:

- **Re-establishing direct shipping iron ore (DSO) production in an area originally mined/assessed by IOCC**
- **There will be 3 phases to the project with expected 20+ years mine life:**
  - **Phase 1a: James North and South and Redmond deposits**
  - **Phase 1b: Knob Lake and Houston deposits**
  - **Phase 2: Sawyer and Astray deposits**
  - **Phase 3: Howse and Kivivik deposits**
- **Project is located in the heart of the "Labrador Trough" – a geological formation occurring in the Quebec-Labrador Peninsula that also hosts three of Canada's largest iron ore mines (at Lab West) comprising all Canadian iron ore production**
- **The project benefits from significant infrastructure remaining from the previous operations of IOCC**
- **LIM commenced exploration and environmental baseline work in this former IOCC area in 2005**
- **Full commercial production of 3 million tonnes/yr by 2012**

History of Iron Ore Development

- **A major iron ore mining camp was developed in the Knob Lake Iron Range by IOCC and operated from 1954 to 1982**
- **Town of Schefferville, the Menihek power station, airport and the railway connection were built to service the iron ore industry in the region**
- **IOCC outlined 400 million tons of iron ore in the Knob Lake Iron Range but produced and shipped 150 million tons over the 28 year period**
- **LIM has acquired ~90 million tons of the remaining historical resources, located exclusively in west-central Labrador**

Project Location

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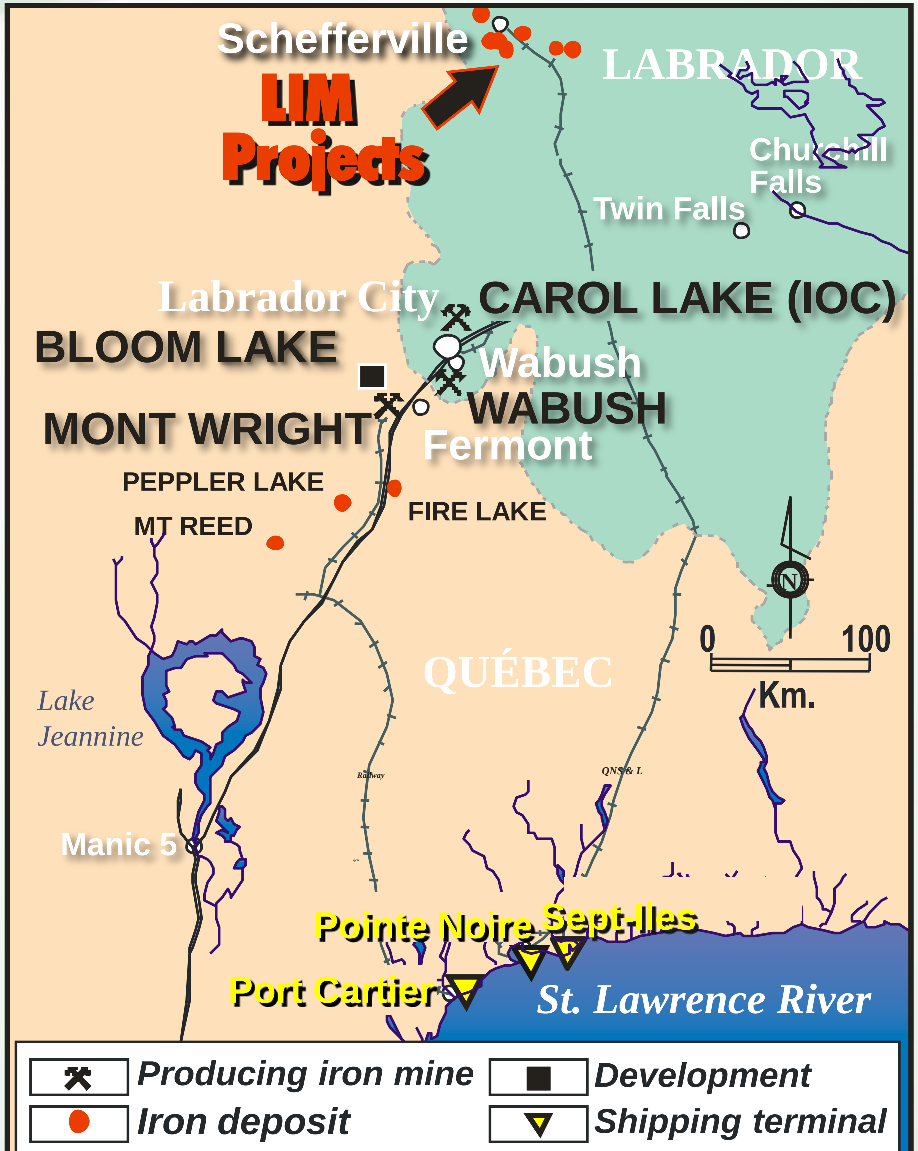

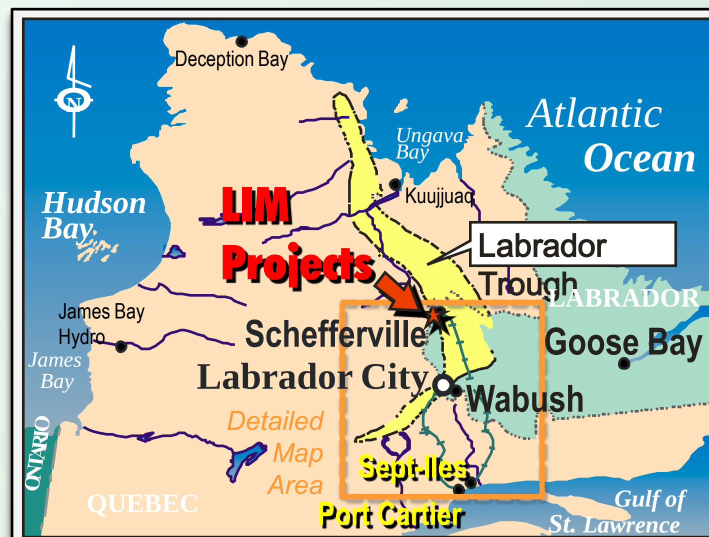

Location of Deposits & Infrastructure

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Existing Infrastructure

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Labrador Communities

1

Fuel Station

Near Processing Sites

2

NL Hydro Plant

Menihek Dam - 35km from the Project

3

4

Electricity

Power Lines crossing property

6

Port Facilities at Sept-Îles

Ship loading with existing installations

5

TSH Railway

Freight and Passengers from Sept-Îles to Schefferville

Resource Estimate

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IOCC 1983	
Deposit	(000t)
James	4,486
Redmond	1,357
Knob Lake	3,662
Houston	9,090
Sawyer	12,000
Astray	7,818
Howse	28,288
Kivivik	26,258
Total:	92,959

Source: SNC Lavalin Technical Report dated September 10, 2007

Historical resources are non NI 43-101 compliant

- Historical resources based on IOCC calculations
- Grade of ore mined is expected to be 56%-58% Fe based on IOCC's historical operations
- Screening and washing is expected to increase grade to 64-65% Fe
- This ore grade is higher than the Lab West iron deposits and therefore does not require concentration or pelletizing
- James North and South & Redmond deposits comprise Phase 1a development

Phase 1a Development

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Phase 1a – James North, James South & Redmond

- 6 million tonnes, 4-5 year production schedule
- Brownfield sites
- James is within 1 km of the rail spur line
- Accessible by existing roads
- James and Redmond deposits are partially pre-stripped since the 1980s and are ready for development

James & Redmond Mines and Plant

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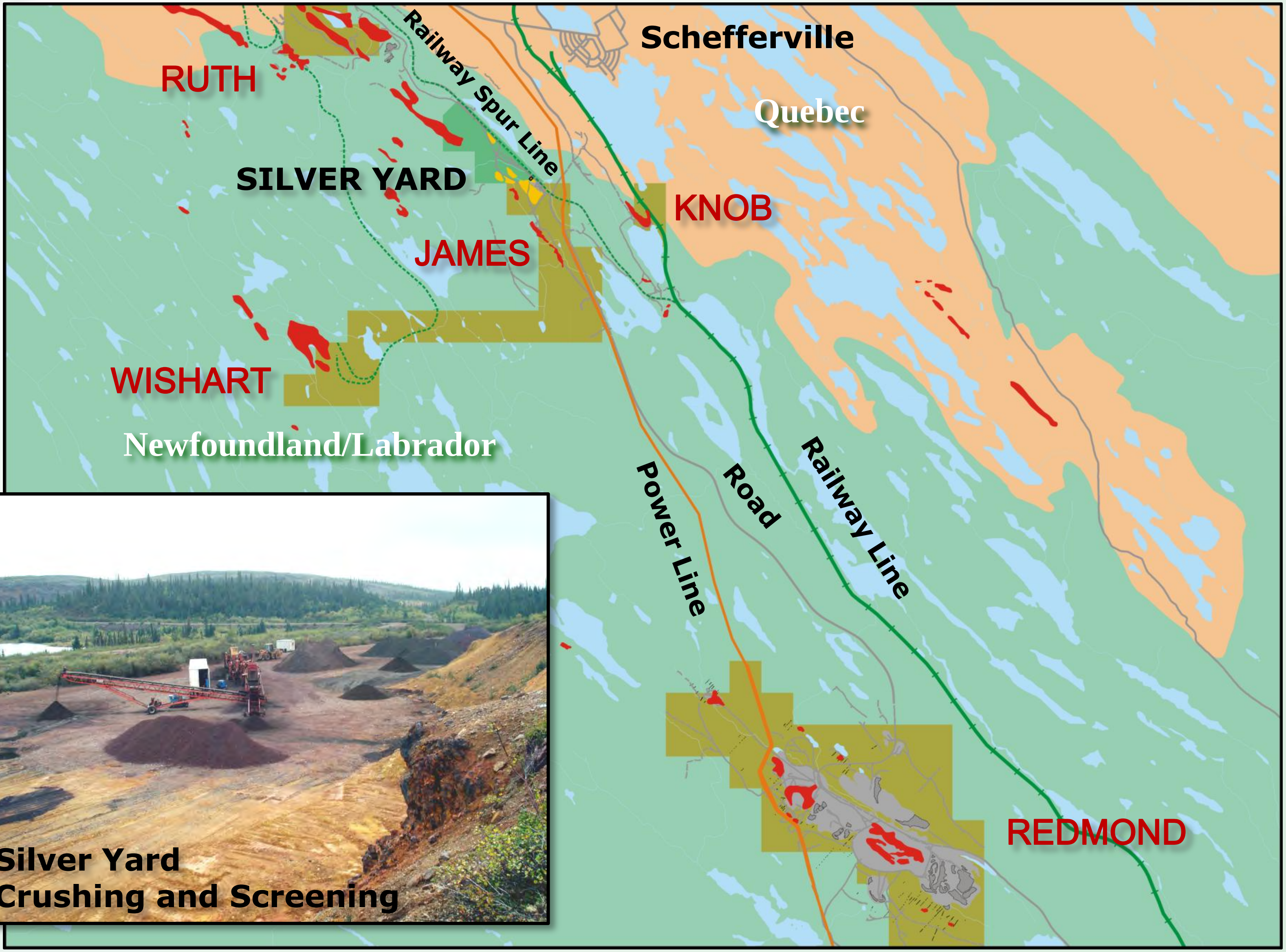

Silver Yard
Crushing and Screening

Phases 1b,2 & 3 - Future Development

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- Not included in scope of current EIS
- 6 deposits - 80 million tons, 15-20 year production schedule
- Houston and Knob are close to the James deposit and existing infrastructure
- Astray and Sawyer approximately 60km southeast
- Howse & Kivivic are 20 & 50 kms respectively to northwest
- Accessible by existing roads (except Astray and Sawyer– require road access)
- Production may increase to 6 million tonnes/yr

Description of Mine Activities

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- Open pit mining
- 2,000 tonnes per day (tpd) increasing to 9,000 tpd total for three deposits (over 8 month operating cycle)
- Drilling and blasting of ore
- Loading onto 65t trucks – delivery to plant
- Crushing to Lump product (gravel size & larger) & Sinter (fine product)
- Washing to remove silica and fines (no chemicals used in process)
- Water source mainly from historical pit and rock fines discharge to same
- Load on to 90 tonne gondola rail cars
- 3 trains per week – no negative impact to current rail operations
- Delivery to port
- Environmental monitoring of air and water during all phases of mine life
- Reclamation and closure

LIM's 2008 Activities

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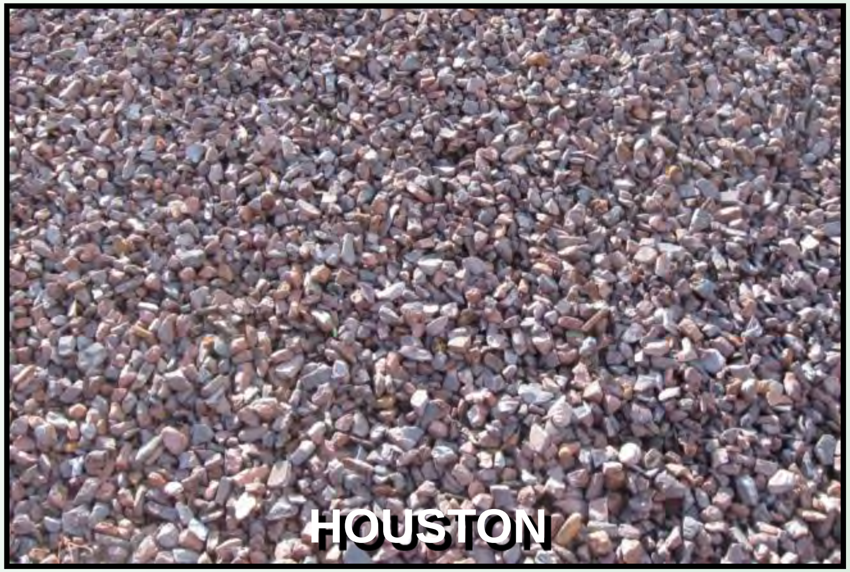
- Drilling
- Resource verification
- Bulk sampling
- Metallurgical testing
- Transportation studies
- Marketing
- Community consultation

- System flowsheet design
- Engineering designs and specifications
- Capital and Opex estimates
- Environmental Baseline studies
- Start of EA Process

Products - Lump & Sinter Fine Ore



Environment & Socio-Economic Studies

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- Environmental Baseline Data collection started during exploration (2005)
- Community Meetings, Outreach Programs & Consultation started 2005
  - Consultations and MOUs with local First Nations
- Traditional Knowledge and Trappers'/Elders' Committees
- Initiated training of Local Environmental Technicians
- Environmental Monitoring of work areas
- Socio-Economic Baseline Program
- Regional Economic Development:
  - Training
  - Educational Support
  - Regional Sourcing of Goods and Services
- Impact Benefit Agreement with Innu Nation of Labrador
  - Business opportunities and jobs through the Innu Development Corporation
  - Environmental protection & monitoring
  - Social, cultural and community support

Jobs & Business Opportunities

- LIM is committed to Labrador-based employment and goods and services procurement
- Labrador based businesses will provide:
  - Mining, loading, haulage, crushing & washing, loading of rail cars
  - Supplies, equipment, fuel, accommodations/catering, road maintenance, equipment maintenance, air transport
- IBA with Innu Nation of Labrador:
  - Business opportunities and jobs through the Innu Development Corporation
- Commitment to maximizing economic benefit to Labrador
- LIM and its contractors plan to utilize a "commute system" providing air or rail transportation from hubs at Lab West and Goose Bay

Training & Education

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- **LIM is committed to maximizing the social and economic benefits to Labrador**
- **LIM is committed to ensuring adequate training is available:**
  - Human Resources and Social Development Canada (HRSD)
  - Newfoundland & Labrador Department of Education (DOE)
  - College of the North Atlantic (CNA)
  - Women in Resource Development Committee (WRDC)
  - Apprenticeship opportunities
- **LIM is committed to employment equity and affirmative action**
  - Development and implementation of Employment Equity Plan
  - Ensure Full and Fair Opportunity and First Consideration for employment, contracting, procurement, education and training
  - Ensuring compliance from its contractors and suppliers for these commitments
- **LIM is committed to the incorporation of traditional knowledge into the mine development:**
  - LIM has conducted meetings with Elders to discuss and record Traditional Knowledge
  - LIM is in contact with the Innu Nation to work together to support their Traditional Knowledge initiatives
  - LIM has met with local trappers and hunters to discuss and record observations about the environment

Summary

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- **Modest-scale direct shipping iron ore production**
  - proposed operation at 25% of IOCC operation in 1982
  - LIM's production would add <10% to volume of rail traffic
- **The Phase 1a development has modest foot print**
  - is a "brownfield" site
  - utilizes existing infrastructure
  - Sources water and discharges to existing pits
- **Will provide sustainable jobs and business opportunities for Labrador**
- **Project is financed**
  - not subject to current financial markets
- **Project has support of Innu Nation of Labrador**
- **Targets for 2009**
  - approval, construction, marketing 1H 2009
  - production start up 2H 2009

Corporate Contacts

TSX : LIR

Labrador Iron Mines Limited

Suite 700, 220 Bay Street
Toronto, Ontario, Canada M5J 2W4
Tel: +1 647-728-4125   Fax: +1 416-368-5344
Toll Free: +1 877-728-4125
E-mail: info@labradorironmines.ca   Website : www.labradorironmines.ca

Contacts:

John F. Kearney
Chairman and Chief Executive Officer
+1 416-362-6686

Bill Hooley
President and Chief Operating Officer
+1 647-728-4111

Terence N. McKillen
Executive Vice President
+1 647-728-4102

Thank-You

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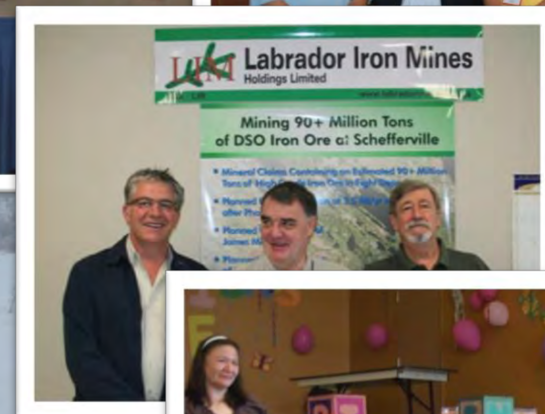

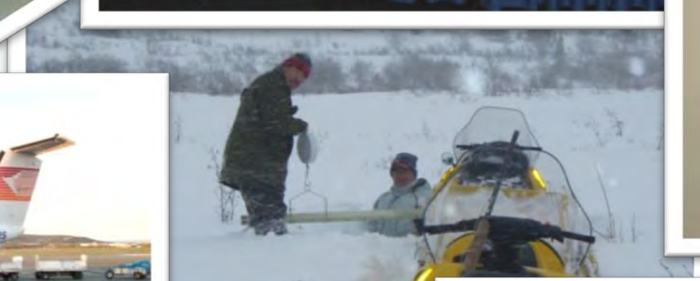

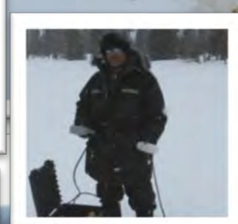

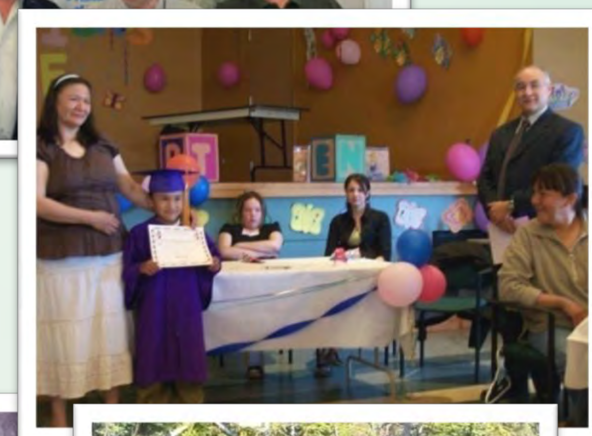

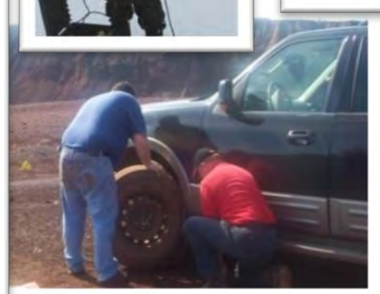

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APPENDIX S

Environmental Assessment Methods

Environmental Assessment Methods

Environmental assessments generally focus on those components of the environment that are valued by society and that can serve as indicators of environmental change. These Valued Environmental Components (VECs) may include both biophysical and socioeconomic components.

The methods employed in this EA are therefore intended to:

- focus on issues of greatest concern;
- address regulatory requirements, including those identified through the project-specific Environmental Impact Statement Guidelines;
- address issues raised by the public and other stakeholders during project-specific consultation; and
- integrate engineering design, mitigation, and monitoring programs into a comprehensive environmental management planning process.

The approach and methods used for the EIS are based largely on the work of Beanlands and Duinker (1983), the CEA Agency (1994; 1999), and Barnes et al. (2000), as well as the study team's experience in conducting environmental assessments. The EA methods provide a systematic evaluation of the potential environmental effects that may arise from each Project phase (construction, operation, and abandonment/decommissioning) as well as malfunctions and accidents, with regard to each of the identified VECs. Project related effects are assessed within the context of temporal and spatial boundaries established for each VEC. The evaluation of potential cumulative effects includes past, present and likely future projects and activities that may interact with Project-related environmental effects within the spatial and temporal boundaries defined in the EIS.

This environmental assessment provides detailed effects analyses for each of the VECs. The specific steps involved in the assessment for each VEC include:

- determination of the assessment boundaries;
- description of the existing conditions for each VEC;
- identification of potential Project-VEC interactions;
- overview of existing knowledge and mitigation or effects management measures;
- definition of the significance criteria for residual environmental effects;
- assessment of the environmental effects and mitigations or effects management measures;
- determination of the significance of Project residual environmental effects.
- cumulative effects assessment; and,
- identification of any monitoring or follow-up requirements.

Each of these is described in more detail in the following sections.

Boundaries

The EIS considers the potential effects of the proposed Project within the spatial and temporal boundaries defined for each VEC. These boundaries may vary with each VEC but generally reflect a consideration of:

- the proposed schedule/timing of the construction, operation, maintenance, and abandonment phases;
- the natural variation of a VEC;
- the timing of sensitive life cycle phases in relation to the scheduling of proposed Project activities;
- interrelationships/interactions between and within VECs;
- the time required for recovery from an effect and/or return to a pre-effect condition, including the estimated proportion, level, or amount of recovery; and
- the area within which a VEC functions and within which a Project effect may be felt.

Spatial Boundaries

The Assessment will be limited to the development of the James and Redmond leases.. Spatial boundaries may be limited to the immediate Project area (e.g., project “footprint” or zone of influence) or may be regional or larger in extent in consideration of the distribution and/or movement of some VECs. The geographic limits and migration patterns of wildlife populations, for example, are important considerations in determining spatial boundaries and may influence the extent and distribution of an environmental effect. For this assessment, the area that could potentially be affected by Project activities and interact with VECs is referred to as the Assessment Area. The Assessment Area is also developed in consideration of the timing and type of Project activity being considered and the sensitivities within the particular VEC being assessed. The assessment of potential Project effects and determination of the significance of those effects occurs within the Assessment Area.

Temporal Boundary

Project effects for this EIS have been assessed from construction through to decommissioning and abandonment. With the exception of those activities which will occur seasonally, effects of Project activities have been assessed as “year round” for the period 2009-2029. The effects of decommissioning, abandonment and site rehabilitation will be assessed and are assumed to occur after 2029. Potential accidental events will be considered and could occur at any point during the life of the Project.

Administrative Boundaries and Technical Boundaries

Administrative boundaries refer to the spatial and temporal dimensions imposed on the environmental assessment for political, socio-cultural or economic reasons. Administrative boundaries can include such elements as the legislation, regulations, and government agencies that govern Project-related activities and the VECs selected for the EIS. Administrative boundaries can also include pertinent government guidelines and wildlife management zones and hunting/fishing seasons. These boundaries are defined for each VEC individually.

Technical Boundaries include and data and information gaps with a focus on data gaps important to environmental effects predictions and determination of significance or to satisfaction of the EIS guidelines. Such boundaries could include limits on availability of existing information and/or field surveys.

Existing Environment

The description of the existing environment (i.e., pre-Project or baseline conditions) for the Assessment Area (as specified in the EIS Guidelines) includes:

- Physical Environment;
  - Climate
  - Air Quality
  - Landscape
  - Hydrology
  - Ambient water quality
- Biological Environment;
  - Wetlands and Flora
  - Wildlife (including caribou and other species)
  - Avifauna (including osprey, eagles and other birds)
  - Fish and fish habitat
  - Fishing
- Socio-economic
  - Employment and business
  - Communities

The description of the existing environment is based primarily on:

- field programs undertaken for the project;
- historical project information for other developments in the area;
- previous environmental assessments for other projects in the area;
- baseline research on the socioeconomic environment in the Assessment Area;
- recent scientific publications and databases; and
- personal communications with local experts and scientific authorities.

The information available through the above sources is considered to be sufficient and acceptable for the purposes of this environmental assessment. While data gaps are always present when describing the natural environment, the gaps for this Project are not considered of sufficient scale and/or nature to affect the integrity of this assessment.

Potential Interactions and Existing Knowledge

A list of potential interactions between the Project activities and each VEC is presented in Table 1.These interactions represent the pathways/mechanisms through with the Project could have environmental effects on the VECs being considered in the EIS. Existing knowledge concerning these potential interactions is also reviewed and summarized.

Table 1 Potential Project-VEC Interactions (Example)

Project Activities and Physical Works	VEC			
	Fish and Fish Habitat	Caribou and Caribou Habitat	Employment and Business	Communities
Construction (Project activities in 2009)				
Site Preparation (grubbing, clearing, excavating)				
Placement of Infrastructure (reinstatement of rail spur, roads, utilities)				
Placement of Equipment and Buildings				
Construction (on-site power generation, solid waste, grey water, human presence, transportation)				
Employment and Expenditures				
Operation (Project activities starting in 2010)				
Iron Ore Extraction (excavation – mechanical, blasting)				
Iron Ore Beneficiation (crushing, washing, screening, stockpiling, hazardous and mining waste disposal)				
Stormwater and Wastewater Management				
Transportation (on-site trucking, rail loading)				
Operations (on-site power generation, solid waste, grey water, human presence)				
Employment and Expenditures				
Abandonment and Decommissioning				
Removal of Facilities and Equipment				
Site Reclamation (grading, re-vegetation)				

Residual Environmental Effects Significance Criteria

Significant adverse environmental effects are those effects that will cause a change that will alter the status or integrity of a VEC beyond an acceptable level. The significance of environmental effects is determined according to criteria defined in each of the VECs.

The definitions for significant adverse environmental effects are based primarily on key factors such as: magnitude (i.e., the portion of the VEC population affected); potential changes in VEC distribution and abundance; effect duration (i.e., the time required for the VEC to return to pre-project levels); frequency; and geographic extent (refer to Section 6.5 for a more detailed definition of these criteria). They also include other important considerations such as interrelationships between populations and species, as well as any potential for changes in the overall integrity of affected populations. A positive effect is one that may enhance a population or socio-economic component.

Environmental Effects Assessment, Identification of Effects Management and Residual Effects Determination

This effects assessment analyses potential effects associated with Project components/activities and potential accidental events for each of the VECs under consideration. Effects are analyzed qualitatively and, where possible, quantitatively using existing knowledge, professional judgment and appropriate analytical tools. The assessment of accidental events and cumulative effects will be considered within each individual VEC chapter.

Some of the key factors that can be considered for determining adverse environmental effects, as per the Agency guidelines (CEA Agency 1994) include:

- negative environmental effects on the health of biota;
- loss of rare or endangered species;
- reductions in biological diversity;
- loss or avoidance of critical/productive habitat;
- fragmentation of habitat or interruption of movement corridors and migration routes;
- transformation of natural landscapes;
- discharge of persistent and/or toxic chemicals;
- loss of, or detrimental change in, current use of lands and resources for traditional purposes;
- foreclosure of future resource use or production; and
- negative effects on human health or well-being.

Potential environmental effects on each VEC are characterized using the following five descriptors:

- Magnitude – the nature and degree of the predicted environmental effect. Rating depends on the nature of the VEC and the potential effect. For biophysical/ecological VECs the rating system is as follows:
    - Low - Affects a specific group or critical habitat for one generation or less; within natural variation;
    - Medium - Affects a portion of a population or critical habitat for one or two generations; temporarily outside the range of natural variability;
    - High - Affects a whole stock, population or critical habitat (may be due to the loss of an individual(s) in the case of a species at risk) outside the range of natural variability.

For socio-economic VECs the magnitude of potential effect is defined as:

  - Low - Does not have a measurable effect on valued socio-economic components;
  - Medium - Has a measurable effect on socio-economic components, but is temporary and/or is highly localized;
  - High - Has a measurable and sustained adverse effect on socio-economic components.

- Geographical Extent: describes the area within which an effect of a defined magnitude occurs;
- Frequency: the number of times during a project or a specific project phase that an effect may occur (i.e., one time, multiple);
- Duration: typically defined in terms of the period of time required until the VEC returns to its baseline condition or the effect can no longer be measured or otherwise perceived (defined specifically for each VEC, may be a specific period of time); at a minimum, it is divided into three timeframes: short-term, mid-term and long-term;
- Reversibility: the likelihood that a measurable parameter will recover from an effect, including through active management techniques such as habitat restoration works; and
- Ecological Context: the general characteristics of the area in which the project is located; typically defined as limited or no anthropogenic disturbance (i.e., not substantially affected by human activity) or anthropogenically developed (i.e., the area has been substantially disturbed by human development or human development is still present).

Based on the potential interactions identified for each VEC, technically and economically feasible mitigation measures will be identified to reduce or eliminate potentially significant adverse effects.

Where possible, a proactive approach to mitigating potential environmental effects has been taken by incorporating environmental management considerations directly into program design and planning; these are noted in the Project Description (Section 3.0). Additional mitigation measures are identified in the environmental assessment to further mitigate potential adverse effects where economically and technically feasible. These mitigation measures are identified and discussed within each individual VEC chapter. Residual environmental effects predictions are made taking into consideration these identified mitigation measures.

A summary of the environmental assessment for each VEC is presented for Project construction and operation as noted in Table 2.

Table 2 Template for Summary of Residual Environmental Effects for [VEC]: [Project Phase]

Mitigation	
Significance Determination	
Geographic extent	
Frequency of occurrence	
Duration of effect	
Magnitude of effect	
Permanence/reversibility	
Significance	
Confidence	
Likelihood of occurrence	
Follow-up and monitoring	

The evaluation of the significance of the predicted residual environmental effects is based on a review of relevant literature and professional judgment. In some instances, assessing and evaluating potential environmental effects is difficult due to limitations of available information. Ratings are therefore provided to indicate the level of confidence in each prediction. The level of confidence ratings provide a general indication of the confidence within which each environmental effects prediction is made based on professional judgment and the effects recorded from similar existing projects. The likelihood of the occurrence of any predicted significant adverse effects is also indicated, based on previous scientific research and experience.

Cumulative Environmental Effects

Environmental effects of individual projects operating in the same geographic region can overlap spatially and temporally resulting in cumulative environmental effects. This environmental assessment includes consideration of cumulative environmental effects for each VEC.

Cumulative effects are considered as part of the Project-specific environmental effects analyses described above (i.e., the overall effect of each project on a VEC). Other projects or activities that could interact cumulatively with the LIM Project include the New Millennium proposal for the Elross Lake area and increased railway traffic as a result of the proposed Bloom Lake Railway; these will be considered in the cumulative effects assessment (Table 3).

Table 3 Projects and Activities Considered in Cumulative Environmental Effects Analysis

Project	Status
Elross Lake Iron Ore Mine Proponent: New Millenium Capital Corporation • New Millenium Capital Corporation is planning to develop an iron ore mine at a previously mined site in Western Labrador, approximately 10 kilometres northwest of Schefferville, Quebec. • Ore will be transported via rail to a marshalling yard in Schefferville and then sent via rail to Sept-Îles , Quebec , for shipment to customers.	Reasonably Foreseeable Project
Bloom Lake Railway Proponent: Consolidated Thompson Iron Mines Ltd. • Consolidated Thompson Iron Mines proposes to construct and operate a new 31.5 kilometre long single-track railway line to connect the company's new load-out facilities within Labrador with the existing railway line between Wabush Mines and the Quebec North Shore & Labrador Railway.	Reasonably Foreseeable Project

As determined by the Guidelines, the assessment of cumulative environmental effects will involve consideration of the following:

- temporal and spatial boundaries;
- interactions among the Project's environmental effects;
- interactions between the Project's environmental effects and those of existing projects and activities;
- interactions between the project's environmental effects and those of planned projects and activities; and,
- mitigation measures employed toward a no-net-loss or net-gain outcome (e.g. recovery and restoration initiatives pertinent to a VEC that can offset predicted effects).

Accidental Events

Each VEC will discuss the potential environmental effects resulting from malfunctions or accidental events that may occur in connection with the Project. These shall be discussed with respect to risk, severity and significance. This discussion shall include (as required by the Guidelines):

- discussion of accidents and malfunctions that could occur related to the Project and the potential interactions with environmental features
- reference to the standards, codes and regulations applicable to governance of the project

Monitoring and Follow-up

The EIS Guidelines require the consideration of any monitoring and follow-up programs that might be required. The purpose of the follow-up program is to:

- verify the accuracy of the environmental assessment; and
- determine the effectiveness of mitigation measures.

As part of the environmental effects analysis, monitoring and follow-up programs are described where warranted. Monitoring and follow-up is considered where there are important Project-VEC interactions, where there is a high level of uncertainty, where significant environmental effects are predicted, or in areas of particular sensitivity.

Effects of the Environment on the Project

The EIS also assesses the effects of the environment on the mine. In particular the EIS will identify the vulnerability of the mine to climatic elements (including wind, weather and global climate change) and describe the provisions for minimizing any identified risk.

APPENDIX T

Methods to Control Ammonia and Nitrate Levels in Mine Waste Water

Methods to Control Ammonia and Nitrate Levels in Mine Waste Water

The main source of nitrogen in mine waste waters is from nitrogen components in explosives. Residues from mine blasting operations enter surface runoff water and depending on the form (nitrate, nitrite, ammonia) and concentration of nitrogen and the characteristics of the receiving stream, nitrogen compounds can have adverse effects to aquatic life.

Many mine operators have learned that there is a direct relationship between the ammonia and nitrate levels in mine waste water and the amount of undetonated explosives in the rock through which the water flows. Most commercial blasting agents contain 70% to 94% (by weight) ammonium nitrate. When some of the explosives end up in shot rock and ore, through either spillage or incomplete detonation, ammonia and nitrates can leach into the ground water. When a blast is completely detonated, there is no blast residue.

There are several ways that undetonated explosives end up on the ground or in shot rock:

- Sloppy handling, storage and loading practices may cause a significant amount of explosive spillage, particularly when bulk explosives are used.
- Poor drilling and loading practices can also cause significant amounts of explosives to remain undetonated.
- Drill patterns, stemming or collar length, explosive selection, priming methods and delay timing are the elements of blast design that can be adjusted to control charge cutoffs and failures

The objective of reducing ammonia and nitrate levels in mine waste water from blasting activities would be to implement actions that contribute to the complete detonation of a blast and reduce the amount of undetonated explosives. This can be achieved through the following approaches:

- Limiting the amount of explosives used.
    - Based on field investigations to-date, it is expected that only periodic blasting will be required during the initial benches, with mechanical means (example dozer with ripper) being used to break the rock. For those infrequent times and for the lower benches, where it is expected the rock is somewhat harder and less leached, packaged emulsion explosives are planned to be used. A relatively low powder factor is still expected for the lower benches.
- Controlling Explosive Losses through storage and handling controls
    - Bulk ANFO and bulk emulsion blasting agents are often spilled during storage, transfer or loading. Development of spill containment and clean-up procedures are integral.
    - Based on field investigations to-date, it is LIM's plan to use packaged explosives (and not bulk explosives) for their periodic blasting requirements. The use of packaged explosives is expected to reduce the amount of explosive spillage due to handling and loading practices.
    - Development of an ongoing explosive management program (as either part of an Operations Manual or Environmental Protection Plan) that outlines proper storage, handling, and loading controls.

- Selection of Blasting Agent
    - The type of explosive used can have a dramatic effect on overall explosive losses. For example, if bulk explosives are used instead of packaged explosives, spillage losses will be relatively high. If bulk ANFO is used in wet holes, losses caused by complete failure or partial detonation will be high.
    - As stated above, it is LIM's intention to use packaged emulsion explosive. These typically consist of 70% ammonium nitrate liquor, 15% water, and 15% mix of diesel oil and surfactant. (ANFO, the most commonly used blasting agent, is usually a mixture of 6% fuel oil and 94% ammonium nitrate).
    - The rate at which nitrates leach from different explosives varies dramatically, based on the explosive's composition. It has been reported that Emulsions did not release nitrates as readily as the ANFO or watergel explosives (the ammonium nitrate is contained in an aqueous phase that is surrounded by an oil (or oil and wax) fuel phase).
- Implementing engineered blasting practices that minimize to the extent possible, the amount of blasting material used and residue produced
    - For many reasons, including safety, environmental, and economic, blast designs should include measures that ensure complete detonation of all explosives.
    - Incomplete detonation can occur as a result of a cutoff. Drill pattern design, explosive loads, and initiation methods can be adjusted to reduce/eliminate the potentiality of a cutoff.
    - This can be accomplished by the use of multiple in-hole delay primers, using appropriate delay time between holes,
    - Stemming heights, stemming material, burden and spacing sizing are other blast pattern design variables that can be adjusted to optimize the complete detonation of explosives and reduce the potential of undetonated explosives from entering the mine waste water.
    - Incomplete detonation can also occur when using a non-water resistant product (ex. ANFO) in wet holes. The planned use of packaged emulsion explosives (which is water resistant) is an attempt to avoid incomplete detonation.
- Minimizing surface runoff that can enter a blasting area
    - For example, the use of a diversion ditch that would divert surface runoff away from the blasting area.
- Properly designed and operated settling pond
    - Settling ponds are considered to represent best practicable technology for treating mine wastewater.
    - In LIM's case, the in-pit sump which is the first stage of mine waste water collection and management, could offer an initial pre-settling and retention time depending on the capacity of the sump.

Summarized in part from "Practical Methods to Control Explosive Losses and Reduce Ammonia and Nitrate Levels in Mine Water", G.F. Revey, Mining Engineering (SME), July 1996