



LIM receives Government environmental approval and project release for DSO iron ore operations

For Immediate Release

Toronto, Ontario. February 16, 2010. **Labrador Iron Mines Holdings Limited** (TSX: LIM) is pleased to announce that it has received final environmental approval and project release from the Government of Newfoundland and Labrador for its Schefferville Area direct shipping iron ore project in Western Labrador.

On February 12, 2010 the Minister of Environment and Conservation informed LIM that, under authority of Section 67(3)(a) of the *Environmental Protection Act*, the Lieutenant-Governor in Council has released the Schefferville Area Iron Ore Mine from further environmental assessment, subject to a number of terms and conditions.

LIM Chairman and Chief Executive Officer **John Kearney** commented, *“Receiving project release from the Government of Newfoundland and Labrador represents another major step in the Company’s development and start-up plans and has come at a time when iron ore demand and pricing have regained their upward momentum. We would like to acknowledge the encouragement and support we have received for this project from the Province of Newfoundland and Labrador.”*

The release may be inspected on the Environmental Assessment Bulletin on the website of the Department of Environment and Conservation at <http://www.gov.nl.ca/env>.

This project release will allow the Company to complete the permit and license application process and regulatory approvals required for the construction of mine infrastructure and production facilities to facilitate the commencement of iron ore production at the James and Redmond deposits planned for summer of this year. The lump and fines that LIM plans to produce will be the first direct shipping iron ore (“DSO”) mined in Canada in almost three decades.

The Project will result in considerable socio-economic benefits accruing to the Province of Newfoundland and Labrador, creating employment and business opportunities and contributing substantially to the economy. LIM has entered into an Impact Benefit Agreement with the Innu Nation of Labrador and it is expected that approximately 25% of total employees on the project will be from Aboriginal First Nations.

Milestones Achieved

Over the last quarter, the Company announced several key developments that have significantly advanced the Project towards the goal of production start-up in the summer of 2010.

Independent Metallurgical Tests by SGA of James lump ore and sinter fines confirmed grade, quality and suitability for steel markets

Metallurgical testing of James South lump ore and sinter fines by SGA research centre in Germany indicated the iron content of the lump ore at 66.98% and the fines at 67.23%, with other elements favourably low in both cases. SGA concluded that James South represents high quality lump ore and fines which will be well accepted in the European market. (See LIM Press Release dated November 24, 2009)

Resource Estimates for James and Redmond deposits showed significant increase over historical resources

The NI 43-101 compliant resource estimates for the James, Redmond 2B and Redmond 5 deposits comprising the first stage of targeted production now total 11.0 million tonnes of Indicated resource at a grade of 57.4% iron compared to 5.2 million tonnes of historical (non NI 43-101) resource. The new estimates prepared by SGS Geostat Ltd. reflect results of drilling and trenching undertaken by LIM in the 2006, 2008 and 2009 field seasons and show a significant increase in tonnage over the historical resources (not NI 43-101 compliant), estimated by the Iron Ore Company of Canada (“IOC”) prior to 1982. The significance of the increase is highlighted by the potential to extend the expected life of stage 1 production. (See LIM Press Release dated November 12, 2009)

EIS accepted, Provincial environmental assessment process completed

The Department of Environment and Conservation completed its review of the Company’s EIS confirmed that it complies with the *Environmental Protection Act* and requires no further work under the Provincial environmental assessment process. (See LIM Press Release dated November 6, 2009)

Rail Co-operation Agreement facilitated infrastructure progress

LIM signed a Rail Co-operation Agreement with New Millennium Capital Corp. (“NML”) regarding the reconstruction of the “Timmins Extension” rail spur line. The line will run from the Tshiuetin Rail Transportation Inc. (“TSH”) Railway main rail line near Schefferville, a distance of approximately 2.5 miles to LIM’s planned processing centre at Silver Yards, and on a further approximately 13 miles to NML’s planned processing centre at the Timmins mining area. The parties also agreed to collaborate to determine the most expedient means to refurbish the TSH Railway main line to standards required to transport the minerals extracted from the DSO deposits. (See LIM Press Release dated October 27, 2009)

Mineral property exchange consolidated LIM’s ownership

LIM entered into an agreement with NML to exchange certain mineral licences in Labrador. The exchange eliminates the fragmentation of ownership of certain mining rights in the Schefferville area and enables both companies to separately mine and optimize their respective DSO deposits. The exchange gave LIM sole ownership of all DSO deposits in its Stage 1 area in proximity to LIM’s planned processing facilities at Silver Yard. (See LIM Press Release dated October 22, 2009)

LIM Acquired an additional 50 million tons of DSO iron ore in Quebec

In a series of five transactions completed in December 2009, LIM acquired control over an additional 50 million tons of historical (non NI 43-101) DSO resource in the Province of Quebec, together with a large package of mineral claims in the Schefferville area considered prospective for exploration for iron ore and which also host a number of small high grade manganese deposits. The acquisition represents a very significant increase in LIM’s resource base and complements LIM’s planned DSO operations in Labrador, as well as providing an excellent portfolio of additional properties prospective for iron ore in the Province of Quebec. (See LIM Press Release dated December 17, 2009)

The historical resources referred to in this document are based on work completed and estimates prepared by the Iron Ore Company of Canada prior to 1983 and were not prepared in accordance with National Instrument 43-101. The historical resource estimate is still considered relevant and reliable. The Company is not treating the historical resource estimate as a defined current resource verified by a Qualified Person.

Qualified Person

Information of a scientific or technical nature contained in this release has been prepared by or under the supervision of Terence McKillen, P.Geo., Executive Vice President of the Corporation and a Qualified Person within the meaning of National Instrument 43-101 of the Canadian Securities Administrators.

Labrador Iron Mines Holdings Limited (LIM)

LIM's Schefferville area project involves the development of 20 direct shipping iron ore deposits in western Labrador and north eastern Quebec near Schefferville. The Company's properties are part of the historic Schefferville area iron ore district where mining of adjacent deposits was previously carried out by the Iron Ore Company of Canada from 1954 to 1982. Labrador Iron Mines plans to mine its deposits in varying stages, the first of which comprises the James and Redmond deposits which are located in close proximity to existing infrastructure. Subject to timely receipt of all permits and licences, the Company plans to commence iron ore production in the summer of 2010.

For further information, please view the Company's website at www.labradorironmines.ca or contact:

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Cautionary Statements:

Some of the statements contained herein may be forward-looking statements which involve known and unknown risks and uncertainties. Without limitation, statements regarding potential mineralization and resources, exploration results, and future plans and objectives of the Company are forward looking statements that involve various degrees of risk. The following are important factors that could cause the Company's actual results to differ materially from those expressed or implied by such forward looking statements: changes in the world wide price of mineral commodities, general market conditions, the uncertainty of future profitability and access to additional capital, risks inherent in mineral exploration and risks associated with development, construction and mining operations, delays in obtaining or failures to obtain required governmental, environmental or other project approvals. Caution should be exercised on placing undue reliance on forward looking information.