Dear [Name]

Re: Your request for access to information under Part II of the Access to Information and Protection of Privacy Act (File # NR-230-2018)

On October 22, 2018, the Department of Natural Resources received your request for access to the following records/information:

Any Decision, Direction, Information, Meeting, Briefing or other such note created in 2018 regarding IRON ORE COMPANY OF CANADA.

I am pleased to inform you that a decision has been made by the Department of Natural Resources, confirmed by the Deputy Minister, to provide access to the requested records. The records are attached.

We are providing access to the most information possible but have made redactions in accordance with Sections 29(1)(a), 30(1)(a), 35(1)(d) and 35(1)(g) of ATIPPA, 2015 as follows:

29. (1) (a) The head of a public body may refuse to disclose to an applicant information that would reveal advice, proposals, recommendations, analyses or policy options developed by or for a public body or minister;

30. (1) (a) The head of a public body may refuse to disclose to an applicant information that is subject to solicitor and client privilege or litigation privilege of a public body;

35. (1) (d) The head of a public body may refuse to disclose to an applicant information which could reasonably be expected to disclose information, the disclosure of which could reasonably be expected to result in the premature disclosure of a proposal or project or in significant loss or gain to a third party;

P.O. Box 8700, St. John’s, NL, Canada A1B 4J6 t 709.729-1466
35. (1) (g) The head of a public body may refuse to disclose to an applicant information which could reasonably be expected to disclose information, the disclosure of which could reasonably be expected to prejudice the financial or economic interest of the government of the province or a public body.

As set out in section 42 of the Act you may ask the Information and Privacy Commissioner to review the department’s decision to provide access to the requested information. A request to the Commissioner must be made in writing within 15 business days of the date of this letter or within a longer period that may be allowed by the Commissioner. Your request should identify your concerns with the department’s response and why you are requesting a review.

The request for review may be addressed to the Information and Privacy Commissioner is as follows:

Office of the Information and Privacy Commissioner  
2 Canada Drive  
P.O. Box 13004, Stn. A  
St. John’s, NL. A1B 3V8

Telephone: (709) 729-6309  
Toll-Free: 1-877-729-6309  
Facsimile: (709) 729-6500

Pursuant to section 52 of the Act, you may also appeal directly to the Supreme Court Trial Division within 15 business days after receiving the department’s decision.

Please be advised that responsive records will be published following a 72 hour period after the response is sent electronically to you or five business days in the case where records are mailed to you. It is the goal to have the responsive records posted to the Completed Access to Information Requests website within one business day following the applicable period of time. Please note that requests for personal information will not be posted online.

For further details about how an access to information request is processed, please refer to the Access to Information Policy and Procedures Manual at http://www.atipp.gov.nl.ca/info/index.html.
If you have any questions, please feel free to contact me at 709-729-0463 or rhynes@gov.nl.ca.

Sincerely,

Rod Hynes

Rod Hynes
ATIPP Coordinator
Meeting Note
Department of Natural Resources
Meeting with Iron Ore Company of Canada
Monday, March 5, 2018; 3:00 to 3:30 PM
Conquest Room, InterContinental Toronto Centre

Attendees:
Clayton Walker, President and CEO, Iron Ore Company of Canada
Heather Bruce-Veitch, Director, Communications & External Relations

Minister Coady
Gordon McIntosh, Deputy Minister

Purpose of Meeting:
• Iron Ore Company of Canada to provide Minister Coady with a company update.

Background:
• The Iron Ore Company of Canada (IOC) began mining iron ore in the Menihek / Schefferville area of Quebec and Labrador in 1954, expanding to Labrador West in the early 1960s.

• IOC's Carol Project, located in Labrador City, is the second largest iron ore producer in Canada and is one of the largest private employers in Newfoundland and Labrador with approximately 1,900 employees working at the mine, concentrator and pellet plant.

• The mine has the capacity to produce up to 23.3 million tonnes of pellets and iron ore concentrate annually. The pellet plant has six production lines with a total capacity of over 13 million tonnes per year. IOC varies the proportion of its concentrate production made into pellets in response to market conditions. In 2017 the company shipped 20.5 million tonnes of pellets and concentrate.

• IOC currently has five active mining areas: Humphrey Main-West/Sherwood, Humphrey South Pit (Magy Lake), Luce Pit, Lorraine South Pit, and Wabush 3 Pit.

• IOC has begun development of the $79 million Wabush 3 Project. The Wabush 3 Project is a new open pit that will allow flexibility in providing iron ore feed to its existing concentrator to achieve production at the mill's rated capacity. First ore is expected in the second half of 2018. Wabush 3 will provide a new source of iron ore to extend the operating life of its Carol Project to beyond the year 2079.

• IOC has registered the Magy Pit extension project for environmental assessment to support its ongoing operations. Once all approvals are in place, the company hopes the Magy Pit will be underway by July 1, 2018.

• IOC's active mining areas are operated under a sub-lease agreement with the Labrador Iron Ore Royalty Corporation (LIORC). LIORC holds 15.1% equity ownership in IOC and, as owners of the mineral rights, receives a 7% gross sales royalty plus a 10 cent per tonne commission on all shipments. Other IOC owners are Mitsubishi Corp. (26.2%) and the mine operator, Rio Tinto PLC (58.7%).
• Since 2015, the price of iron ore peaked at US$95 per tonne in February 2017 but dropped to US$54 per tonne by mid-June 2017. The price has rebounded to US$79.90 at the end of February 2018.

Agenda item #1 (Executive 2017 Update)
• IOC Executive will provide an update of 2017 operating results.

Analysis
• Total concentrate produced in 2017 was 20.5 million tonnes; this was a record amount and 12% higher compared to the 18.3 million tonnes produced in 2016. All 6 pellet lines operated as planned in 2017. In the second quarter, Pellet Line 2 was down for scheduled refurbishment of the induration machine.

• In October 2016, the Research and Development Corporation announced a $720,000 investment to support IOC’s industrial trial of an innovative technology for the recovery and refinement of fine ore. The total cost of the project is $1.5 million, with IOC providing the remainder of the funding.

• The goal of the trial is to improve the recovery of fine ore, with the project being used to evaluate the potential to increase productivity and efficiency, decrease environmental impacts and enhance the sustainability of IOC’s operations in Labrador.

Potential Speaking Points
• Government recognizes the accomplishments that IOC has made in increasing production, reducing costs and continuing to move forward with innovative initiatives especially during the challenging economic environment in the iron ore industry over the past few years.

• The Minster may wish to ask about the results of the trial to date?

Proposed Actions
• None at this time.

Agenda item #2 (Ongoing Issues)
• IOC Executive will provide an update regarding power rates, innovation and greenhouse gas reduction.

Analysis
• IOC has implemented its Operations Centre Pilot (OCP), which is intended to improve monitoring, coordination and automation of mining and shipping activities. The goal is to improve the efficiencies, tonnage and costs of the overall operation, from Mine to Port.
In March 2015, IOC wrote the Premier to request reduced power rates citing the depressed price of iron ore and need to reduce costs to stay viable. The Minister responded that power is priced competitively and provided at cost from the Development Block and that lower power rates would require a direct subsidy from government or higher rates for ratepayers. Given current fiscal situation, government is unable to provide a subsidy. Officials have been made available to discuss potential solutions that IOC may have, but IOC has not followed up on this offer to further discussions.

The Office of Climate Change is modeling the impacts of the proposed carbon tax and will be reviewing these results during consultations with IOC currently scheduled for March 1, 2018. The modeling will compare the cost of the federal carbon tax to the more flexible provincial approach set out in the Management of Greenhouse Gas Act.

Implementation of carbon pricing as proposed by the Federal Government could have a substantial impact on IOC.

The Climate Change Branch (CCB) of MAE met with IOC on March 1, 2018 to consult with the company on greenhouse gas and carbon pricing. The meeting went well.

The Federal Government has indicated that process related emissions could be exempted from carbon pricing. Based on guidelines provided by the Feds,
• IOC also indicated that their international competition for the most part are not currently covered by a carbon pricing system and that they have made significant emission improvements making further significant improvement to emissions difficult and costly.

Potential Speaking Points
• Government will continue to support IOC in its endeavors to innovate and create solutions to ongoing issues and upcoming advancements.

Proposed Actions
• None at this time.

Prepared/Approved by: B. Lawlor/K. Bradbury/A. Smith/
Ministerial Approval: Received from Hon.

March 2, 2018

Attachments:
  Biographies
Biographies

Clayton Walker, President and CEO, Iron Ore Company of Canada
Clayton Walker earned his Bachelor of Science degree in Metallurgical Engineering from the University of Utah and later completed a Masters of Business Administration from the University of Utah.

Mr. Walker was appointed President and Executive Chairman of the Iron Ore Company of Canada with Rio Tinto in November, 2016. He previously served as the managing director of the Pilbara Supply Chain for the Iron Ore business of Rio Tinto Group. In this role, Clayton had accountability for Pilbara rail, ports, utilities, accommodation and towns, autonomous trains, Operations Centre, integrated planning and business improvement functions. Clayton is also a member of the Iron Ore Executive Committee.

Clayton joined Rio Tinto in 2001 and has worked in senior management roles for the energy and copper product groups, at Gillette, Spring Creek, Greens Creek and Kennecott.

Most recently he was Chief Operating Officer of the Pilbara Supply Chain for the Iron Ore business, where he played a lead role in the strategy and optimization of the railway, ports and operation centre while leading the work around the AutoHaulTM automated rail network.

Prior to joining Rio Tinto, Clayton held a number of project, engineering, sales and marketing, business development and management roles with Baker Process Systems and Larox Flowsys.

Heather Bruce-Veitch, Director, Communications & External Relations
Heather Bruce-Veitch graduated from Memorial University with a Bachelor of Arts majoring in French and is currently the Chair of Mining NL, Director of the NL Employers Council and Vice-President Canadian Institute of Mining NL Branch.

Currently in her 25th year with the Iron Ore Company, Heather Bruce-Veitch is Director of Communications & External Relations based in St. John’s, NL, having recently returned from over twenty years in Labrador West. Heather has primary responsibility for engaging and building relationships with external stakeholders who include communities, government, business partners and media.

Prior to her recent appointment Heather was the Manager Human Resources with responsibility for the two operating sites: Labrador City, and Sept-Iles, Quebec, with a workforce of approximately 2000 employees.

She has led teams in the areas of employee recruitment and retention, industrial relations as well as talent management. Heather has progressed through a series of leadership roles within IOC and has a wide variety of experience in both industry and federal government and is bilingual.
Information Note
Department of Natural Resources

Title: Mining Activity in Labrador

Issue: To provide background on mining projects and exploration activity in Labrador.

General
- The forecasted gross value of mineral shipments for NL is $3.4 billion in 2018. Labrador mining activity accounts for an estimated $3.2 billion, 93% of the shipment forecast. Provincial mining industry employment is forecasted to be 6,111 person years in 2018. It is estimated that Labrador mining employment will account for 4,748 person years, 78% of total forecasted provincial mining employment in 2018.

- Three mines are operating in Labrador including:
  - Vale Newfoundland and Labrador’s Voisey’s Bay open pit mine (nickel, copper and cobalt)
  - Iron Ore Company of Canada (iron ore)
  - Tata Steel Minerals Canada (iron ore)

- Developing projects in Labrador include:
  - Howse Minerals (Tata Steel)
  - Tacora Resources (former Wabush Mine)
  - Alderon Iron Ore (Kami Project)
  - Voisey’s Bay Mine Expansion Project (nickel, copper and cobalt)
  - Search Minerals (Rare Earth Elements)

Vale Newfoundland and Labrador (VNL)

Background and Current Status:
- Vale Newfoundland and Labrador (VNL) operates the Voisey’s Bay mine and Long Harbour nickel processing plant (LHPP) subject to conditions of the Voisey’s Bay Development Agreement (2002). The mine opened in 2005 and since then has been producing nickel, copper and cobalt from the open pit mining operation – the Ovoid – which constitutes only a part of the nickel resources in the Voisey’s Bay area. Ovoid production is scheduled to be complete by 2023.

- According to the Vale S.A. first quarter 2018 production report, finished nickel production at the LHPP reached 8,600 tonnes, a quarterly record. The LHPP produced 373 tonnes of cobalt rounds in the quarter. Construction of the LHPP was completed in late 2016 and by late 2017 all Voisey’s Bay nickel concentrate began shipping solely to the LHPP.

- The underground mine, Voisey’s Bay Mine Expansion (VBME) Project, was sanctioned in July 2015. Progress of the VBME became uncertain as the nickel market continued to deteriorate following sanction eventually leading to parent company Vale S.A. placing its Base Metal Business, which includes all Voisey’s Bay operations, in review during the summer of 2017. The VBME was placed on hold as the review took place.

- It was announced on June 11, 2018 in St. John’s that Vale S.A. is moving forward with the VBME. The announcement was made collaboratively by Premier Ball, Minister Coady and Vale’s Executive Director of Base Metals, Eduardo Bartolomeo. Underpinning the advancement of the VBME are an improved nickel market and the confirmation of two cobalt streaming deals by Vale S.A.
The cobalt streaming deals are with Wheaton Precious Metals Corp. and with Cobalt 27 Capital Corp. The agreement is to sell an aggregate total of 75% of Voisey's Bay cobalt production commencing January 1, 2021, for US$ 690 million in upfront payment plus additional payments of 20%, on average, of cobalt prices upon delivery.

The VBME will extend Voisey’s Bay mine life from 2023 to 2034 and will require 16,000 person years of employment during the five-year construction period, peaking at 4,800 in 2020. Once operational, the VBME and LHPP will provide over 1,700 direct jobs.

The first full year of underground production is expected to be 2021, when current mining of the Ovoid begins to ramp down.

Iron Ore Company of Canada (IOC)

Background and Current Status:

- The Iron Ore Company of Canada (IOC) began mining iron ore in the Menihek / Schefferville area of Quebec and Labrador in 1954, expanding to Labrador West in the early 1960s. Its Carol Project, located in Labrador City, is the second largest iron ore producer in Canada and is one of the largest private employers in NL with approximately 1,900 employees working at the mine, concentrator and pellet plant.

- The mine has the capacity to produce up to 23.3 million tonnes of pellets and iron ore concentrate annually. The pellet plant has six production lines with a total capacity of over 13 million tonnes per year. IOC varies the proportion of its concentrate production made into pellets in response to market conditions. In 2017, the company shipped 20.5 million tonnes of pellets and concentrate.

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Since 2015, the price of iron ore peaked at US$ 95.00 per tonne in February 2017 but dropped to US$ 54.00 per tonne by mid-June 2017. The price has rebounded to US$ 66.15 at the middle of June, 2018.

Analysis:
- On May 29, 2018, a nine week strike by the local steelworkers union at IOC came to an end. This nine week disruption in production will affect IOC’s final production output.

Tata Steel Minerals Canada (TSMC)

Background and Current Status:
- Tata Steel Minerals Canada (TSMC) operates an iron ore mine in the Menihek area of Labrador and is a joint venture between Tata Steel of India (77.68%), Ressources Quebec (18%), and New Millennium Iron Corp. (4.32%). TSMC’s iron ore deposits are Direct Shipping Ore (DSO) which typically require only crushing and screening to produce a marketable product. Project construction started in 2011 and first ore was shipped in 2013.

- Capital costs have increased from the original estimate of $300 million to over $1 billion due to changes in project scope, logistical challenges, productivity, and workforce issues. Construction of the concentrator was completed in August 2015 but commissioning has not been completed as a result of challenging market conditions. After a temporary winter scale down of operations in 2016, TSMC will be operating on a seasonal basis in the near term.

- In July 2016, TSMC announced that it had been awarded a financial contribution of $175 million by the Government of Quebec to support the development of its DSO Project. The financial contribution includes an equity stake for $125 million and a loan of $50 million. In exchange, the Government of Quebec obtained an 18% ownership stake in the company.

- TSMC is currently mining Goodwood deposit located on the Quebec side of the operation. TSMC is expected to generate 250,000 tons with 375 person years of employment expected to be generated this year.

- TSMC acquired the Howse deposit in 2015. This deposit is expected to contain 46 million tons of high-grade ore and 5 million tons of low grade ore. The Howse project is released from both Provincial Environmental Assessment and Federal Environmental Assessment.

Analysis:
- TSMC has stated that the project is critical to its future operation. However, all permitting is not yet in place for the Howse project to proceed.

Tacora Resources

Background and Current Status:
- On July 19, 2017, Tacora Resources Inc. announced that it closed the acquisition of assets associated with the Scully Mine, located in Wabush. The mine was formerly owned by Cliffs
Natural Resources who idled the mine in February 2014 and closed it in October of the same year. It then went into creditor protection under the Companies’ Creditors Agreement Act.

- Tacora is an iron ore mining and development company based out of Grand Rapids, Minnesota with its parent company being Magglobal LLC. Tacora proposes to reactivate the Scully mine and mill, for a minimum of 15 years at an expected annual production rate of 6.25 million metric tonnes of concentrate in full operation, estimated to begin in 2021.

- Tacora has entered into a long term (five-year) offtake agreement with Cargill, an international metals supply chain, for 100% of its concentrate product. Iron ore concentrate will be sold as feed for sinter plants and pelletizing plants.

- Tacora’s “Wabush Scully Mine Reactivation” was released from the provincial environmental assessment process on November 22, 2017. Conditions associated with the release include completion of a Benefits Plan, a Gender Equity and Diversity Plan, and an Environmental Protection Plan.

Tacora filed for an IPO on the TSX in February 2018 and later filed an amendment to the IPO at the end of May. The company will issue between 6,578,947 and 7,812,500 common shares at an offering price of between $16.00 and $19.00 per share for gross proceeds of approximately $125 million.

- A feasibility study for the project was released in February 2018, with an amended and restated version released on May 28, 2018. The restart of the Scully Mine requires an initial capital expenditure of $210.1 million with a sustaining capital of $515.1 million.

- Manpower requirements are set to vary over the life of mine from operations personnel of 128 to a peak of 147. Mine maintenance varies from 48 to 67, while engineering and geology remain steady with nine and eight respectively.

**Analysis:**

**Alderon Iron Ore**

**Background and Current Status:**

- The Kami project is located in Labrador West, and was put on hold in 2014 due to the depressed iron ore market. The Kami Project boasts an NI 43-101 Mineral Resource Estimate of 1.3 billion tonnes Measured and Indicated at 29.8% iron and an additional 522.6 million tonnes Inferred at 29.5% iron.

- The proposed mining operation will include an open pit, adjacent crushing plant, concentrator, tailings disposal area and new rail infrastructure connecting to the Quebec North Shore and Labrador main rail line. The November 2017 PEA outlined a US$ 999.4 million capital investment and production at 7.8 million tonnes of iron ore concentrate per year with a mine life of 24 years.
• Concentrate will be railed from Kami to the common port terminal facilities in Pointe Noire, Quebec, which is owned and operated by a third party. Ship loading services will be provided by the Port of Sept-Iles.

• Employment numbers for construction average approximately 340 person years over the 29 month construction period. The total manpower required to operate the mine is estimated to peak at 309 in Year 10.

• Alderon has three strategic partners in the Kami Project including the HBIS Group, Glencore and Liberty Metals and Mining Holdings. HBIS Group, China’s second largest steelmaker, has invested $182.2 million in the project and will purchase 60% of annual production. Glencore, a large globally diversified natural resource company, has an offtake agreement to purchase the remaining 40% of annual production. Liberty Metals and Mining Holdings have invested $49.2 million in equity and $22 million in convertible debt.

• On June 21, 2018, Alderon announced that it has entered into an agreement with Sprott Resource Lending for a US$ 14 million loan that will provide sufficient funds to repay the loan due to Liberty Metals & Mining Holdings, and also provide additional runway for Alderon to continue its re-boot of the Kami Project including completion of a revised feasibility study this fall. Altius Minerals Corporation will be participating in the loan by providing US$ 2 million of the US$ 14 million principal.

• The project was released from environmental assessment in January 2014. This release expired and the company applied and was granted an extension.

• On April 3-4, 2018, Minister Coady travelled to China to participate in meetings alongside Alderon as the company promoted its Kami Project to the HBIS Group and the China Development Bank.

Analysis:

• The current Alderon PEA is based on an iron ore price of US$ 72.23 per tonne, delivered to China, with production costs estimated at US$ 29.94 per tonne. Alderon’s 2012 Feasibility Study was based on an iron ore price of US$ 110 per tonne, delivered to China with production costs estimated at US$ 42.17 per tonne.

Search Minerals

Background and Current Status:

• Search Minerals has 100% ownership of three Rare Earth Element (REE) camps in Labrador
  o Port Hope Simpson (REE) District including the company’s flagship Foxtrot deposit, Deep Fox Discovery and Fox Meadow Discovery
  o Henley Harbour Property on the southern coast of Labrador
  o Red Wine Complex Property in central Labrador

• Search Minerals received Junior Exploration Assistance (JEA) grants of $150,000, $123,506 and $47,245 under the Mineral Incentive Program in 2011, 2015 and 2016. Search has submitted a Letter of Intent indicating that they will be undertaking further exploration work this year and will seek a JEA grant for 2017/18.

• In February 2017, pilot plant testing produced a high quality purity mixed rare earth oxide. Search plans to prove its metallurgy to be economical, scalable and effective as a primary
processing technique. The end product would be a 98-99% rare earth oxide concentrate making it saleable to be refined by REE refineries.

- In April 2016, Search released an updated Preliminary Economic Assessment (PEA) on the Foxtrot deposit. The PEA evaluated an open pit-underground mine with a 1,000 tonnes per day processing facility producing a rare earth oxide concentrate. The rare earth oxide would be shipped out of the province for final separation of the REEs.

- The PEA estimated an initial capital cost of $152 million ($232 million including sustaining and closure capital), Pre-tax Net Present Value (at 10%) of $93 million and after-tax payback period of 4.4 years. The potential mine would have a 14 year mine life and employ 140 people during the 8 year open pit stage and 220 during underground mining.

Analysis:
- Search's Foxtrot project is under both provincial and federal environmental assessment. An environmental impact statement is required for the project and is expected from the company in second quarter of 2019.

Exploration in Labrador

Background and Current Status:
- Mineral exploration in Labrador has become more diversified and includes iron ore, rare earth elements, nickel, copper, cobalt and gold. The 2018 forecasted value of Labrador exploration expenditures is $8.0 million; this is a 20% increase over last year's $6.6 million.

- In addition to the ongoing exploration work being done by Vale and IOC, several other companies are undertaking exploration programs in Labrador including:
  - Fjordland Exploration Inc. and Commander Resources have drill ready targets on their South Voisey's Bay property and are in advanced stages of exploration on their nickel-copper-cobalt property.
  - King's Bay Resources are active on their Lynx Lake copper-cobalt property located in southeastern Labrador along the Trans Labrador highway and were granted $75,000 from the JEA Program 2017.
  - Labrador Gold and its subsidiaries are grassroots companies actively exploring for gold in various locations across Labrador. As part of the 2017 JEA Program, the company received $91,000 for work on its Ashuanipi South Project.
  - Big Land Exploration Ltd. in Labrador West received $25,000 from the JEA Program to work on its Evening Lake Project in 2017.
  - Search Minerals Ltd. was granted $69,000 in 2017 via the JEA Program for work on its Foxtrot Rare Earth Element Project near St. Lewis.
  - Maximos Metals Corp. received $105,000 from the 2017 JEA Program for work on its Big Brother Claims nickel project in Northern Labrador.
  - Red Moon’s Black Bay Project in Cartwright-L’Anse Au Clair received $17,000 through the JEA Program in 2017. Red Moon is exploring for nepheline, a source of alumina.

Action Being Taken:
- N/A.

Prepared/Approved by: B. Lawlor / G. Taylor / A. Smith

Ministerial Approval:

June 21, 2018
Attachments:
Appendix 1a: Map – Producing Mines in Labrador
Appendix 1b: Map – Developing Projects in Labrador

Appendix 1a: Map – Producing Mines in Labrador

1) Iron Ore Company of Canada
   Labrador City – Fe

2) Tata Steel Minerals Canada Ltd.
   Menihék – Fe

3) Vale Newfoundland and Labrador Limited
   Voisey's Bay – Ni, Cu, Co

Appendix 1b: Map – Developing Projects in Labrador

1) Tacora Resource Inc.
   Wabush – Scully Mine – Fe

2) Alderon Iron Ore Corporation
   Labrador West – Kami Project – Fe

3) Howse Mineral Limited
   Menihék – Fe

4) Vale Newfoundland and Labrador Limited
   Voisey’s Bay Mine Expansion Project – Ni, Cu, Co

5) Search Minerals Inc.
   Port Hope Simpson – Rare Earth Elements
Title: Newfoundland and Labrador Mining Industry Overview

Issue: Overview of the status of the mining industry in Newfoundland and Labrador for the 2018 Energy and Mines Ministers’ Conference

Background and Current Status:
- The gross value of mineral shipments for Newfoundland and Labrador in 2017 was $3.60 billion with a forecasted value of $3.39 billion for 2018.

- The NL Mining industry average employment was 5,335 person years in 2017 with a forecasted value of 6,111 person years in 2018. Mining construction employment included in these values for 2017 and 2018 are 496 and 874 respectively, the increase is mainly attributed to Voisey’s Bay Underground Mine Expansion.

- Iron, nickel, and copper contribute 91% of the value of shipments from the province with gold, cobalt, silver, industrial minerals, stone, sand and gravel contributing the remainder.

- Producing mines in the province are summarized in the table below:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Commodity</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vale Newfoundland and Labrador Limited</td>
<td>Nickel/Copper/Cobalt</td>
<td>Voisey’s Bay</td>
</tr>
<tr>
<td></td>
<td>Finished</td>
<td>Long Harbour</td>
</tr>
<tr>
<td></td>
<td>Nickel/Copper/Cobalt</td>
<td></td>
</tr>
<tr>
<td>Iron Ore Company of Canada</td>
<td>Iron Ore</td>
<td>Labrador City</td>
</tr>
<tr>
<td>Tata Steel Minerals Canada Ltd.</td>
<td>Iron Ore</td>
<td>Elross Lake/Menihek</td>
</tr>
<tr>
<td>Anaconda Mining Inc.</td>
<td>Gold</td>
<td>Pine Cove</td>
</tr>
<tr>
<td>Rambler Metals and Mining Canada Limited</td>
<td>Copper/Gold/Silver</td>
<td>Baie Verte</td>
</tr>
<tr>
<td>Atlantic Minerals Limited</td>
<td>Limestone/Dolomite</td>
<td>Lower Cove</td>
</tr>
<tr>
<td>Hi – Point Industries (1991) Ltd.</td>
<td>Peat</td>
<td>Bishop’s Falls</td>
</tr>
<tr>
<td>Barite Mud Services Inc.</td>
<td>Barite</td>
<td>Buchans</td>
</tr>
<tr>
<td>Trinity Resources Ltd.</td>
<td>Pyrophyllite</td>
<td>Manuels</td>
</tr>
<tr>
<td>Canada Fluorspar(NL) Inc.</td>
<td>Fluorspar</td>
<td>St. Lawrence</td>
</tr>
<tr>
<td>Galen Gypsum Limited</td>
<td>Gypsum</td>
<td>Coal Brook</td>
</tr>
</tbody>
</table>

- Vale Newfoundland and Labrador announced that its Voisey’s Bay Mine Expansion will proceed this summer. The project represents close to $2 billion in capital expenditures by Vale. There will be 16,000 person years of employment during the five years of construction, peaking at 4,800 person years in 2020. First ore production from underground is expected by April 2021.

- Tacora Resources Inc., an iron ore mining and development company based out of Grand Rapids, Minnesota, has acquired the former Wabush Scully mine in Wabush, Labrador. In a May 2018 Preliminary Economic Assessment the company estimated a capital expenditure of $210 million to reactivate the mine. Tacora has been released from environmental assessment and is currently attempting to raise capital.

- Wabush 3 project, owned by the Iron Ore Company of Canada, was delayed due to a nine week work stoppage. IOC plans to officially open Wabush 3 on September 25, 2018.
• Howse Minerals Limited, a subsidiary of Tata Steel Minerals Canada, has been given Mining Act approval for their Howse project in Menihek area of Labrador.

• Alderon Iron Ore Corp. continues to advance their Kami project located in Labrador West. The company expects to release a new Feasibility Study in Q4, 2018.

• Red Moon Resources Inc. is developing the Ace gypsum deposit near Flat Bay. Mining Act approval is in place and mining can start once financial assurance is in place. The mine will employ 15 people on a seasonal basis with an initial production of 100,000 – 250,000 tonnes per year ramping up to 300,000 – 450,000 tonnes per year. The life of the mine is expected to be 10 years.

• Projects in advanced stages of exploration in the Province:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Commodity</th>
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</tr>
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<tbody>
<tr>
<td>Marathon Gold Corporation</td>
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</tbody>
</table>

Analysis:

• Over the past year, iron ore prices have remained fairly steady with a peak of $79.70 USD/tonne at the end of February. As of July 20, the price is $64.10 and the average price for the past month (June 20 - July 20) is $63.40. Efforts to advance potential iron ore projects in Labrador are based on being high quality ore which is in demand from China due to efforts to reduce emission.

• Nickel prices have fluctuated over the past year peaking at $15,750 USD/tonne in June and at July 20 is $13,425. The average price for the past month (June 20 - July 20) is $14,335. Nickel prices are closely related to demand from stainless steel producers who account for about two-thirds of total demand.

• Copper prices had steadily increased since January 2016 and peaked in June at $3.29 USD/lb. Prices have since declined to $2.75 as of July 20 and the average price for the past month (June 20 - July 20) is $2.95.

Prepared/approved by: B. Lawlor / K. Bradbury / A. Smith
Ministerial Approval: Received from Honourable

July 31, 2018
Information Note
Department of Natural Resources

Title: Newfoundland and Labrador Mining Industry Overview

Issue: To provide a status update on the Newfoundland and Labrador Mining Industry

Background and Current Status:

- The gross value of mineral shipments for Newfoundland and Labrador (NL) in 2017 was estimated to be $3.6 billion. The gross value is forecast to be $3.0 billion in 2018. The decrease can be primarily attributed to a reduction in the value of iron ore shipments.

- The NL Mining Industry generated an estimated 5,145 person years of employment in 2017 and expects to generate 5,527 person years of employment in 2018. The increase can be primarily attributed to an expected increase in construction employment related to the proceeding Voisey’s Bay Underground Mine Expansion Project.

- Producing mines in the province are highlighted in the table below:

<table>
<thead>
<tr>
<th>Operator</th>
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<tbody>
<tr>
<td>Vale Newfoundland and Labrador Limited</td>
<td>Nickel/Copper/Cobalt</td>
<td>Voisey’s Bay</td>
</tr>
<tr>
<td></td>
<td>Finished</td>
<td>Long Harbour</td>
</tr>
<tr>
<td>Iron Ore Company of Canada</td>
<td>Iron Ore</td>
<td>Labrador City</td>
</tr>
<tr>
<td>Tata Steel Minerals Canada Ltd.</td>
<td>Iron Ore</td>
<td>Ellinwood Lake/Menisek</td>
</tr>
<tr>
<td>Anaconda Mining Inc.</td>
<td>Gold</td>
<td>Pine Cove</td>
</tr>
<tr>
<td>Rambler Metals and Mining Canada Ltd.</td>
<td>Copper/Gold/Silver</td>
<td>Baie Verte</td>
</tr>
<tr>
<td>Atlantic Minerals Limited</td>
<td>Limestone/Dolomite</td>
<td>Lower Cove</td>
</tr>
<tr>
<td>Hi - Point Industries (1991) Ltd.</td>
<td>Peat</td>
<td>Bishop’s Falls</td>
</tr>
<tr>
<td>Trinity Resources Ltd.</td>
<td>Pyrophyllite</td>
<td>Manuels</td>
</tr>
<tr>
<td>Canada Fluorspar (NL) Inc.</td>
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<td>St. Lawrence</td>
</tr>
<tr>
<td>Galen Gypsum Limited</td>
<td>Gypsum</td>
<td>Coal Brook</td>
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<tr>
<td>Red Moon Resources Inc.</td>
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- As part of the Phase 3, The Way Forward: Building for Our Future, NR, in collaboration with the mining industry and community stakeholders, is developing a strategic framework for growing the provincial mining industry. Engagement sessions have been completed with specific stakeholders including Mining Industry NL, NL Prospectors Association, and other government departments. Broader consultation sessions will be completed by the first week of October and will be held in Labrador City, Happy Valley-Goose Bay, St. John’s, Springdale and Maryestown. NR is targeting a release of the Mineral Strategy, pending completion of aboriginal consultations, at the annual Mineral Resources Review being held November 1, 2018.

- On June 11, 2018, Vale announced that it will be proceeding with the Voisey’s Bay Mine Expansion Project. The project represents close to $2 billion in capital expenditures by Vale and will provide 16,000 person years of employment during the five years of construction, peaking at 4,800 person years in 2020. First ore is expected by April 2021.

- Tacora Resources Inc. has acquired the former Wabush Scully mine in Wabush, Labrador. In a Preliminary Economic Assessment (May 2018) the Company estimated a capital
expenditure of $210 million to reactivate the mine. Tacora has been released from environmental assessment and is currently attempting to raise capital.

- The Wabush 3 project, owned by the Iron Ore Company of Canada, was delayed due to a nine week work stoppage which ended on May 28, 2018. IOC plans to officially open Wabush 3 on September 25, 2018.

- Howse Minerals Limited, a subsidiary of Tata Steel Minerals Canada, has been given Mining Act approval for the Howse project in the Menihek area of Labrador.

- Red Moon Resources Inc. had its first shipment from the Ace Gypsum Deposit near St. George's in August 2018. The mine will employ 15 people on a seasonal basis with an initial production level of 100,000 – 250,000 tonnes per year ramping up to 300,000 – 450,000 tonnes per year. The life of the mine is expected to be 10 years.

- Alderon Iron Ore Corp. continues to advance the Kami project located in Labrador West. The Company expects to release a new Feasibility Study in Q4 2018.

- Projects in the advanced stages of exploration in the province are listed in the table below:

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Analysis:

- Over the past year, iron ore prices have fallen since peaking at US$79.90 per tonne at the end of February 2018. As of September 17, 2018, the price of iron ore is US$69.25 per tonne and the average price over the past month is US$66.82 per tonne.

- There exists increased demand for high quality iron ore in China as the country is dedicated to reducing its emission levels.

- Nickel prices have increased slightly over the past year peaking at US$15,750 per tonne in June 2018. As of September 17, 2018, the price of nickel is US$12,235 per tonne and the monthly average is US$12,363 per tonne.

- Copper prices have declined over the past year and as of September 17, 2018 sit at US$2.66 per pound.

Prepared/approved by: G. Taylor / A. Smith

Ministerial Approval: 29/9/18

September 17, 2018
Title: Mill Licence (ML-IOC-04) for Iron Ore Company of Canada under Section 5 of the Mining Act.

Decision / Direction Required:
- It is recommended that the Minister sign the attached Mill Licence (ML-IOC-04) for the Iron Ore Company of Canada’s Carol Project.

Background and Current Status:
- The Iron Ore Company of Canada (IOC) first began mining iron ore in the Menihek / Schefferville area of Quebec and Labrador in 1954, expanding to Labrador West in the early 1960s.
- IOC’s Carol Project, located in Labrador City, is the second largest iron ore producer in Canada and is the largest private employer in Newfoundland and Labrador with approximately 1,811 permanent employees working at the mine, concentrator, and pellet plant.
- IOC currently has six active mining areas: Luce Pit, Lorraine South Pit, Spooks Pit, Humphrey South Pit, Humphrey Main – Sherwood Pit and Moss Pit (Wabush 3).
- IOC has 1,348 million tonnes of proven and probable ore reserves and 1,016 million tonnes of measured and indicated resources. Approximately 55 million tonnes of ore and 45 million tonnes of waste are mined annually.
- IOC has long term plans to produce beyond the year 2075. The mine can produce up to 23.3 million tonnes of pellets and iron ore concentrate annually. The pellet plant has six production lines with a total capacity to process 14 million tonnes per year of concentrate to produce 12.5 million tonnes per year of pellets. IOC varies the proportion of its concentrate production made into pellets in response to market conditions.
- The Iron Ore Company of Canada (IOC) submitted an application for a Mill Licence renewal, dated July 23, 2018. The application for the Mill Licence was reviewed by Mineral Development and is acceptable.
- The mill will serve the processing requirements of the Carol Project which are held under IOC and Labrador Mining and Exploration Company Limited (LME) Mining Leases No.’s 10, 12, 13, 14 and 15.
- IOC is in compliance with the Mining Act with the exception of the Plateau Dolomite Quarry. IOC has received comments from Mineral Development on the development and rehabilitation and closure plans for Plateau Dolomite Quarry and is actively working towards re-submittal.
- Indigenous Affairs confirmed indigenous consultations are not required on the renewal of the mill licence.
Analysis:
- The application for the Mill Licence was reviewed by Mineral Development and is acceptable.

- Section 5 of the *Mining Act* requires the Minister to issue a Mill Licence to a lessee upon application. The issuing of a Mill Licence is a routine matter.

- The attached Mill Licence has been reviewed by the Departmental Solicitor.

Alternatives:
- Not applicable.

Prepared/Approved by: P. Philpott / A. Smith / P. Canning
Ministerial Approval: Received from Hon.

October 17, 2018
Decision/Direction Note
Department of Natural Resources

Title: Approval of the Iron Ore Company of Canada Development Plan Amendment for the Magy Pit Extension under section 6.(2) of the Mining Act.

Decision / Direction Required:

- It is recommended that the Minister approve the Iron Ore Company of Canada Development Plan Amendment for the Magy Pit Extension under section 6.(2) of the Mining Act.

- A letter approving the Development Plan is attached for the Minister’s signature. The letter has been reviewed by the Departmental Solicitor.

Background and Current Status:

- The Iron Ore Company of Canada (IOC) first began mining iron ore in the Menihek/Schefferville area of Quebec and Labrador in 1954, expanding to Labrador West in the early 1960s.

- IOC’s Carol Project, located in Labrador City, is the second largest iron ore producer in Canada and is the largest private employer in Newfoundland and Labrador with approximately 1,811 permanent employees working at the mine, concentrator, and pellet plant.

- IOC currently has six main active mining areas: Luce Pit, Lorraine South Pit, Spooks Pit, Humphrey South Pit, Humphrey Main – Sherwood Pit, and Moss Pit (Wabush 3).

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- The Magy Pit Extension was released from the Environmental Assessment Process on March 21, 2018.

- The Magy Pit Extension area (~30 ha) is related to the overall design of the Humphrey South Pit, in the Magy Pit area. The project targets the extension of the Magy Pit through an intense limonitic alteration zone along the strike of the orebody (ie to the south). This area was not included in the 2016 Development Plan for Wabush 3.

- The Magy Pit Extension contains 13.6 million tonnes of dominantly limonitic iron ore (~41.5% Fe) and 12.7 million tonnes of waste and overburden with an overall stripping ratio.
of 0.9. The deposit will be mined over a period of five years with the annual ore tonnage varying between 1.8 and 3.8 million tonnes per year.

- IOC has scheduled the start of development for Magy Pit Extension in Q4 2018. First ore is scheduled to be mined in 2019.
- The IOC Rehabilitation and Closure Plan is currently under review by Mineral Development. IOC will incorporate the Magy Pit Extension into the revision to this plan.
- IOC has not reported Mineral Reserves for the Magy Pit Extension, due to uncertainty regarding the metallurgical response of the highly altered material. The intense limonitic alteration zone however is reported as a Mineral Resource.

Analysis:

- A letter approving the Development Plan is attached for the Minister’s signature.

Alternatives:
- None

Prepared/Approved by: P. Philpott
Ministerial Approval: October XX, 2018