

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

- I PREPARED FOR:** Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources
- II ISSUE:** Meeting with His Honour Byron Mallott, Lieutenant Governor of Alaska, to discuss the protection of transboundary waters and the efficacy of the Statement of Cooperation.

Accompanied by: **Larry Hartig** - Environmental Conservation Commissioner
Gina Shirey - Local and Tribal Government Coordinator, Department of Environmental Conservation Division of Water
Heidi Hansen - Alaska Department of Natural Resources Deputy Commissioner
Richard Peterson – President, Central Council of the Tlingit and Haida Indian Tribes of Alaska
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Heather Gatti - Special Assistant to the President, Central Council of the Tlingit and Haida Indian Tribes of Alaska

III BACKGROUND:

The tailings storage facility failure that occurred at the Mount Polley mine heightened long-standing concerns in Alaska about British Columbia (BC) mine development along the border, which threatened to impact further mining development in northwestern BC.

On November 25, 2015 former Premier Christy Clark and Alaska Governor Bill Walker signed the *Memorandum of Understanding and Cooperation Between The State of Alaska and The Province of British Columbia* (MOU). The goals of the MOU are to strengthen cooperation between the two jurisdictions; to protect the environment, transboundary rivers and watersheds; and promote general economic development. The first part of the MOU is being implemented through a Statement of Cooperation (SoC) on the Protection of Transboundary Waters. The SoC was signed October 6, 2016 by former Minister of Energy and Mines Bill Bennett, former Minister of Environment Mary Polak, and Alaska Lieutenant Governor Byron Mallott.

The SoC is overseen by a Bilateral Working Group (BWG) of BC Deputy Ministers of Energy, Mines and Petroleum Resources and Environment, and Alaska department commissioners of Environmental Conservation, Fish and Game (DFG) and Natural Resources (DNR). In the first year of implementation of the SoC, the BWG met quarterly, and then will meet at least annually after that. The BWG oversees the three main components of the SoC:

1. Technical Working Group on Water Monitoring : Develop a process for collecting and sharing water quality data, from before, during and after mining and other industrial activity. There will be opportunities for collaboration among different agencies, Tribes,

First Nations, local governments, industry, organizations and others, in the collection of these data, observations and related information;

2. Joint Participation in Environmental Assessments (EAs) and Permitting: Formalize reciprocal procedures around the invitation and ongoing involvement of government representatives and technical staff in EAs and permit processes triggered by provincial or state law; and
3. Reporting on Mine Discharges, Operations and Closure: Identifying and sharing information on mine permitting non-compliance, design or construction deficiencies and threat or release of pollutants from mines.

The BWG met on December 16, 2016, January 26, 2017 and April 20, 2017 and most recently on October 5, 2017. The BWG approved the program description and two year monitoring plan submitted by the bi-lateral technical working group on monitoring, which has been initiated; the Reciprocal Procedures document on EAs and permitting submitted by senior Ministry of Energy, Mines and Petroleum Resources (EMPR) and Alaska Department of Natural Resources staff, which is being implemented; and the communications plan prepared by EMPR and Alaska DFG staff, which has led to the creation of a purpose-built website to facilitate access to relevant information and an inaugural newsletter to update interested parties on activities in the transboundary watershed region.

IV DISCUSSION:

BC Interests

Maintaining a positive and open working relationship with Lieutenant Governor Byron Mallott is important as softwood lumber and the North America Free Trade Agreement negotiations enter a critical phase.

The BC Intergovernmental Relations Secretariat recommends that all Ministers meeting with Lieutenant Governor Byron Mallott communicate the following:

- BC strongly values its relationship with the United States (U.S.) as its most important international partner.
- BC remains committed to working with the State of Alaska to enhance the protection of transboundary rivers and watersheds.

Financial Securities for Mines

The Ministry requires security at the time of mine permitting and regular review of the amount as conditions change throughout the life of the mine. The Ministry reclamation security practice seeks to provide reasonable assurance that the costs of mine reclamation work will not fall to the Province. Under the *Mines Act*, the Chief Inspector sets the financial security requirements at the permit stage, regularly reviews them during mine operations, and can adjust them as liability or other factors change, at any point during mine life. All mines operating in BC must deposit securities (bonds) with the government to minimize the risk of reclamation costs falling on provincial taxpayers in the case of default by a company.

BC-Alaska Cooperation to Protect Transboundary Waters

BC has a similar MOU with the State of Montana addressing transboundary water concerns related the Province's southeast coal mines, signed in 2010. To date, this agreement works very well. Other agencies, such as Environment and Climate Change Canada and the Canadian Environmental Assessment Agency, are interested in and support the BC-Alaska discussions, as they are already partners with BC in a number of monitoring programs for transboundary rivers and regularly participate in joint federal/provincial EAs.

As the BC-Alaska cooperative efforts continue, various letters to the United States State Department, written by United States Senators and Members of Congress, and to Prime Minister Justin Trudeau, written by environmental non-governmental organizations and other groups, are requesting that the United States and Canada invoke the provisions of the Boundary Water Treaty and determine whether a reference from the International Joint Commission would be a more suitable venue to address transboundary concerns relating to mining in BC. Canada is not inclined to support this request.

Ministry staff and Global Affairs Canada are collaborating to enhance confidence, both in Canada and in the United States, in the sustainable mining practices and oversight in BC. BC has made significant changes to how mining is done in the Province, including new policies, additional resources and funding to improve permitting processes and strengthen compliance and enforcement.

BC has completed a review of the health and safety portion of mining code review and made updates to the code based on the unanimous recommendations from the Code Review Committee, chaired by the Chief Inspector of Mines, which includes an equal number of representatives from First Nations, mine labour unions and industry. BC has also instigated major changes to the management and oversight of tailings storage facilities and has brought into force administrative monetary penalties regulations and related penalties for non-compliance with the *Mines Act* and Mining Code.

V CONCLUSION:

The MOU and SoC formalize opportunities for BC and Alaska to work together to enhance the protection of Transboundary River and watersheds along the border; thereby building upon and improving the cooperative relationship that currently exists between the two jurisdictions.

ATTACHMENT:

1. Tulsequah Chief Mine update
2. Biography for Byron Mallott, Lieutenant Governor of Alaska and attendees

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MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Correction to application of the Provincial Sales Tax within the point-of-purchase incentive under the Clean Energy Vehicle (CEV) Program.

III BACKGROUND:

The Clean Energy Vehicle (CEV) program includes a CEVforBC point-of-sale incentive for eligible plug-in electric and hydrogen fuel cell vehicles when purchased in B.C. The New Car Dealers Association of BC (NCDA) has administered the CEVforBC incentives on behalf of the Province since the Program's inception in 2011.

The Ministry of Environment and Climate Change Strategy managed the first phase of the CEVforBC incentive and provided incentives to 950 program participants from 2011 to 2014. The CEV Program was re-launched in April 2015 by the Ministry of Energy, Mines and Petroleum Resources (EMPR), and to-date has provided 3,854 incentives. EMPR implemented the CEVforBC incentive program in the same format as the first phase, offering \$2,500 for a plug-in hybrid vehicle, \$5,000 for a battery electric vehicle, and \$6,000 for a hydrogen fuel cell vehicle.

Throughout the life of the program, the CEVforBC incentive has been deducted from the manufacturers' suggested retail price (MSRP) on a pre-tax basis. The pre-tax application of incentives has been communicated by Provincial sources including all news releases and the 2016 Climate Leadership Plan. In addition, the NCDA-administered website for the CEVforBC incentive details the incentive applying "before tax".

In January 2017, the Ministry of Finance (FIN) became aware that CEVforBC incentive was being applied pre-tax. The Provincial Sales Tax (PST) was not in place during the first implementation of the CEV Program as this was the period of the Harmonized Sales Tax. Consequently, the tax application was not reviewed by FIN at the time. No request for a tax review was made upon the re-implementation of the PST or the re-launch of the CEV Program.

In April 2017, FIN staff contacted EMPR staff indicating that the CEVforBC incentive was not conforming to provincial tax law. The application of the incentive pre-tax has resulted in insufficient tax being paid on each vehicle purchase. The insufficient tax could include both PST and the federal Goods and Services Tax (GST).

Since the reintroduction of the PST on April 1, 2013, approximately \$15 million in rebates have been provided under the CEV Program. As a result, approximately \$1.05 to \$1.5 million in PST has not been paid as required.

The *Provincial Sales Tax Act (PSTA)* is clear that any rebate apart from one offered by an automotive manufacturer must be applied to the purchase price and not the pre-tax MSRP. The Province is unable to address the application of the GST as it is the responsibility of the federal government.

IV DISCUSSION:

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Section 19 of the FAA authorizes the Lieutenant Governor in Council to authorize a remission of any tax or penalty payable to the government, if the Lieutenant Governor considers remission to be in the public interest, and great public inconvenience, great injustice, or great hardship has, or is likely to, occur from the imposition of the tax or penalty.

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V CONCLUSION:

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**MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES
BRIEFING NOTE FOR INFORMATION**

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Ajax Mine Project: Update and Key Issues

III BACKGROUND:

The Ajax Mine Project (Ajax), proposed by KGHM Ajax Mining Inc. (KGHM), would be an open-pit copper-gold mine with a processing capacity of 65,000 tonnes of ore per day and an 18-year mine life. Ajax would be located just south of the City of Kamloops municipal boundary on private land owned by KGHM. Ajax would be located within the traditional territory of the Stk'emlupsemc te Secwepemc Nation (SSN).

KGHM states that Ajax would employ 500 full time positions during construction and operations. Ajax would have an initial capital expenditure of \$1.307B, and generate over \$285M in federal, provincial, and municipal tax, including over \$125M in mineral tax.

Ajax is undergoing a joint Federal-Provincial environmental assessment (EA). The Environmental Assessment Office (EAO) extended their 180-day review to align with the Federal EA timeline, which included a final public comment period on the joint EA report and draft provincial EA documents (concluded October 10, 2017). EAO anticipates referring Ajax to the Minister of Environment and Climate Change and the Minister of Energy, Mines and Petroleum Resources (the Ministers) in mid-November 2017.

The Province and SSN Chiefs signed an Ajax Government to Government (G2G) Framework Agreement on September 16, 2016 that sets out a framework and process for relationship building and collaboration between the SSN and the Province. The agreement included an EA Collaboration Plan co-developed by the EAO and SSN to create connections between the provincial EA and the SSN's Assessment Process.

SSN initiated their own assessment process in mid-2015, to review Ajax in accordance with SSN governance and Secwepemc laws. SSN's process involved a community panel of 46 SSN members; a panel hearing attended by the SSN and representatives, KGHM, and Provincial and Federal government representatives; and EA document review and comment. On March 4, 2017, SSN completed their process and announced that they oppose the Ajax project and that approval of the project would be contrary to UNDRIP.

IV DISCUSSION:

Key technical and public issues in the EA were air quality and human health, social and economic effects, wildlife and ecosystems, and the tailings storage facility safety. The EAO determined there would be significant adverse effects to Indigenous heritage, and to Indigenous fishing, cultural and ceremonial activities. EAO identified multiple residual

effects to other valued components and determined that, with mitigation measures set out in legally-binding conditions, these effects were not likely to be significant.

EAO received a very large volume of divided public comments during the review. Favourable comments included those related to job creation and economic benefits to Kamloops. Opposition centered around concerns regarding air quality, human health, and water quality, uncertainty in mitigation effectiveness, and effects to housing prices.

The City of Kamloops participated in the EA, which including retaining a consultant to do an independent review of Ajax. On July 17, 2017, Kamloops City Council voted to oppose the mine, and stated key concerns regarding air quality and health, community well-being, and costs to municipal infrastructure, services and housing development. The City has expressed interest in a municipal benefits agreement with KGHM, should the mine be built.

The SSN's key concern regarding Ajax is the potential impact to the Jacko Lake area, known as *Pipsell*, an SSN cultural keystone area. The SSN view impacts to *Pipsell* to be against Secwepemc laws. The SSN's related concerns include effects to water quality and quantity, fish and fish habitat, native grassland habitat, and archeological sites. The EAO concluded that Ajax would have impacts on SSN's Aboriginal rights to fishing, hunting, gathering, and spiritual/cultural practices, ranging from moderate to serious.

The SSN filed a title claim in 2015 that includes the Ajax project area. The SSN state that they are in the pre-declaration stage of Aboriginal Title, and a positive decision on Ajax by Ministers would constitute an infringement. The EA is not a rights-determining process.

The Province consulted with the SSN at the deep end of the *Haida* spectrum for the Ajax EA and developed measures to accommodate the SSN's interests during the Ajax EA. The G2G Agreement and associated EA Collaboration Plan reflect this approach to meeting the Crown's legal duty. Over 2016-2017, the Province made several attempts to negotiate an Ajax accommodations agreement with the SSN, which were ultimately unsuccessful.

On September 18, 2017, the SSN met with relevant Natural Resource Assistant Deputy Ministers (ADMs) to discuss the EA referral package. At that meeting, the SSN and ADMs agreed to build on the Ajax G2G structure to create an enduring engagement table with the SSN to work on key initiatives, such as water stewardship, land use planning and collaborative decision making.

Since this meeting, the SSN and BC have developed a draft organizational structure for the SSN caretaker G2G table and identified draft principles and projects for the SSN caretaker G2G table. BC will meet with the SSN in the next two weeks to prioritize the table's projects and have further dialogue on the table's principles and framework.

V CONCLUSION:

The EAO anticipates referring Ajax to Ministers for decision in mid-November 2017. MMPO will continue to inform the Minister of any emerging issues, and progress made at the G2G table with the SSN.

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**MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES
BRIEFING NOTE FOR INFORMATION**

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Federal decision with respect to Murray River Underground Coal Mine

III BACKGROUND:

HD Mining International Ltd. (Proponent) proposes to develop the Murray River Underground Coal Mine (Project) 12.5 km southwest of Tumbler Ridge, which would produce six million tonnes of metallurgical coal per year for a mine life of 25 years.

The Project was subject to a provincial environmental assessment (EA), which concluded in October 2015 that the Project could be developed in a way that no significant adverse effects are likely to occur, except on wetlands, forests, and rare plants and ecosystems. Ministers also concluded that the benefits from the Project outweigh the significant cumulative effects. A total of 24 conditions were established for development, including commitments on local workers.

The federal EA for the Project resulted in the conclusion, in October 2016, that the Project would result in significant cumulative adverse environmental effects on the Quintette herd of Southern Mountain Caribou, and on the current use of lands and resources for traditional purposes by Aboriginal peoples.

Under the *Canadian Environmental Assessment Act*, the Governor-in-Council (GIC) must make a separate decision on whether significant adverse environmental effects are justified in the circumstances. In the case of Murray River, the GIC is now considering this question, informed in large part by progress on the establishment of a caribou recovery approach in collaboration with the province and Treaty 8 groups.

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IV DISCUSSION:

Temporary Foreign Workers: The Project will use a mining method not currently found in Canada. Therefore, there is a lack of trained domestic workers currently available to enable construction and initial operations of the mine. To ensure there is a plan in place to transfer from reliance on foreign to local workers, the Proponent developed a

recruitment and training plan as part of their EA application outlining how they will transition from temporary foreign workers to workers from BC, once the Project gets underway. The current transition plan, which is a condition of the provincial EA Certificate, includes a target to replace 10 percent of the temporary foreign workforce each year with locally-sourced workers. The Proponent is committed to engaging with the Province to develop strategies leading to hiring skilled Canadian workers and developing a training program for underground coal mining to achieve that goal.

Section 11 agreement: The draft agreement released for public consultation on November 27, 2017 identifies recovery actions including range planning, habitat protection and restoration, as well as maternity penning and access control to sensitive caribou habitat. The agreement may limit surface mine development in certain areas, but it does not preclude the federal approval of underground coal mines in northeast BC.

Federal decision: On December 13, 2017 the federal Minister of the Environment and Climate Change announced the GIC decision to approve the Project, and issued an EA Decision Statement with 104 conditions, including proponent actions to support caribou recovery consistent with the section 11 agreement and in consultation with Treaty 8 First Nations.

Provincial permitting: The Ministry is coordinating the Mine Review Committee that is overseeing the development of provincial permits for the Project. Ministry staff are reviewing the federal decision and EA conditions, and working to incorporate these conditions into provincial permits (where appropriate). Permits are expected to be referred to statutory decision-makers in March 2018.

Consultation with First Nations during provincial permitting: Treaty 8 First Nations have engaged in Project permitting discussions under the Regional Coal Agreements. Engagement has occurred through a First Nations Independent Technical Review (FNITR) committee established and funded by the Proponent, as well as through the Mine Review Committee. ^{s.16}

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V KEY MESSAGES:

- The province will be ensuring HD Mining continues to meet all of the conditions of its BC EA Certificate, including the conditions that will ensure a transition from reliance on temporary foreign workers to locally-sourced employees.
- The Proponent is committed to engaging with the province to develop strategies leading to hiring skilled Canadian workers and developing a training program for underground coal mining to achieve that goal.

- The province worked with the federal government and Treaty 8 First Nations to establish an effective caribou recovery strategy with measures to enable the Murray River Project to be approved under the *Canadian Environmental Assessment Act*.
- The Ministry has established a Mine Review Committee and is overseeing the development of permits for the Project. While the proposal is for an underground mine, permit conditions will include measures to monitor and mitigate the impact of mining, including subsidence, on surface habitat.
- Treaty 8 First Nations have been engaged in permitting discussions with the province and with the Proponent. Ministry staff will meet with Treaty 8 First Nations in January 2018 to ensure that First Nations concerns are considered in the draft permits under development.

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Appendix 3: Options for an Independent Oversight Unit

Executive Summary

The Ministry of Energy, Mines and Petroleum Resources (EMPR) has been mandated to “increase industry safety by establishing an independent oversight unit.” This discussion paper reflects the views of a selection of senior mines inspectors and regional directors tasked with considering how this mandate commitment could be achieved through organizational restructuring. At the staff level no unanimous agreement on the optimal structure and functions for an independent oversight unit was reached based on this work.

The establishment of an Independent Oversight Unit is a partial response to the concerns raised by the Office of the Auditor General regarding the effectiveness of the compliance and enforcement of the mining sector and the risk of regulatory capture. The establishment of an Independent Oversight Unit would be one of multiple actions taken by the Ministry to address these concerns.

Reviews of other agencies and other jurisdictions showed that all organizations have separate permitting and compliance and enforcement (C&E) functions within the same agency. None of these organizations also have a health and safety mandate. All agencies note it is critical that the permitting staff and compliance staff are well integrated and work together to ensure successful regulatory oversight.

EMPR and the Health Safety and Permitting Branch has a unique function within the natural resource sector agencies of the Province, that being the regulatory oversight for health and safety of workers in the industry. Currently all Mines Inspectors within the branch, regardless of their specialty, have a duty to consider health and safety and this makes a significant contribution to the fact that mining is one of the safest heavy industries in the province.

Discussions within the Ministry have focused on the implications of the changing roles of inspectors, particularly if there is separation of permitting and compliance and enforcement roles. It raises concerns as to the effectiveness of permitting decisions and the efficient use of staff. Changes to roles and responsibilities and structure require a well-planned and deliberated change management approach.

Options and high level implications are shown in the table below. The report provides additional background, discussion and more fulsome descriptions of the pros and cons of the options. The Appendices also provide initial high level organization charts for each option that show reporting relationships of the various functions. This is to help visualize the potential future organization and the level of change from the current state.

Staff recommends a staged change approach to implementation of the independent oversight unit.

Overview of Options

Option	Independent Oversight Provided by:	Core Functions of C&E Unit (bold text indicates addition of function from previous option)	Positive Aspects	Risks
1	Compliance and Enforcement Unit within the Health Safety and Permitting Branch	C&E policy direction Training, quality assurance and control Risk-based compliance verification planning Investigations <i>Note: no change in roles/responsibilities of inspectors</i>	Least disruptive and allows EMPR to expedite benefits of ongoing improvements in staffing, training and operational policies Strengthened quality assurance within the Branch.	Requires organizational discipline and resources to keep appropriate balance between authorizations and C&E Does not appear as an independent unit to external parties
2	Compliance and Enforcement Branch under direction of a separate Executive	C&E policy direction Training quality assurance and control Risk-based compliance verification planning Investigations High priority or reactive inspections Compliance specialist support for inspectors Complex C&E issues management <i>Note: no change in roles/responsibilities of existing inspectors</i>	Separate executive provides additional accountability and responsibility for C&E functions in the Ministry Includes specialist staff focussed on compliance verification activities Provides separation of serious/complex enforcement actions from permitting decision makers	Executive responsible for C&E is not responsible for all C&E staff. Change management is required
3	Staff dedicated to compliance and enforcement separate from staff assigned to permitting. Branches renamed in new structure.	All functions from Options 1 and 2 above. All mine inspections and C&E activities <i>Note: dual role of inspectors completely eliminated</i>	Allows predetermined allocations of resources to each function Staff have a narrower scope of duties allowing them to remain focussed on core priorities and expertise required	Less efficient use of staff Requires more intensive change management with staff Will take longer to realize benefits May require legislative changes
4	A Mining Commission established to regulate the industry based on legal and regulatory requirements set by government	Full regulatory spectrum shifted from EMPR to commission *requires definition of internal structure	Increased options for funding, governance and structure Regulatory oversight distinctly separate from the Ministry responsible for the promotion and policy functions	Cost recovery from industry can be perceived as creating obligation to industry Large change effort that would take a long time to implement Significant supporting legislation changes required

Background

The mandate direction and the options considered in this discussion paper are in part due to the concerns raised by the Office of the Auditor General in 2016 regarding the effectiveness of the compliance and enforcement of the mining sector and the risk of regulatory capture. The establishment of an Independent Oversight Unit would be one of multiple actions taken by the Ministry to address these concerns.

A number of actions have been taken since the Office of the Auditor General's (OAG) report was released in May 2016 including:

- Increased staffing of the Mines Inspectorate and the establishment of a C&E Branch with dedicated policy, coordination and investigative roles;
- Developing C&E policy, guidance and training for staff;
- Introducing a new Administrative Monetary Penalties (AMP) regime; and
- Increasing transparency of mining oversight including making applications, permits and inspection reports available on a joint website for major mines with Ministry of Environment and the Environmental Assessment Office.
- Involvement of EMPR in the wider Aboriginal Liaison Committee initiative, to formalise the pilot programs;
- Established joint inspection pilot programs with selected First Nations, thus increasing levels of scrutiny, transparency and accountability to external parties;
- Commissioned Ernst and Young, a leading auditing firm with experience and knowledge of the mining industry worldwide, to undertake an in-depth examination of reclamation securities practices.

These actions are addressing the indicators and risk of regulatory capture, as outlined by the OAG. Work is ongoing to ensure these risks are addressed.

These actions have improved EMPR's systems and capacity to oversee the sector and mining remains one of the safest heavy industries in BC¹.

These actions have improved EMPR's systems, transparency and capacity to oversee the sector.

Staff Engagement related to Independent Oversight Unit

Senior staff within the Health, Safety and Permitting Branch and Compliance and Enforcement Branch were engaged in the development of background information and assessment of options for structuring of an independent oversight unit. This includes the Chief Inspector of Mines, Deputy Chief Inspectors, Regional Directors, managers and senior inspectors. From this engagement, each team put forward a representative to participate in a small working group to further discuss and define the pros and cons of each option.

The paper reflects four options for implementation of an independent unit. Within each option there are a number of organizational structures that could be implemented. The working group did not reach a

¹ In 2016, the injury rate for mining (based on the number of claims per 100 estimated person-years of employment) was 0.8 compared to 4.9 for forestry and 3.5 for heavy construction. The WorkSafe provincial average was 2.2.

unanimous decision on a preferred option or on a preferred structure within the options, as such there are no organizational charts or recommendations included in this paper.

Existing Organizational Structure

There are currently three Branches within the Mines and Mineral Resources Division of EMPR that provide for industry regulatory oversight. Each are described below with consideration of how their functions could be adapted to varying models of independent oversight.

Health, Safety and Permitting Branch (HSP Branch)

The HSP Branch is responsible for all aspects of regulatory oversight of the mining and mineral exploration industry as set out in the *Mines Act*. Regulatory oversight includes: ensuring protection of health and safety of workers, public and the environment by setting conditions of authorizations (permits), conducting permitting and compliance requirements education to industry, compliance verification and enforcement when non-compliance is found.

The Health, Safety and Permitting Branch (HSP Branch) is led by the Chief Inspector of Mines (Chief Inspector) who is designated by the Minister of Energy and Mines pursuant to Part 3 of the *Mines Act*.

Staff within the HSP Branch maybe appointed as Inspectors of Mines (Inspectors) by the Chief Inspector of Mines. Currently, Inspectors are broadly separated into disciplines related to health and safety and those related to environment. Some disciplines cross these categories (i.e. geotechnical engineering). Regulatory oversight functions are separated by provincial specialists who work across the whole province and regional experts who focus on one of EMPR's five regions.

Unique Function related to Health and Safety Regulatory Oversight

EMPR and the Health Safety and Permitting Branch has a unique function within the natural resource sector agencies of the Province, that being the regulatory oversight for health and safety of workers in the industry. Currently all Mines Inspectors within the branch, regardless of their specialty, are expected to consider and address concerns related to health and safety when they are observed. This makes a significant contribution to the fact that mining is one of the safest heavy industries in the province.

Inspectors who specialize in health and safety are focused on compliance promotion, compliance verification and enforcement actions. These specialists provide technical review of very specific components of permit applications to ensure that mine plans will be compliant with regulatory requirements.

Impacts to the capacity to regulate industry health and safety will need to be considered in all options, especially if there is shift to separate permitting and C&E functions.

Dual Role of Permitting and Compliance and Enforcement

Many Inspectors have a dual function of permitting and compliance and enforcement (C&E) under the *Mines Act*. They balance their time between application reviews for permitting, compliance verification (inspections and document review) and enforcement activities (issuance of orders, recommendation of administrative penalties).

Mines Act permitting involves setting mine-site specific regulatory standards (i.e. permit conditions) established through detailed technical review of applications. The dual function approach provides the

benefit that those technical experts drafting the permit conditions have the context behind a given condition when verifying compliance. As well, the field C&E component provides the ability to observe and understand the development of the activity that the Inspector has permitted, since projects are not static, they develop over time and require continual regulatory control of new activities through permit amendments. Both First Nations and industry recognise and support the importance of a decision maker being familiar with the physical and cultural landscape in which the activities are happening.

Compliance and Enforcement Branch (C&E Branch)

The C&E Branch is currently structured to provide overall C&E related policy direction, complex non-compliance issues management and tracking, increased interagency coordination, quasi-criminal investigations and training to the mines inspectorate. This branch was established in mid-2016 and its structure and core function continues to be under development. Currently the C&E Branch does not provide for increased compliance verification, instead focussing on ensuring that the HSP Branch has the tools and support needed to conduct that activity.

Mineral Titles Branch

The Minerals Title Branch is responsible for all aspects of regulatory oversight of the mining and mineral exploration industry as set out in the *Mineral Tenure Act*. This branch has two Mineral Tenure Inspectors, who are also cross-appointed as Inspectors of Mines. The inspectors in this branch provide field-based compliance verification for a small proportion of the overall mineral tenures issued by the province. This branch conducts a number of office-based administrative regulatory oversight functions such related to reporting requirements for tenure holders.

The Mineral Titles Branch is led by the Chief Gold Commissioner, who is the statutory decision maker for decision, including enforcement actions, under the *Mineral Tenure Act*.

Jurisdictional Scan of C&E for Mining Industry Regulatory Oversight:

All organizations reviewed have separate permitting and C&E functions within the same agencies (Appendix 1). For example, in Ontario, the Ministry of Northern Development and Mines has a Mineral Exploration and Development Section that issues permits and a Mine Rehabilitation, Inspection and Compliance Section that undertakes C&E. The two sections are accountable to different managers that report to a Director. Quebec's Environment Ministry (which authorizes mine construction and operation) separates the functions at a high seniority-level with an ADM of Environmental Evaluations and Authorizations (permitting) and an ADM of Environmental Control and Dam Safety (C&E). The BC Oil and Gas Commission (OGC) separates the functions at the Executive Vice President level.

Operationally, regardless of the organizational level at which the separation between permitting and C&E occurs, all agencies note it is critical that the permitting staff and compliance staff are well integrated and work together to ensure successful regulatory oversight. Key collaboration approaches include ongoing discussions between permitting and compliance staff at all project phases, the ability to have permitting staff present during inspections, involvement of both groups in compliance planning and strategy meetings. Currently the OGC is undertaking a project to better ensure integration of regulatory oversight activities across its business areas, in recognition that complete separation or silos for permitting, compliance and enforcement, does not lead to the most effective outcomes.

Risk of Regulatory Capture

The OAG indicated that EMPR may be at risk of regulatory capture based on eight risk factors. These factors require a number approaches to ensure the risk is mitigated including organizational structure as well as clear legislation, adequate resourcing and clear policies, procedures and training for staff. The organizational structure will not, on its own, address the risk of regulatory capture.

Discussion

Options for establishing an independent oversight unit

Option 1: HSP Branch includes C&E operational support

In this option independent oversight exists in the structure of the HSP Branch as a C&E unit. This unit provides clear support and expertise related to compliance and enforcement component of regulatory oversight under the existing structure of the Mines Inspectorate.

Within the current structure, the Health, Safety and Permitting (HSP) Branch houses the Mines Inspectorate. Inspectors are responsible for the full spectrum of regulatory oversight in accordance with internal training, policies and procedures, regulations and legislation that guide their work. Specific responsibilities include First Nations engagement, setting regulatory requirements through permitting, compliance verification (inspections) and enforcement, and education for industry and First Nations. Inspectors are technical experts in disciplines related to health, safety and the environment. Inspectors in this branch are responsible for compliance verification activities informed by risk-based planning.

The C&E unit within the HSP Branch provides internal policy direction for C&E activities, training for the Mines Inspectorate, risk-based planning of compliance verification activities, and internal quality assurance for the Mines Inspectorate. This unit would be expanded to include compliance specialists who are technical experts with Inspector authority that are responsible for ensuring trend analysis informs risk-based planning across the Mines Inspectorate, as well as providing expertise in relation to complex C&E related issues. This unit houses an expert quasi-criminal investigations team that is responsible for conducting investigations under the *Mines Act*. This unit ensures that inspection findings and enforcement actions are reported publically.

Pros:

- This structure results in the least amount of disruption from current duties for staff, allowing them to continue to focus on permitting and compliance.
- More efficient use of financial and human resources by avoiding separate field trips for staff involved in permitting, compliance verification and early stage enforcement,
- Specialist technical staff involved in permitting then use detailed knowledge of permit conditions for compliance verification. Ensures specific resourcing and specialized expertise for investigations under the *Mines Act*.
- Implementation of this option could begin immediately

Cons:

- Retains the same vulnerability as current structure in terms of de-emphasizing C&E when resources are stretched (same staff still undertaking permitting and C&E and forced to prioritize).
- May not address OAG concerns regarding the potential conflicts that arise with dual permitting and C&E functions.
- May not meet mandate letter commitment to establish independent oversight unit

- No clear separate accountability at Director level for permitting and inspection functions.
- The C&E unit does not have direct accountability for industry compliance because the focus of this unit is support to the HSP Branch.
- Leaves BC out of step with other jurisdictions

Option 2: Separation of executive reporting lines

In this option the independent oversight unit is located outside of the Health, Safety and Permitting Branch as the Compliance and Enforcement Branch within the Mines and Mineral Resources Division to ensure structural separation from permitting decisions.

This option creates a separation between the C&E function and the Chief Inspector of Mines. The Health, Safety and Permitting (HSP) Branch houses the Mines Inspectorate. Inspectors remain responsible for the full spectrum of regulatory oversight. The Compliance and Enforcement (C&E) Branch provides internal policy direction for C&E activities, training, risk-based planning of compliance verification activities, and internal quality assurance for the Health, Safety and Permitting Branch.

This unit would include compliance specialists who are technical expert inspectors, whose core responsibilities include risk-based planning to inform inspection priorities of the HSP Branch, conduct of high priority and reactive inspections, expertise to address complex C&E issues referred from the Mines Inspectorate. This branch also has the expertise to conduct quasi-criminal investigations, provide internal quality assurance and continuous improvement reviews of the HSP Branch, and ensures inspection findings and enforcement actions are reported publically.

The key difference between option 1 and 2 is that the C&E Branch functions as a separate branch and has a direct accountability for compliance verification and enforcement activities. This structure creates executive director level accountability. This structure includes inspectors in both branches and maintains the dual function of permitting and compliance verification in the HSP branch.

Pros:

- This structure increases organizational focus on C&E as a critical component of regulatory oversight and ensures that some staff have compliance verification as their core job function.
- This organizational structure establishes senior staff-level accountability for oversight activities.
- Supports an increased focus and priority on inspection follow-up to ensure that outstanding and long-term compliance concerns are proactively addressed.
- A centralized quality assurance function would allow for internal assessment and continuous improvement.
- Efficiencies in financial and human resources remain in place as some inspectors keep their dual role of permitting and compliance verification.
- Provides for increased independence from permitting decisions by separating accountabilities for planning and conducting C&E activities.
- This structure is more similar other Natural Resource agencies and supports increased coordination of compliance activities.
- Ensures specific resourcing and specialized expertise for investigations under the *Mines Act*.
- This structure results in relatively minimal disruption for current staff.
- Implementation could begin quickly following confirmation of budget.

Cons:

- Retains a vulnerability that C&E could be reduced when resources of permitting staff are stretched (same staff still undertaking permitting and C&E).

- May not fulsomely address OAG concerns regarding the potential conflicts that arise with dual permitting and C&E functions.
- May not meet mandate letter commitment to establish independent oversight unit if the intent is complete separation from permitting.
- Legislative change could be required to establish full independence from the statutory authority of the Chief Inspector of Mines.
- Leaves BC out of step with other jurisdictions and BC natural resource agencies.

Option 3: Functional and Organizational Separation of Roles

In this option the existing structure is reorganized to establish both functional and organizational separation of accountabilities between permitting and C&E. Independent oversight is achieved through full separation of the job functions at the staff level. The dual role currently held by permitting inspectors is eliminated. There would be multidiscipline dedicated staff who perform regulatory control through authorizations (for both Regional and Major Mines) and multidiscipline dedicated staff that ensure compliance with the Mines Act, Code and permits (i.e. compliance verification and enforcement).

This functional separation of roles results in a number of options for organizational structure. The key changes for the HSP branch are that the staff responsible for permitting now have that as their core job function. Permitting staff are no longer attending mines for the purposes of inspection, but they do require authority to conduct pre-permitting site visits. These staff require strong technical expertise and knowledge of the mining industry to support review and decision making for permits. The function of health and safety inspectors remains the same.

Pros:

- Separate dedicated resources for permitting and compliance verification and enforcement to ensure that all functions are resourced to meet predetermined risk-based goals.
- Dedicated C&E staff will not be asked to reprioritize to focus on permitting as this is not part of their role.
- Strongly supports clarity of roles.
- Supports an increased focus and priority on inspection follow-up to ensure that outstanding and long-term compliance concerns are proactively addressed.
- Easier to explain to public and stakeholders how post approval regulatory oversight is independent from permitting
- Supports continuous improvement in establishing clear, enforceable permit condition as C&E inspectors can provide feedback on the adequacy and enforceability of the conditions
- Permitting staff could have more time for engagement with First Nations and stakeholder when making permitting decisions if needed.
- This does not preclude permitting staff from participating in field visits or inspections with C&E Inspectors to ensure provision of specific technical expertise is continued.
- Is consistent with other jurisdictions that separate permitting and C&E
- Separation of permitting and C&E would likely be seen as going further than options 1 and 2 in addressing OAG concerns

Cons:

- Separating the ministry's permitting and C&E functions would require more staff, all having the same technical knowledge to ensure knowledge of mining operations currently held by permitting inspectors can be transferred to C&E inspectors.
- May reduce permitting staff ability to conduct field visits, leading to a reduction in understanding of mine operations and conditions.
- Delays in resolution of time sensitive health and safety and environmental issues may occur if these are identified during field visits by permitting inspectors who lack authority for issuing orders which is considered a compliance and enforcement function
- Risk of silos and insufficient communication between permitting and C&E staff could lead to reduction of effective regulatory oversight.
- Negative impact on staff morale for those who become solely focussed on permitting due to loss of job variability. This could impact delegated authorities and pay.
- Loss of experienced technical staff due to poor job satisfaction will reduce regulatory capacity.

Option 4: Mining Commission (combined with Oil and Gas Commission)

In this option contemplates creation of a Mining Commission established to regulate the mining industry based on legal and regulatory requirements set by government and which is distinctly separate from the Ministry (EMPR) responsible for the promotion of the industry.

The integration of a Mining Commission with the existing Oil and Gas Commission could be a cost effective option to develop a commission based mining regulatory system. The combined BC Oil, Gas and Mining Commission (Commission) would be an independent, single-window regulatory agency with responsibilities for overseeing oil, gas and mining operations in British Columbia, including exploration, development, operation, and reclamation. The Commission's core roles would include reviewing and assessing applications for industry activity, consulting with First Nations, ensuring industry complies with provincial legislation and cooperating with partner agencies, such as the Environmental Assessment Office (EAO).

This would leverage the OGC existing corporate structure and support services while aligning with similar regulatory functions, such as authorizations and compliance activities. The development of the internal organizational structure would require input and detailed discussions with OGC prior to a decision. Significant supporting legislation changes would be required to enable integration into the Oil and Gas Commission or the creation of a separate Mining Commission at a later date.

Pros

- Most clearly addresses OAG recommendation for separation of C&E from the Ministry.
- Separation of authorizations and compliance and enforcement can occur at the Vice President level, enabling a clear accountability at a senior level for those activities.
- Could also achieve the Ministers mandate to "Develop an improved and properly resourced approvals process to assess mining applications" because the approvals function would also be part of a commission.
- Independent technical agency, separating the promotion of the industry from its regulation.
- Fiscally responsible, as various funding mechanisms can be applied including an industry levy.

- The budget and resourcing can better reflect the industry risk and activity level, and not compete with fiscal budgetary decisions on social requirements such as health care and education
- The combined Commission will be able to assign resources to where they are needed most to better weather cycles and seasonality in both sectors
- Headquarters staff will be able to manage tracking and external reporting requirements for both sectors more efficiently than possible for separate organizations
- Leverage existing OGC IT systems
- Leverage OGC union agreement to allow for higher wages and overtime wages better aligned with the industry that the Commission regulates
- More efficient regulatory regime that minimizes duplication
- Improved ability to engage directly with First Nations on mining activities, rather than relying on partner ministries to provide this function as is done currently
- The experience gained in each sector may be applied to create solutions in the other sector

Cons

- Legislative changes required for the Mines Act as well as legislated delegation to make decisions under many different legislations (Environmental Management Act, Forest Act, Water Sustainability Act, Heritage Act, Lands Act, Agricultural Land Commission Act)) this is a challenging multi-party process that could take several years.
- Set up and transition costs, as well as loss in productivity during the transition
- Change of funding mechanism to a levy could be seen as negative by both public and the industry.
- Recognizing that the activities of the Commission will be funded by the two sectors, it will be necessary to track the allocation of shared resources closely for reporting purposes
- The mining/exploration industry has a significant proportion of small scale operations, many of which in the mining/exploration industry would view a Commission levy prohibitive to small operations and grass roots exploration.
- The general public does not necessarily understand that a commission is removed from the politics of government.
- May create pressure to remove health and safety aspects from Ministry mandate to be consistent with OGC approach – OAG does not regulate health and safety.
- First Nations consultation and ever evolving legal obligations is more complicated for the Non-Treaty FN's across the Province than for the Treaty 8 FN's. Also, the current OGC model uses a significant portion of the resources from fees collected from Proponents to pay for consultation agreements with FN's which increase every time they are renegotiated. FN's now across the entire province would expect this level of financial contribution if they are engaging with the a new OGC/Mining Commission.

Implementation

The four options presented above require substantially different levels of effort and resources to implement. While significant effort and resources are required to implement Option 2 or 3, this work can begin immediately. Option 4 requires substantial additional research, legislative change, policy development and consultation prior to implementation. This option also requires that the internal organizational structure be defined such that the work of Option 2 or 3 is still required.

In consideration of the above, it is suggested that implementation of an independent oversight unit within EMPR is an appropriate step following a decision on the available resources. It is recommended that the effectiveness of this unit be assessed following time for implementation including hiring and training of new staff as well as at least one inspection season. This would also allow time to review legislation, consult with industry and First Nations, and further research a commission structure. Following the effectiveness assessment, it may then be appropriate to consider a more drastic change such as moving regulatory oversight of the mining sector into a commission or other structure.

Change Management

Discussions within the Ministry have focused on the implications of changing the roles of inspectors, particularly if there is separation of permitting and compliance and enforcement roles. This would be a significant change in how Mines Inspectors view their role and how authorities under the Mines Act are distributed. It raises concerns regarding the effectiveness of permitting decisions if there is a lack of operational and site knowledge and at the same time is there an efficient use of staff, if there are multiple staff having to travel to a site to carry out their duties. It also raises concerns about the collective capacity to inspect and address the health and safety requirements, especially on smaller regional mine sites.

If the decision is to make a significant structural change, it requires a well-planned and deliberated change management approach and recognition that it will impact performance levels for a period of time. As with most major change initiatives, certain staff will embrace it and others will be dissatisfied to the point of choosing to leave the organizations. This is particularly difficult to manage when there has been a significant and ongoing change in the organization that is recognized to lead to change fatigue.

APPENDIX 1: Review of permitting and compliance relationship in other jurisdictions

Agencies reviewed

- BC agencies
 - BC Ministry of Environment and Climate Change Strategy,
 - BC Environmental Assessment Office, and
 - BC Oil and Gas Commission
- Nova Scotia (mining)
- Ontario (mining)
- Quebec (mining)
- Canada National Energy Board (energy)
- US Environmental Protection Agency (environment)
- Queensland (mining)

Findings:

- In all cases, the permitting/authorizing agency is also responsible for ensuring compliance with the permit/authorization it issues (Same ministry or department)
- Unlike EMPR, all agencies reviewed have separate accountabilities for the permitting/authorizing function and the compliance and enforcement function.
 - Some separate the accountabilities at the manager level (a manager of permitting and a manager of compliance reporting to same director)
 - Some separate at the executive level (ADM of permitting and an ADM of compliance)
- Agencies reported that communication/collaboration between the permitting staff and the compliance staff was effective in addressing possible compliance gaps
 - Collaboration approaches included:
 - Informal discussions between permitting and compliance groups, including pre-authorization,
 - Ability of compliance staff to request attendance of permitting staff on inspection
 - Ongoing general meetings between permitting and compliance staff to ensure effective process
 - Key deliverables:
 - Review process for draft permit/authorization (review by compliance group prior to issuance),
 - Compliance plans prepared by permitting group to aid compliance activities.

Examples of permitting and C&E structure in other agencies

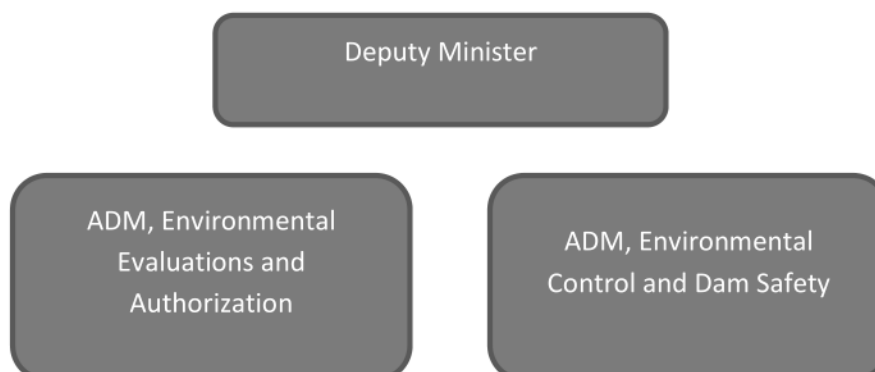
BC (*Oil and Gas Commission*)

BC Oil and Gas Commission permitting takes place under the Vice President, Applications. C&E activities fall under the Vice President, Operations.



Quebec (*Ministry of Sustainable Development, Environment and the Fight against Climate Change*)

Quebec's environment ministry authorizes mine construction and operation. The ministry separates the permitting function and the C&E function at a senior level with an ADM of Environmental Evaluations and Authorizations (permitting) and an ADM of Environmental Control and Dam Safety (C&E).



Ontario (*Ministry of Northern Development and Mines*)

The Ministry of Northern Development and Mines has a Mineral Exploration and Development Section that issues permits and a Mine Rehabilitation, Inspection and Compliance Section that undertakes C&E. The two sections are accountable to different managers that report to the same director



**MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES
BRIEFING NOTE FOR INFORMATION**

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Next steps in establishing independent oversight unit for mines

III BACKGROUND:

The Minister of Energy, Mines and Petroleum Resources (EMPR) has a mandate to: *Develop an improved and properly resourced approvals process to assess mining applications, and increase industry safety by establishing an independent oversight unit.*

Two phases are proposed to fully implement both aspects of the mandate direction.

With respect to independent oversight, the attached discussion paper (Appendix 3) reflects the results of a review of the organizational structure of other natural resource agencies in BC, other mining jurisdictions, as well as extensive engagement with the mines inspectorate. The paper presents the views of representative senior mines inspectors, regional directors and the Chief Inspector's office on how to establish an independent oversight unit. The discussion paper sets out four options. Engagement with industry, indigenous communities and environmental non-governmental organizations (ENGOS) would occur during phase 2 outlined below.

IV DISCUSSION:

s.12,s.13

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Appendix 1: Two phases to a world class mining regulator
Appendix 2: Independent Oversight Unit implementation plan
Appendix 3: Options for an Independent Oversight Unit

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s.12;s.13

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Ministry of Finance proposed amendments to the *Petroleum and Natural Gas Act* to implement Petrinex

III BACKGROUND:

The Ministry of Finance (FIN) is moving administration of revenue programs to a single platform called GenTax as part of its Revenue Transformation Initiative (RTI). The RTI is entering its final phase, Oil and Gas Revenue. By late 2018 GenTax will be used to calculate and bill of oil and gas royalties.

As part of the RTI project, BC has committed to joining Alberta's Petroleum Information Network (Petrinex), an online system which will be used by industry to submit information for the calculation of royalties. Petrinex is used by both Alberta and Saskatchewan to manage oil and gas information reporting. s.13

The Ministry of Energy, Mines and Petroleum Resources (Ministry), the Oil and Gas Commission (OGC) and Industry have been involved in the design of Petrinex for BC. The FIN draft RFL has been reviewed by Ministry staff.

IV DISCUSSION:

s.13

V CONCLUSION:
s.13

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✓
✓

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: National Energy Board Hearing re: NOVA Gas Transmission Ltd.
Application to Vary the North Montney Pipeline Project

III BACKGROUND:

In 2015 the National Energy Board (NEB) approved the North Montney Pipeline Project (NMML), a ~300 kilometer (km) pipeline and related components that would traverse the prolific North Montney gas play to gather new natural gas production and connect to the NOVA Gas Transmission Ltd. (NGTL) system, 35 km southwest of Fort St. John.

The original NEB certificate for the NMML was conditioned on Progress Energy Canada Ltd. (Progress) moving forward with a final investment decision related to the Pacific Northwest LNG (PNWLNG) project. This condition reflected the commercial structure that originally underpinned the NMML application designed to both supply natural gas for Liquefied Natural Gas (LNG) export and to reach North American markets through the Alberta system.

In March 2017, NGTL applied to the NEB for variances to conditions of the proposed NMML. The variance would enable the pipeline project to proceed without LNG and with new commercial underpinnings. In July 2017, PNWLNG officially announced it would not proceed with its LNG project.

NGTL has restructured its commercial arrangements for the project with the original four producers (including Progress) along with seven new customers. All customers have signed 20-year commercial transportation agreements that will move natural gas from BC onto the Alberta NGTL system starting November 2019 (Appendix 1). The committed customers represent a daily volume of 1.5 Bcf/day.

The variance is being requested for a subset of the original application as NGTL plans to complete the 182 km Aitken Creek Section and related facilities but only advance 24 km of the northern Kahta Section (originally 119 km). The number and locations of meter stations (tie-ins) has also changed but all are within the currently approved right-of-way. Thus, the overall footprint of the project has been reduced.

In September 2017, the NEB issued a letter that it will hold a hearing regarding the variance application. The Ministry of Energy Mines Petroleum Resources (EMPR) is an intervenor in the hearing along with 35 other parties; four other parties were granted

commenter status. EMPR has been monitoring the proceedings to date, reviewing information requests and analyzing evidence submitted by all parties.

By December 15, 2017, EMPR must indicate to NEB whether it intends to put forward a final argument and whether it will be presented orally - at the hearing, or in writing. The oral hearing begins January 22, 2018 and the final argument is due at this time.

IV DISCUSSION:

s.16

Evidence filed by parties falls into one of three camps. The first camp proposes that the proposed tolling creates a competitiveness issue. Enbridge (a competing pipeline) is against the proposal and feels it cannot compete and will not be able to attract natural gas supplies to its system in the future. Alliance pipeline has been silent and in the past has not shared this view. s.16

The second camp is the producers who have filed evidence supporting the need for the project saying they need access to market as all pipelines are fully contracted. This evidence shows that producers to date have readily signed up with all three of the major pipeline companies when expansion opportunities occur (countering Enbridge's complaint of not being able to attract supply). These parties are Black Swan and Progress Energy as well as Saguaro Resources, who filed a letter of comment.

The third camp is First Nations who argue strongly that resource development that comes with this pipeline and all resource development creates hardship for their way of life because of the cumulative effects. This pipeline to them means more roads, more wells, and more gas plants and related impacts. Evidence filed came from West Moberly First Nations, Blueberry River First Nations, Sauteau First Nations and Doig First Nations.

NGTL has provided strong evidence in its application of the need for the pipeline without LNG. s.16

s.16

V NEXT STEPS:

s.14,s.16

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Appendix 1: List of NMML Customers

Progress Energy Canada Ltd.	Kelt Exploration (LNG) Ltd.
Aitken Creek Gas Storage ULC	Painted Pony Petroleum Ltd.
Arc Resources Ltd.	Saguaro Resources Ltd.
Black Swan Energy Ltd.	Tourmaline Oil Corp.
Canbriam Energy Inc.	UGR Blair Creek Ltd.
ConocoPhillips Canada Energy Partnership	

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Meeting with Ratnesh Bedi, President of Pacific Oil and Gas, and Byng Giraud, Country Manager and Vice President Corporate Affairs, Woodfibre LNG Limited, regarding the Woodfibre LNG project

III BACKGROUND:

Woodfibre LNG is proposing a 2.1 million tonnes per annum facility that will utilize electrically driven liquefied natural gas (LNG) trains situated on privately-owned land near Squamish, BC. In November 2016, Woodfibre LNG announced its project received board approval to proceed.

The Woodfibre LNG Project is owned and operated by Woodfibre LNG Limited, a privately held Canadian company based in Vancouver. The company is a subsidiary of Pacific Oil and Gas Limited, which is part of the Singapore-based Royal Golden Eagle group of companies.

Woodfibre LNG announced on March 30, 2017 that it had awarded a pre-construction contract to MATCON Environmental Ltd., a Squamish First Nation owned company. It is anticipated that this work will be completed by the end of 2017.

In October 2017, Woodfibre LNG announced it was delaying the start of construction until 2018 and that the dual front-end engineering and design (FEED) process by KBR Inc. and JGC Corporation was complete, and moving to the next stage of engineering, procurement and construction (EPC) with Houston-based KBR Inc. A construction decision is expected to come once the EPC contract is complete, with the build taking two to three years.

Woodfibre LNG has recently made a number of public statements about competitiveness issues that the company views as barriers to LNG development. The competitiveness issues include the fabricated industrial steel components (FISC) anti-dumping rulings by Canadian regulators and the rate of electricity for industrial customers as well as the issues that are consistent amongst other proponents.

An Executive Project Team has been established, reporting directly to the Deputy Minister's Office to project-manage the fiscal, regulatory and environmental issues.

Woodfibre LNG has requested a meeting with the Minister to provide a project update and has indicated that the company updated its modelling and presentations to regulators.

IV DISCUSSION:

In addition to providing a project update, representatives from Woodfibre LNG will likely wish to discuss competitiveness issues with the Minister. The LNG competitiveness review began in early 2017 to examine whether BC had competitiveness issues that were preventing projects from moving forward. One of the six streams of the review is a consultation with projects, such as Woodfibre LNG, through the BC LNG Alliance. Through this stream, the Ministry has been made aware of Woodfibre LNG's concerns.

Import Duties on FISCs and Floating Storage Units

Recently, Canadian International Trade Tribunal (CITT) and Canadian Border Services Agency (CBSA) have ruled that FISCs from China, Korea and Spain are being dumped into Canada and/or subsidized by foreign governments, thereby causing or threatening to cause injury to Canadian firms. As a result of the ruling, anti-dumping duties in the range of 45 percent could apply for a period of five years.

A number of industrial and engineering companies, including Fluor Canada (a contractor to Woodfibre LNG, who had worked with one of the engineering companies involved in the FEED study) and LNG Canada, have argued that Complex Modules (ones that contain FISCs and other goods) should be excluded from the scope of these rulings since such modules are not produced in Canada, therefore no Canadian firms can be harmed from their import. However, CITT and CBSA have stated that there is not sufficient evidence at this time to exclude Complex Modules from potential duties.

Potential duties could also be levied against Woodfibre LNG for their floating storage facility. Two years ago (July 2015), the CBSA issued a decision to levy a 25 percent import tariff of the Douglas Channel LNG floating facility that had been proposed by AltaGas. ^{s.16,s.21}

^{s.16,s.21}

Woodfibre LNG has applied to the CBSA for an exemption and is awaiting a decision.

These rulings create additional cost uncertainty for LNG proponents.

Electricity Rates

BC Hydro and the Ministry are re-engaging with commercial discussions on the Woodfibre LNG project. On February 21, 2017, the Province announced that the Provincial Sales Tax (PST) on electricity will be reduced to 3.5 percent from seven percent, effective October 1, 2017, and fully exempt April 1, 2019.

V KEY MESSAGES:

- The Province understands the LNG industry's competitiveness and is actively engaging with industry, First Nations, communities and the federal government with recommendations due towards the end of the year.
- The Ministry will continue to engage with the federal government to see that rulings related to import duties have a minimum impact on LNG proponents.
- The Province is working with BC Hydro to provide reasonable and predictable long-term energy costs for the LNG industry, while protecting BC Hydro rate payers.
- s.13
- s.13,s.16,s.21
-

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LNG Project Fact Sheet

WOODFIBRE LNG

November 2017

Recent Announcements

Oct 12 Woodfibre LNG announced that it now expects construction to commence in 2018 (previously the company had been stating by the end of 2017). The project also announced that the dual front-end engineering process by KBR and JGC was complete and that the project would be moving to the next stage of engineering, procurement and construction (EPC) with Houston-based KBR. A construction decision would come once an EPC deal is in place, with the build expected to take two to three years.

Jul 12 The British Columbia Environmental Assessment Office granted Woodfibre LNG the approval needed to formally change the cooling technology from seawater to air cooling. The design changes were the result of the Squamish Nation selection of air cooling as the cooling technology for the project as well as ongoing front-end engineering design (FEED) work.

Facility Concept



Major Permits and Authorizations

Export License:	25-year license issued Application for 40-year license approved.
Provincial Environmental Assessment Status:	EAC issued October, 2015.
Federal Environmental Assessment Status:	EADS issued March, 2016.
LNG Facility Permit:	Pre-Application

Summary Table

Shareholders:	Pacific Oil & Gas (100%)
Facility Type:	Liquefied Natural Gas Facility and Marine Terminal
Location:	Squamish—Former Woodfibre pulp mill site
Output Capacity Total:	2.1 MTPA
Feedstock Pipeline:	Eagle Mountain—Woodfibre Gas Pipeline
LNG Buyers:	Signed HoA with Guangzhou Gas Group Co., Ltd for 1 MTPA
Pre-FEED Contractor:	KBR Inc.
FEED Contractor:	KBR, Inc. and JGC America, Inc.
EPC Contractor:	KBR Inc. (contract yet to be signed)
Capital Expenditure (est.):	\$1.6 billion
Operating Expenditure (est.):	\$542 million / year
Construction Jobs (est.):	650
Operations Jobs (est.):	100

Contact: [LNG Task Force](#)

Appendix 2: Biography Ratnesh Bedi and Byng Giraud



MR. RATNESH BEDI – *President Pacific Oil and Gas*

Mr. Bedi has been the President of Pacific Oil and Gas (PO&G) since 2011. His key area of focus is PO&G's new venture to develop and construct an LNG liquefaction plant in British Columbia. On behalf of PO&G and the investor, Mr. Bedi manages financing and oversees the ongoing work for the project to ensure that the engineering team and local staff have the necessary support to secure permits, appoint world class EPC contractors, build and commission the facilities while continuing to work and engage with First Nations and the community. Mr. Bedi also leads the oil and gas exploration and exploitation initiatives, growth and operations in the Indonesia's business in this current role.

Prior to his appointment in PO&G, Mr. Bedi was Chief Financial Officer of Asia Pacific Resources International Limited (APRIL), a world-leading pulp and paper manufacturer, from 2007 until 2010.

Mr. Bedi was previously with KPMG Indonesia as Manager of Corporate Recovery and Restructuring Division and Deloitte Advisory as Executive Director in corporate and financial advisory services. Mr. Bedi graduated with a BComm from New Delhi, India and is an associate member of the Institute of Chartered Accountants of India.



MR. BYNG GIRAUD – *Country Manager and Vice President Corporate Affairs, Woodfibre LNG Limited*

Mr. Giraud joined Woodfibre LNG Limited in April 2013 as the company's first North American employee. As Country Manager, Mr. Giraud is the senior representative of the company and responsible for the day-to-day operations of Woodfibre LNG Limited. He is also currently Chairman of Ridley Terminals Inc. a Canadian government owned bulk export terminal in Prince Rupert, BC, a member of the board of the Vimy Ridge Foundation and a member of the Board of Governors of the BC Business Council. Most recently he was asked to sit on the BC Assembly of First Nations-BC Business Council "Champion's Table", a body dedicated to breaking new ground in economic reconciliation.

Mr. Giraud has been involved in innovative efforts at First Nations economic reconciliation, including the first agreements between operating mines and First Nations in BC, and the innovative Squamish Nation Environmental Assessment process.

Prior to joining Woodfibre LNG Limited, Mr. Giraud was in an executive role in Corporate Affairs for a Canadian copper/gold mining company. In the past, Mr. Giraud has served as a Vice President with both the Association for Mineral Exploration BC and the Mining Association of BC. Before that, Mr. Giraud worked with some of Canada's top public affairs agencies. He has also served on the board of directors of Geoscience BC, Canada Place Corporation, Initiatives Prince George, and a number of other organizations.

In 2012, Mr. Giraud received the Queen Elizabeth II Diamond Jubilee Medal for volunteerism.

Mr. Giraud holds a MSc. Econ. from the University of Wales at Aberystwyth and an MBA from the University of Cambridge (Jesus College).

Away from the office, Mr. Giraud volunteers as a Scouts Canada leader. On the weekends, he collects bruises playing old boys rugby.

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Call with David Keane, President and Chief Executive Officer of the BC LNG Alliance (BCLNGA) to discuss the Canada-China LNG Memorandum of Understanding (MOU)

III BACKGROUND:

BCLNGA is a consortium of industry partners working together to foster a safe, environmentally responsible and globally competitive liquefied natural gas (LNG) industry in BC. The role of BCLNGA is to provide British Columbians with reliable information on LNG, industry operations and best practices, and the challenges and opportunities they face as an industry. It also engages with communities, First Nations and other stakeholders, and represents BC projects at international conferences and events.

BCLNGA currently represents seven members:

- Kitimat LNG (Chevron and Woodside Energy)
- LNG Canada (Shell, PetroChina, KOGAS and Mitsubishi Corporation)
- GrassyPoint LNG (Woodside Energy Ltd)
- Triton LNG (AltaGas and Idemitsu Canada)
- Woodfibre LNG (Pacific Oil and Gas)
- WCC LNG (ExxonMobil)
- Fortis BC

Many LNG projects are in the pre-final investment decision stage where they are evaluating cost and competitiveness and looking for ways to keep their BC projects viable. BCLNGA, along with its members, have been requesting mechanisms to improve BC's competitive position when compared against the US Gulf Coast.

An Executive Project Team has been established, reporting directly to the Deputy Minister's Office to project-manage the fiscal, regulatory and environmental components of the competitiveness review.

The Province also works closely with BCLNGA on a variety of issues and policy objectives, and BCLNGA has supported government at international and domestic events as well as regional energy education seminars.

IV DISCUSSION:

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Natural Gas Development MOUs

The Province signed an MOU with the Government of China's National Energy Administration (NEA) on Natural Gas Sector Cooperation in July 2014 which has a term of five years. This MOU can be modified by mutual consent or be terminated with a month's notice. The Province also has signed MOUs with two Japanese organizations, Japan Oil, Gas and Metals National Corporation (JOGMEC) and the Ministry of Economy, Trade and Industry (METI), to cooperate on natural gas development in BC. The Province extended an MOU until 2019 with JOGMEC that deals with unconventional natural gas and coal resources and associated technology such as Gas-to-Liquids. The MOU with METI was signed in 2013 and relates to energy cooperation and development and includes a topic on accelerating investments in upstream development in BC.

Recommendation

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V KEY MESSAGES:

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- The Province understands the LNG industry's competitiveness and is actively engaging with industry, First Nations, communities and the federal government with recommendations due towards the end of the year.

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Appendix A – Biography of David Keane (from BCLNGA website)



David Keane brings considerable energy and LNG experience to BCLNGA, having worked globally in the energy sector for more than 35 years in over 15 countries.

He has a strong track record of leadership and success, and has worked collaboratively with communities, stakeholders and governments throughout his career. Most recently, Mr. Keane was Vice President, Policy and Corporate Affairs for BG Canada in Vancouver. Prior to his time with BG Canada, he held senior roles with Dynegy, Apache Corp. and Conoco, Inc.

Mr. Keane lives in Vancouver, is married and has two grown children and two grandchildren.

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Meeting with Steelhead LNG about updates to the Kwispa LNG project

III BACKGROUND:

Steelhead LNG has shared a project status update (October 24, 2017) with the Ministry of Energy, Mines and Petroleum Resources (Ministry) on its Kwispa LNG project (formally Sarita Bay LNG). Steelhead LNG has also requested a meeting with the Ministry to share new information about the project's development.

Steelhead LNG is a privately held energy company focused on liquefied natural gas (LNG) project development in BC. In March 2017, Huu-ay-aht citizens voted 70 percent in support for the proposed Sarita LNG project. As a result of the vote, the Huu-ay-aht First Nation (HFN) and Steelhead LNG are moved forward with a co-management relationship to develop the proposed facility at Sarita Bay.

In September 2016, Steelhead LNG announced that Calgary-based Seven Generations, a publicly traded energy firm, would acquire a stake in the company and will explore new midstream infrastructure to support the company's proposed projects on Vancouver Island. Calgary-based Azimuth Capital Management is an investor in Steelhead LNG.

Steelhead LNG has been actively marketing itself in the Asian market (mainly China) for four years to attract investors and offtake buyers for Kwispa LNG. ^{s.21}
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Kwispa LNG Facility and Associated Pipeline

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The project is in the preliminary engineering and conceptual design stage and is expected to file its project description with the BC Environmental Assessment Office in early 2018. ^{s.16,s.21}
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^{s.16,s.21} Steelhead LNG has been issued export licences by the National Energy Board to export 24 MTPA of LNG from the Sarita Bay site.

IV DISCUSSION:

At the First Nation Leadership Gathering meeting, the HFN shared their support for the proposed LNG facility at Sarita and that s.21
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s.21 The HFN also indicated that it would like the Province to support the Sarita Bay LNG project. s.16,s.21
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V KEY MESSAGES:

- We are committed to continuing to support Steelhead LNG and HFN in their aspirations to advance the Kwispaa LNG project at Sarita Bay.
- The Province is supportive of the investment deal and is interested in participating in the announcement.
- We understand that Kwispaa LNG has yet to enter the environmental assessment process, and are committed to work closely with the HFN, communities and the company as project planning advances.
- The Province is committed to reviewing the proposed plans for Kwispaa LNG.

Attachments: 1. Kwispa LNG Project Status Update

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MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

- I PREPARED FOR:** Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources
- II ISSUE:** Meeting with Korean Consul General Kim Gunn, United Kingdom's Science and Innovation Officer Niniane Tozzi, Chief of the Economic and Commercial office of the Consulate of the People's Republic of China Shanjun Yu and the Consul General of the Netherlands Gert Heijkoop. The group wishes to discuss the future of liquefied natural gas (LNG) in British Columbia and more specifically the proposed LNG Canada project.

III BACKGROUND:

Global LNG Market

- Over the last few years, the global downturn in the energy marketplace has created economic challenges for the LNG industry.
- As LNG prices declined, the number of LNG project Final Investment Decisions declined globally.
- According to the recently released World Energy Outlook from the International Energy Agency (IEA), its base case scenario (the New Policies Scenario) projects that global natural gas use will increase by 45 per cent over the next 25 years.
- Over 30 per cent of this growth is project to come from long-distance trade (by LNG as well as pipeline), with LNG accounting for nearly all of the growth in trade.
- The IEA believes that the excess supply that currently exists in the LNG marketplace will be absorbed by the mid-2020s creating a need for timely new LNG investment prior to 2020.
- British Columbia has multiple LNG proposals still on the table, demonstrating a continued interest in our province's export potential.
- Three proposed export facilities have received environmental approval from both the federal and provincial governments (Woodfibre LNG, LNG Canada and Kitimat LNG).
- One project – Woodfibre LNG – has announced it will move forward. If construction were to commence at this facility as anticipated, initial exports could begin by 2020.
- The Province is currently conducting analysis to determine if British Columbia is at a competitive disadvantage when compared to LNG projects in other jurisdictions, including the U.S. Gulf Coast.
- This review is supported and includes consultation with industry, associations, First Nations and communities.

LNG Canada's Proposed Export Project Overview

- LNG Canada is a proposed two-phase, four-train (6.5 million tonnes per annum per train) liquefied natural gas (LNG) development located on the former Methanex site at the Port of Kitimat.
- The project is being developed by LNG Canada Development Inc., an incorporated joint venture owned by Shell (50%), PetroChina (20%), Mitsubishi (15%) and KOGAS (15%).
- The project received the first 40-year export licence granted by the National Energy Board, and received both provincial and federal environmental approvals in 2015.
- LNG Canada is also the first LNG facility to be issued an LNG Facility Permit by the BC Oil and Gas Commission.
- The project is currently undertaking a competitive process to identify the prime contractor to manage all of the design and construction related to the facility.
- Recently Andy Calitz, CEO of LNG Canada, announced that the project wants to make a Final Investment Decision (FID) and commence construction in 2018.

IV KEY MESSAGES:

- Over the last few years, the global downturn in the energy marketplace has created economic challenges for the LNG industry. The marketplace is challenging everywhere, not just in BC.
- We have multiple LNG proposals still on the table in BC, demonstrating a continued interest in our province's export potential.
- BC's new government supports LNG development – with four conditions:
 1. Proposals must include express guarantees of jobs and training opportunities for British Columbians;
 2. Proposals must provide a fair return for our resources;
 3. Proposals must respect and make partners of First Nations; and
 4. Proposals must protect our air, land and water, including living up to our climate commitments.
- The Province is currently conducting a competitiveness review of the industry in consultation with industry, associations, First Nations and communities.

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