

Morrison Copper/Gold project, Analysis of the BCEAO Referral Documents

Years of science based study performed by qualified professionals in a number of scientific disciplines determined that this project could be constructed, operated and decommissioned without significant adverse effects on the local environment. Many years of consultation and review with the Environmental Assessment agencies and the other stakeholders finally reached the stage where the BCEAO determined that with appropriate mitigation, the project would not have any significant adverse effects.

On June 17th, 2012, we received an email from Chris Hamilton, Executive Project Director of the BCEAO, that stated "We will go over this [*Certified Project Description*] document in a fair bit of depth Wed and we want it ready to go to the WG [*Working Group*] by Friday, along with our Assessment Report (**with conclusions this time - no significant adverse effects found**), FN [*First Nations*] consultation plans (but only to the appropriate FN), along with your 3rd Party Review Response Report, 3rd Party Review Response Report Addendum One, Christoph Wel's Report on hydrogeology and Dr Bernard Laval's report on lake behaviour." [Note: words formatted in *italics* have been added to the text for clarity.]

On June 22nd, PBM sent an email to Chris Hamilton that said: "Hi Chris, Do you have everything you need? Water EMP to follow" and received this in reply: "We're all good Erik. All letters out this aft. It's over to us now, so for the next month just stand by to answer questions and be prepared to discuss small editorial changes. C"

On June 25th, we received an email from Chris Hamilton, Executive Project Director of the BCEAO, that was also sent to 2 staff members from the Ministry of Forests, Lands and Natural Resource Operations to introduce the 3 individuals to each other stating "I wanted to put you all in touch to manage the potential handoff of concurrent permitting for the Morrison Mine project." (Note: the permitting referred to are the permits that need to be acquired after the EAC decision and before work starts on building the mine.)

On July 26th, a letter was sent by Chief Adam to Chris Hamilton: "This letter is in response to your letter dated June 22, 2012 regarding the Morrison Copper/Gold Mine Project - Draft Assessment Report in which you have requested a response from Lake Babine Nation (LBN) by July 18, 2012 and have since verbally extended LBN's response date to July 27, 2012. As the governing body responsible for this territory our government is opposed to this project and having considered the proposal will not be giving our approval for it to proceed. LBN does not support the proposed project as it would significantly impact our aboriginal fishing and other rights including our aboriginal title. To move forward with the Morrison Copper/Gold Mine Project will result in direct infringement upon LBN's inherent rights. This has left LBN government with no choice but to oppose this project moving forward within our traditional territories and causing environmental harm to our homelands." Link to document: [Letter from Chief Wilf Adam to Chris Hamilton](#)

On August 2nd, a memo was sent by Greg Tamblyn to Chris Hamilton: "Pacific Booker Minerals has made a number of noteworthy commitments in its project description to mitigate potential risks to water quality and the aquatic environment. One of the most significant is to line the proposed tailings storage facility with a geomembrane liner. According to the proponent's revised hydrogeological and surface water models, this liner will significantly reduce seepage from the tailings storage facility into streams MCS-7, 8 and 10 and into Morrison Lake. EPD concurs with the proponent that under such a scenario, the effects on the stream ecosystems will be reduced significantly. Most predicted exceedances of B.C. Water Quality Guidelines are primarily attributed to baseline ground water quality. Our previous concerns related to dense contaminated stream water flowing along the lake bottom, creating "hot spots" appear to have been resolved. The likelihood of "hot spots" of contaminated water

in the benthic environment of the lake resulting from emerging seepage has also been reduced significantly. Nonetheless, despite the addition of the liner and the other conditions PBM has committed to, EPD maintains that the Morrison Copper-Gold project presents significant risks to Morrison Lake and Morrison Creek for the following reasons: First and foremost, Morrison Lake and Creek are pristine, high-valued ecosystems supporting many important fish species, including genetically distinct sockeye salmon with an irreplaceable gene pool.” Link to document: [Memo from Greg Tamblyn to Chris Hamilton](#)

On August 2nd (or 3rd, depending on the page), a letter from Gitanyow Hereditary Chiefs’ Office was sent to Ministers Lake and Coleman: “We write to you today because we disagree with the recommendation of the EAO in its Assessment Report to you that an Environmental Assessment Certificate be granted to the Proponent, Pacific Booker Minerals, for the Morrison Project. In order to adequately accommodate our Aboriginal rights, we do not believe that an EAC should be granted at this time, and in this letter we tell you why.” The letter details their concerns on the following topics: Physical Location, Assessment Report, and Consultation Failures. As part of the justification of their views, they quote: “Environment Canada views the proposed mine as a high risk project that has the potential to impact the water quality of the Morrison-Babine watershed, an area with high ecological values that is already being affected by existing closed mines. We therefore highlight the need for a low risk tolerance threshold when considering the potential effects of the Project. (Stephen Sheehan of Environment Canada to Robyn McLean, CEAA, 1 October 2010, page 1.)” Subsequent to the date of this statement by Stephen Sheehan, PBM made significant design changes and by July 2011, CEAA was satisfied enough to proceed with the preparation of the federal Comprehensive Study Report. Link to document: [Letter from Gitanyow Hereditary Chiefs’ Office to Ministers Lake and Coleman](#)

On August 3rd, a letter from Gitxan Chiefs’ Office was sent to Ministers Lake and Coleman (this letter uses exactly the same words as the letter from the Gitanyow Hereditary Chiefs): “We write to you today because we disagree with the recommendation of the EAO in its Assessment Report to you that an Environmental Assessment Certificate be granted to the Proponent, Pacific Booker Minerals, for the Morrison Project. In order to adequately accommodate our Aboriginal rights, we do not believe that an EAC should be granted at this time, and in this letter we tell you why.” The letter details their concerns on the following topics: Physical Location, Assessment Report, and Consultation Failures. Link to document: [Letter from Gitxan Chiefs’ Office to Ministers Lake and Coleman](#)

August 3rd was the date of a draft of the Recommendations of the Executive Director Report. The August 3rd document shown here was created from the draft “whistleblower” document received from an anonymous source by regular mail (in July 2013). That document shows the review marks (inserts and deletions) that changed it from this draft to the August 13th version. Link to discussion on this document: [Comparison of the Recommendations of the Executive Director documents](#). Link to document: [Recommendations of the Executive Director dated August 3, 2012](#)

On August 8th, a memo from Kim Bellefontaine was sent to Chris Hamilton: “MEM recognizes that Pacific Booker Minerals committed to some substantive project design changes during the review process to address agency concerns regarding adverse effects and to reduce environmental risks associated with the project. The largest of these commitments included the lining of the tailings impoundment with a geomembrane, the backfilling of potentially ARD generating (PAG) waste rock into the open pit at closure and to annually place surplus PAG material in the tailings impoundment. However, despite these modifications to the project, MEM believes that the Morrison Copper Gold project still presents significant risks for the following reasons: Large-Scale Environmental Liabilities, Inconsistency with Provincial Policy, Environmentally Preferable Designs Potentially Feasible, Potential Future Changes to Project, In-Perpetuity Aspects of liabilities, Uncertainty with Water Treatment Proposed. In summary, MEM believes these additional factors should be fully considered in the final EA decision making for the Morrison Project.” Link to document: [Memo from Kim Bellefontaine to Chris Hamilton](#)

On August 9th, PBM received a letter from Chris Hamilton: “As you are aware, we have recently received comments from a number of reviewers on Environmental Assessment Office's (EAO) draft

Assessment Report, draft Certified Project Description and draft Table of Conditions for the proposed Morrison Copper Gold Mine Project (Project), and we will be moving to finalize these documents in preparation for a referral to Ministers. I have provided you with comments we have received from Environment Canada, Health Canada, Department of Fisheries and Oceans, the Lake Babine Nation, the Gitxsan Nation and the Gitanyow Nation. I have also recently received comments from the British Columbia Ministry of Environment (MOE) and the Ministry of Energy and Mines (MEM). I am enclosing the MOE and MEM memorandums. While these issues have all been identified in EAO's draft Assessment Report, you should be aware that referral documents may also highlight these issues for the Ministers when they are considering whether to issue an environmental assessment certificate for the proposed Project. Prior to our referral, I would like to provide you a final opportunity to comment on any of these issues. Your perspectives will also be brought to the attention of Ministers. Please provide me with any written comments by close of day on August 14, 2012." Link to document: [Letter to PBM from Chris Hamilton](#)

On August 13th, PBM sent a letter to Chris Hamilton: "In the fall of 2011 the EAO commissioned an independent 3rd Party review of all aspects related to water quality effects on Morrison Lake, which led to a reduction in the risk of potential effects. The independent 3rd Party review also supported PBM's assessment of no significant adverse effects. PBM believe that they have accommodated all of the concerns of MEM, MOE and First Nations and propose a project that uses unprecedented measures to be protective of the environment. PBM will construct and operate the Morrison mine in compliance with industry best practices, using proven technology and in full compliance with all permit requirements." Link to document: [Letter from PBM to Chris Hamilton](#)

August 13th was the "revised" date shown on a draft of the Recommendations of the Executive Director Report, received from an anonymous source by regular mail (in July 2013) containing this version of the draft Recommendations report. Until that time, PBM was not aware that this document existed. This draft does not include a recommendation that the certificate be denied. Please note on page 33 of the August 13th draft, a post-it note addressed to "Derek" makes reference to what the author "thinks the CEA report, due within a week or so, will say" is shown. The CEA report was completed in September 2012, which makes the August 13th date questionable. Link to document: [Recommendations of the Executive Director draft dated August 13, 2012](#)

August 14th was the file date shown on the draft Environmental Assessment Certificate #M-12 for the Morrison, received by email on August 27. Link to document: [EA Certificate #M12-01](#)

On or about (according to his affidavit) August 21st, Derek Sturko, Associate Deputy Minister and Executive Director of EAO referred the application for the certificate to Minister of Environment, Terry Lake, and to Minister of Energy, Mines and Natural Gas, Rich Coleman. The referral binder contained:

- Title Page
- Table of Contents
- Cover letter to Ministers Lake and Coleman dated August 21, 2012
- Cover letter to Deputy Ministers Cairine MacDonald and Steve Carr
- Power Point Summary (**for "Booker Pacific Minerals Inc"**)--According to Derek Sturko's affidavit, it "was a document that EAO project director Chris Hamilton prepared at my direction and with my input, with the aim of providing a high-level visual overview of key information in the Assessment Report, Recommendations, and submissions contained in the referral package."
- Recommendations of the Executive Director dated August 21, 2012
- Assessment Report dated August 21, 2012 including Appendix 1 - Issue Tracking Tables and Appendix B - Table of Conditions
- Compliance Management Plan dated August 21, 2012--Why would the EAO spend time on a 20 page compliance management plan for a certificate that would not be issued?
- August 9, 2012 letter from Chris Hamilton to Erik Tornquist
- August 13, 2012 letter from Erik Tornquist to Chris Hamilton
- August 8, 2012 memorandum from Kim Bellefontaine to Chris Hamilton
- August 2, 2012 memorandum from Greg Tamblyn to Chris Hamilton

- July 26, 2012 letter from Chief Wilf Adam, Lake Babine Nation, to Chris Hamilton
- August 3, 2012 letter from Beverley Clifton Percival, Gitxan Chiefs' Office, to Ministers Lake and Coleman c/o Chris Hamilton
- August 2, 2012 letter from Glen Williams, Gitanyow Hereditary Chiefs, to Ministers Lake and Coleman c/o Chris Hamilton
- Ministerial Decision Record
- Draft environmental assessment certificate for signature in the event of a decision in favour of issuance with attached [Schedule A - Certified Project Description](#) and [Schedule B - Table of Conditions](#)
- Disc containing 3D computer simulation of the proposed project, prepared by the petitioner. (This video was created in 2009. It does not reflect changes made in 2010.)

On August 27th, we received an email from Nicole Vinette, Project Assessment Officer of the BCEAO, which stated "I was able to reach Chris (who is out of the office this week) and he asked that I send you the final Assessment Report that was submitted to ministers, as well as the EA certificate, which contains the Certified Project Description and the Table of Conditions as Schedules A and B." Attached to that email was a unsigned copy of the Environmental Assessment Certificate (numbered #M12-01) that states "Now Therefore, we issue this Environmental Assessment Certificate to the Proponent for the Project, subject to the following conditions and to the conditions set out in Schedule B." Link to document: [Email on behalf of Chris Hamilton with attached Final Assessment Report](#)

On August 30th, CEAA informed PBM that CEAA had received feedback from the federal departments on the draft Comprehensive Study Report ("CSR") and was planning to have a second draft prepared for PBM comments during the week of September 4, 2012 and advised PBM that the final public comment period would be in October 2012 with the referral to the Federal Minister of Environment in November 2012.

On September 9th, PBM received an email from CEAA asking a few questions for clarification to finalize the draft CSR including a request for "environmental photo's to use in our final report".

On September 17th, there was an email from Chris Hamilton to Kim Bellefontaine & Tania Demchuk-- Do either of you know if any other mines in BC have put waste rock back into open pit on closure and any other mines with lined tailings ponds. Thanks! We have a prebrief with Minister Lkae (*Lake*) on Morrison tomorrow in prep for the joint briefing next week. Link to document: [Email from Chris Hamilton to Kim Bellefontaine & Tania Demchuk](#)

September 18th was the first briefing on the referral (according to Derek Sturko's affidavit) with Derek Sturko, EAO staff John Mazure, Chris Hamilton and Nicole Vinette, held with Minister Lake. Minister Lake's requests for clarification led to the updated Recommendations dated September 20, 2012 arose at this briefing.

On September 19th, PBM received (from CEAA) a draft of Comprehensive Study Report that concludes that the proposed Project is not likely to cause significant adverse environmental effects stating that: "The environmental effects of the Project have been determined using assessment methods and analytical tools that reflect the current best practices of impact assessment practitioners. As a result of incremental changes to the project design and additional mitigation measures and commitments applied to the Project throughout the comprehensive study process, the Agency concluded that the proposed project can be constructed, operated, maintained, and decommissioned without significant adverse effects, including consideration of cumulative effects. No significant adverse biological, physical, or human health effects are predicted. Any residual effects are predicted to be of low magnitude, moderate duration, localized in geographic extent, and reversible over the long term following decommissioning".

On September 19th, Canadian Environmental Assessment Agency requests a Commitment letter to comply with Commitments and Follow-up Program.

On September 20th, PBM committed in writing to Robyn McLean, Project Manager, Canadian Environmental Assessment Agency our Compliance with Table of Commitments and Follow-up Program Requirements under CEAA, as follows "This letter is intended to respond to the request made by the Canadian Environmental Assessment Agency to state categorically that Pacific Booker Minerals Inc. will comply with the environment related commitments summarized in the Table of Commitments [Comprehensive Study Report, Appendix E]. The Table of Commitments summarizes commitments made by Pacific Booker Minerals, through various environmental assessment and consultation activities to date related to the Morrison Copper-Gold Mine Project. This letter is also intended to state categorically that Pacific Booker Minerals will undertake the Follow-up Program under the Canadian Environmental Assessment Act as specified in Section 9 of the Comprehensive Study Report prepared for the Morrison Copper-Gold Mine Project." Link to document: [CEAA Commitment Letter](#)

On or shortly after September 20, 2012 (according to his affidavit) Derek Sturko provided the updated Recommendations to the Ministers as a supplement to the package. His cover letter enclosing the updated document was addressed to Minister Lake only, "because Minister Lake's office had arranged to add the updated Recommendations to Minister Coleman's referral binder". The referral package contained a [Cover letter to Minister Lake dated September 20, 2012](#) with enclosed [Recommendations of the Executive Director updated September 20, 2012](#). In his affidavit, he explained: "The clarifications requested by Minister Lake were (a) correction of a factual error relating to the project's anticipated contribution to Provincial Gross Domestic Product, and (b) more specificity regarding the nature and basis of the additional factors that I cited in my recommendations at the end of the document." A comparison of the August 21st and September 20th documents shows that the word changes were entirely on the last 2 pages and didn't include any change to the Gross Domestic Product number. Please see the following link for the final 2 pages with highlights: [September 20, 2012--final 2 pages with highlights on the changes made](#)

On September 24th, (according to Derek Sturko's affidavit), the second briefing was attended by Derek Sturko, John Mazure, Chris Hamilton, Nicole Vinette and Greg Leake of the EAO; Ministers Lake and Coleman by telephone; and Minister Coleman's Deputy, Steve Carr, and Assistant Deputy, Dave Morel, both also by telephone. My impression from the briefings was that both Ministers were well acquainted with the nature of the proposed project and issues surrounding it as presented in the Assessment Report, Recommendations, and submissions in the referral package. My recollection is that the briefing moved quickly to substantive discussion; I found it unnecessary to complete the full presentation we had prepared given the Ministers' apparent familiarity with the materials."

September 24th was also the "signing" date written on the Ministerial Decision Record document. Link to document: [Ministerial Decision Record](#)

September 28th was the date stamped on the letter from Terry Lake, Minister of Environment, advising PBM that "on behalf of the Honourable Rich Coleman, Minister of Energy, Mines and Natural Gas and Minister Responsible for Housing and Deputy Premier and myself to advise you of our decision under section 17(3)(c) of the Environmental Assessment Act regarding Pacific Booker Minerals Inc.'s application for an environmental assessment (EA) certificate in respect of the proposed Morrison Copper/Gold Mine Project'(Project). We have decided to refuse to issue an EA certificate for the Project as proposed. In reaching this decision, we considered the August 21, 2012 Assessment Report prepared by Environmental Assessment Office (EAO), as well as the September 20, 2012 Recommendations of the Executive Director of EAO. As set out in 17(3)(b) of the Environmental Assessment Act, we considered a number of other factors we considered to be in the public interest." Link to document: <https://projects.eao.gov.bc.ca/api/document/5886a78aa4acd4014b81f937/fetch>

On October 1st, during a brief telephone call (on line was Chris Hamilton, John Magure & Derek Sturko) around 8:40am PBM was informed that the EAC was refused, and was told that the file was closed and that the only option available was to resubmit the application. We were informed that an email

containing the letter from Terry Lake would be sent around 11am and that the news would be released by the Provincial Government at 2pm that day.

While we were trying to prepare the news release advising our shareholders and the public of the decision and before the official announcement had been made by the BC Government, we received a phone call from a Kamloops newspaper asking about the rejection. Since the news had not been made public, we asked where he heard that, and the reporter said that he had been told by "the Ministers office" about the decision. We searched online immediately and could not find the EAO news release at that time. We could not confirm that the Company had been informed of the decision (because it had not been made public information yet) and did not advise callers, until after the news had been released by the BC Government.

The trading price of our shares went from a previous day's close of \$14.95 to a close price on the day after of \$4.95, a change in value of \$10 per share and total market capital loss of \$120 million overnight from this decision. Further loss of market value was to follow.

The recommendation made by Derek Sturko, ADM/ED (BCEAO) and the decision made by Minister Terry Lake (Environment) and Minister Rich Coleman (Energy, Mines and Natural Gas) not to award the EA Certificate, effectively reversed the determination of no significant adverse effects received by the project during the Environmental Assessment Process.

On October 30th, PBM was advised by CEAA that due to the refusal of the BCEAC, CEAA was requesting additional information regarding whether and how PBM intends to redesign the Project to address the concerns identified.

As directors and officers of PBM, it was necessary to understand where the "fault" in the process happened, why it happened and how best to address it before considering what would be the future for the Morrison Property.

The first person called was Harvey McLeod of Klohn Crippen Berger. He was as surprised at the refusal as we were and proceeded to compose a document on the stated reasons for the refusal. That document can be found online at: <http://www.pacificbooker.com/pdf/121030L-MorrisonEACRejectionResponse.pdf>

The next step was to Review the Recommendations of the Executive Directors Report updated September 20, 2012. The report author appeared to have doubts as to whether the mitigation plans discussed and accepted by the EAO would be effective. The report states "in addition to the technical conclusions presented in the Assessment Report, which **assumes** successful implementation of all mitigation strategies". Would the EAO accept the report for referral, if the EAO did not believe that the mitigation measures would work? Would the determination of no significant adverse effects have been possible without the EAO being confident that those mitigation measures would work as discussed? Also, a risk/benefit approach was recommended to the ministers. That was outside of the Terms of Reference for the project and was therefore not addressed in the reports submitted.

It began to appear that the recommendation and decision was based on matters not addressed by the EA process.

Over the next three months, PBM responded to the denial of the EAC and provided information on the project including:

- a statement that the Project is not located within the Skeena River headwaters (it is located at the most eastern edge of the Skeena River watershed, 160 kilometers from the Skeena River, and the Project's footprint represents 0.046% of the of the Skeena River watershed)
- information that the plan to line the Tailings Storage Facility with a geomembrane liner was at the request of the BCEAO and its reviewers.
- that PBM was asked during the review process to place the waste rock into the open-pit on closure

but the Executive Director's Report states that the project was inconsistent with the ML/ARD Policy.

- a response to the expressed concerns of the Ministry of Energy and Mines ("MEM") with respect to the treatment of ARD that collection may not be the preferred choice but is acceptable as per the ML/ARD Policy, Guidelines and precedence set by other projects as a highly effective and reliable means for protecting the environment.
- information on the amount of data collected to support PBM's understanding of Morrison Lake Water with baseline data starting in 2003 and continuing through 2011, a bathymetry survey conducted in 2008 and aquatic resources data including water quality, sediment, fish habitat surveys, benthic invertebrate and plankton, periphyton taxonomy, chlorophyll and biomass; drift net sampling, fish sampling, and including metals analysis.

After many attempts to address the misinformation that resulted in the negative decision, and no arbitration method available in the circumstance, the only recourse left to challenge the decision was through the courts.

Justice Affleck said in court: "My use of the word sham was not meant to imply that this was all some kind of a phony exercise. My concern that I expressed is driven by the fact that what happens here is that eventually the petitioner is told you have reached the point where we are satisfied that the potential environmental impacts can be adequately mitigated. And, then, notwithstanding that, the recommendation goes forward to the ministers that they should decline the certificate. That's what I meant by sham. That you, to put it a bit differently, you kick the ball and it goes through the goalpost, but then the referee says no, sorry, we moved the goalpost just before you kicked the ball or just after you kicked it, however the metaphor works."

When considering the remedy that PBM was seeking, Justice Affleck asked: "Just to be certain that I understand what you are asking for, you want the question of the application for the certificate to be sent back to be reconsidered by whom?" And PBM's representative, John Hunter, QC, replied: "the preferred remedy is that it go to the ministers for decision on proper materials, namely the assessment that's been done and such other materials they regard as appropriate but not, specifically not the executive director's document, the recommendation document."

We believe that this demonstrates that even the court found the decision unfair. Note that when PBM was asked about the remedy, what we asked for was a fair decision based on the assessment report.

Shortly before the court case, PBM received anonymously by regular mail (postmarked Victoria) a copy of the Recommendations of the Executive Directors Report, prepared by Derek Sturko, BCEAO ADM/ED. This was our first indication that the decision process had been interfered with. That document can be seen at: <http://www.pacificbooker.com/pdf/AffidavitTornquist.pdf>

The BC Supreme Court case provided us with copies of various affidavits to review and our Freedom of Information requests provided us with over 6,000 pages of communications and reports. It took some time, but we have reviewed most of this information and that is the source for the details and most of the documents provided here.

Some items deserve a little extra discussion

Please see the next 3 pages in this document for the following topics:

- Comparison of the Recommendations of the Executive Director documents
- Referral Documents as at August 21, 2012
- Certified Project Description

Comparison of the Recommendations of the Executive Director documents

The purpose of this exercise was to determine, if possible, when the positive recommendation changed to a negative recommendation and to identify any words changed.

August 3rd and 13th documents were created based on the draft document received by PBM in July 2013. That document shows the review marks (inserts and deletions) that changed it from the original draft to the August 13th version. I created the August 3rd draft from this document. The August 21st version was disclosed in the affidavit and FOI documents. The September 20th document is the final version released in 2012 when the EAC was first refused.

The highlighted words in the August 3rd document were removed and replaced with the underlined words in the August 13th document. The changes to the August 21st version were on the final two pages only of the September 20th version. Please see the following link for the (highlighted) changes made to the final 2 pages: [September 20, 2012--final 2 pages with highlights on the changes made](#)

August 3rd document is shown at: [Recommendations of the Executive Director dated August 3, 2012](#)
August 13th dated document is shown at: [Recommendations of the Executive Director draft dated August 13, 2012](#)
August 21st document is shown at: [Recommendations of the Executive Director dated August 21, 2012](#)
September 20th document is shown at: [Updated Recommendations of the Executive Director dated September 20, 2012](#)

Comparing these documents gives some insight into the changes requested of the writer. The documents do not identify an author. We believe the original version was drafted by Chris Hamilton and the final version was signed by Derek Sturko, both from EAO.

Interesting word counts

"no significant adverse effects" is stated 12 times in the August 3rd and 13th document and 14 times in the August 21st and September 20th documents and covered "no significant adverse effects" on water quality, fish habitat, ecosystems, and wildlife.

"successful implementation"--That phrase is not mentioned at all in the August 3rd document, . In the August 13th document, it shows only in the text that was added on the 2nd last page. In the August 21st document the word "successful" was inserted before implementation 23 times and shows the same 23 times in the September 20th version.

"EAO, having considered input from the Working Group, is satisfied" shows 7 times in the August 3rd version, 8 times in the August 13th version and 8 times in the August 21st and September 20th versions.

It appears that the changes were requested by Minister Lake. This is indicated by the following email from July 16, 2014 at 3:16 PM: From Chris Hamilton (EAO:EX) To: Sarah Bevan (JAG:EX) on the subject of dates of the Morrison milestones: *"Hmm, I recall the first PBM knew about the no was a phone call on Oct 1, a Monday. **Could you be thinking about the two versions of the recommendations? One was dated Aug 21, the date of the referral and then Minister Lake had asked for changes to that doc, so the second was dated Sep 20. Could that be it?"***

Referral Documents as at August 21, 2012

Taken from the affidavit of Derek Sturko given in June 2013:

I was appointed Executive Director and Associate Deputy Minister, Environmental Assessment Office ("EAO"), Ministry of Environment, effective January 30, 2012. Previously I held positions as Assistant Deputy Minister in the Ministry of Public Safety and Solicitor General (2004-2011) and Associate Deputy Minister in the Ministry of Children and Family Development (2011-2012). On October 2, 2012, I was appointed Deputy Minister, Ministry of Agriculture. The latter move was at the request of the Deputy Minister to the Premier, as a matter of priority in the filling of executive roles at that time. I continue to serve as Deputy Minister of Agriculture today.

On or about August 21, 2012, I referred the petitioner's application for a certificate for the project to the Minister of Environment, Dr. Terry Lake, and to the Minister of Energy, Mines and Natural Gas, Rich Coleman, under s. 17(1) of the Environmental Assessment Act, S.B.C. 2002, c. 43 (the "Act").

Now shown to me and attached as Exhibit "A" to this Affidavit is a true copy of the EAO file copy of the referral package that I provided to Ministers Lake and Coleman at the time of my referral of the petitioner's application to them. The referral package contains all the documents that I transmitted to Ministers Lake and Coleman for the purposes of their decision making under s. 17(3) of the Act with regard to the proposed Morrison Copper/Gold Mine Project, as follows: (see list shown on page 3 of this document)

With the exception of my September 20, 2012 updated Recommendations, I provided all the above documents to Ministers Lake and Coleman on or about August 21, 2012. On or shortly after September 20, 2012, I provided the updated Recommendations to the Ministers as a supplement to the package. My cover letter enclosing the latter document was addressed to Minister Lake only, because Minister Lake's office had arranged to add the updated Recommendations to Minister Coleman's referral binder.

On **October 2, 2012**, Derek Sturko was appointed as Deputy Minister, Ministry of Agriculture.

When you examine the documents included as part of the referral package, it appears that these documents were assembled in a short period of time.

1. There is the discrepancy between the affidavit and the e-Pic posted versions of the Certified Project Description. If the e-Pic document had been reviewed before posting, the table of contents errors would have been noticed and most likely corrected before the document was referred or posted.
2. There is the error on the name of the company on the PowerPoint that was "created" for the referral meeting. The title page says "Booker Pacific Minerals Inc.'s". When the company's name isn't properly shown, it definitely indicates a lack of attention to the document.
3. The rejection letter had the date stamped on it (not typed on) and was dated 3 days before the official announcement. We had to wait from 8:40 when the call was received until after 11 before the email was sent to PBM. If the letter was ready to go on the 28th, why wasn't it sent immediately after the 8:40 am call?
4. Why is the date on the Decision Record Monday the 24th and the letter Friday the 28th but the news wasn't officially released until Monday October 1st.

This indicates that things were prepared at the last moment or after the fact and not in the normal organized manner.

Certified Project Description

There is a discrepancy between the affidavit version and the e-Pic version of this document.

The e-Pic version shows items in the table of contents that are not in the document or are identified with different section numbers than shown in the actual text. For example, the Mine Plan in the table of contents is 3.2 but shows in the document as 2.2. The e-Pic version contains a section 6.2.2 Tailings Storage Facility--in the affidavit version, it is part of section 6.2.1. Section 6.2.2 in the affidavit version is the Mine Area which is section 6.2.3 in the e-Pic version.

These are discrepancies in the document format.

According to the affidavit (sworn in June 2013), the "affidavit" document was given to the Ministers on or about August 21, 2012.

According to the e-Pic site, the "e-Pic" document was uploaded on October 1, 2012.

Question?

Was the document that was submitted to the Ministers (as per the affidavit) the same document as the document that was actually referred to the Ministers? If so, why was the document uploaded to the e-Pic site on October 1, 2012 different than the one referred to the Ministers?

[This link shows the table of contents from the "affidavit" document.](#)

[This link shows the e-Pic posted table of contents](#)

Here is the link for the full e-Pic version:

<https://projects.eao.gov.bc.ca/api/document/5886a781a4acd4014b81f935/fetch>

Table of Attachments

Email on behalf of Chris Hamilton with attached Final Assessment Report	12
EA Certificate #M12-01	13
Recommendations of the Executive Director dated August 3, 2012.....	15
Recommendations of the Executive Director draft dated August 13, 2012	40
Referral Documents as at August 21, 2012	75
Title Page.....	76
Table of Contents	77
Cover Letter to Ministers Lake & Coleman from Derek Sturko	78
Cover Letter to Deputy Ministers Cairine MacDonald & Steve Carr from Derek Sturko	80
Power Point Summary for "Booker Pacific Minerals Inc.'s" Application from Derek Sturko	81
Recommendations of the Executive Director dated August 21, 2012	98
Assessment Report dated August 21, 2012 from Derek Sturko.....	130
Appendix 1--Issue Tracking Tables	130
Appendix B--Table of Conditions	130
Compliance Management Plan.....	131
August 9, 2012--Letter to PBM from Chris Hamilton.....	157
August 13, 2012--Letter from PBM to Chris Hamilton.....	159
August 8, 2012--Memo from Kim Bellefontaine to Chris Hamilton.....	163
August 2, 2012--Memo from Greg Tamblyn to Chris Hamilton.....	166
July 26, 2012--Letter from Chief Wilf Adam to Chris Hamilton.....	169
August 3, 2012--Letter from Gitxan Chiefs' Office to Ministers Lake & Coleman.....	171
August 2/3, 2012--Letter from Gitanyow Hereditary Chiefs' Office to Ministers Lake & Coleman .	176
Ministerial Decision Record	181
Draft Environmental Assessment Certificate for signature by Ministers	183
Certified Project Description	185
Version from the Affidavit of Derek Sturko	185
Version from the e-Pic site	188
Table of Conditions.....	192
3D computer simulation of proposed project.....	193
Cover Letter to Minister Lake dated September 20, 2012 from Derek Sturko	194
Updated Recommendations of the Executive Director dated September 20, 2012.....	196
September 20, 2012--final 2 pages with highlights on the changes made	197
Email from Chris Hamilton to Kim Bellefontaine & Tania Demchuk.....	199
CEAA Commitment Letter	201

Email on behalf of Chris Hamilton with attached Final Assessment Report
EA certificate (including the Certified Project Description and the Table of Conditions)

Erik Tornquist

From: Vinette, Nicole EAO:EX <Nicole.Vinette@gov.bc.ca>
Sent: Monday, August 27, 2012 1:37 PM
To: 'Erik Tornquist'
Cc: Hamilton, Chris EAO:EX; Gajowski, Leigh Anne EAO:EX
Subject: Proposed Morrison Copper/Gold Mine Project - Referral Documents
Attachments: 14Aug2012_Morrison EAC_FINAL.pdf; Aug17_FINAL CPD_FINAL.pdf; TOC Aug 9_FINAL.pdf

Hi Erik,

Following up on our telephone conversation this morning, I was able to reach Chris (who is out of the office this week) and he asked that I send you the final Assessment Report that was submitted to ministers, as well as the EA certificate, which contains the Certified Project Description and the Table of Conditions as Schedules A and B.

If you have any questions, Chris will be back in the office on Tuesday, September 4th. In the meantime, please feel free to contact me at Nicole.Vinette@gov.bc.ca or 250-356-5311.

~Nicole

Nicole Vinette
Project Assessment Officer
Environmental Assessment Office
(250) 356-5311
Nicole.Vinette@gov.bc.ca

EA Certificate #M12-01

(original file name 14Aug2012_Morrison EAC_FINAL.pdf)

**In the matter of the
ENVIRONMENTAL ASSESSMENT ACT
S.B.C. 2002, c. 43
(Act)**

and

**in the matter of an
Application
for an
Environmental Assessment Certificate
(Application)**

by

**PACIFIC BOOKER MINERALS INC.
(Proponent)**

for the

MORRISON COPPER/GOLD MINE PROJECT

ENVIRONMENTAL ASSESSMENT CERTIFICATE #M12-01

Whereas:

- A. The Proponent proposes to develop the project described in Schedule A to this Certificate (the "Project");
- B. On September 30, 2003, a Project Lead of Environmental Assessment Office issued an Order under section 10(1)(c) of the Act stating that an environmental assessment certificate was required for the Project and that the Proponent could not proceed with the Project in the absence of an assessment;
- C. The assessment of the Project was conducted from July 12, 2010 to August 20, 2012, and included consultations with First Nations and the public respecting the Application;
- D. Compliance with this Certificate, including its conditions, will be monitored by the staff of Environmental Assessment Office, and others who have been appointed as inspectors under the Act;
- E. Compliance activities will also be conducted in cooperation with other agencies of the Government of British Columbia in accordance with the Morrison Copper/Gold Mine Project Compliance Management Plan;
- F. On August 20, 2012, pursuant to section 17 of the Act, the Executive Director referred the Application, the assessment report and his recommendations to the undersigned; and,
- G. The undersigned have considered the Application, the Assessment Report and the recommendations of the Executive Director.

Now Therefore,

We issue this Environmental Assessment Certificate to the Proponent for the Project, subject to the following conditions and to the conditions set out in Schedule B.

Conditions

1. The Proponent must cause the Project to be designed, located, constructed, operated and decommissioned in accordance with the Conditions of this Certificate, Schedule A, and the Proponent's conditions in Schedule B, and must comply with all of the Conditions of this Certificate to the reasonable satisfaction of the Minister.
2. Where, in the reasonable opinion of the Minister, there is a conflict or inconsistency between Schedule A and the conditions in Schedule B, Condition 1 must be interpreted so that Schedule B will vary, repeal, rescind or supersede, as the case may be, the contents of Schedule A.
3. The Proponent must submit a report to the Executive Director on the status of compliance with the Conditions of this Certificate, and the conditions in Schedule B, at the following times:
 - (a) one month prior to substantially starting construction of any of the Project facilities;
 - (b) one month prior to operations;
 - (c) on or before December 31 in each year during which the Project is being constructed or operated;
 - (d) One month prior to the start of decommissioning; and,
 - (e) One month after the completion of decommissioning.
4. Where the Proponent, except in connection with the granting of security to project lenders or other financing entities or financing facilities, intends to sell, assign, transfer or grant an interest in this Certificate or the Project or change the holder's name on the Certificate, the Proponent must first apply for and obtain an amendment under section 19 of the Act.

Duration of Certificate

5. For the purpose of section 18(1) of the Act, the deadline is 5 years from the date set out below.

Honourable Terry Lake
Minister of Environment

Honourable Rich Coleman
Minister of Energy and Mines and Minister
Responsible for Housing

Issued this _____ day of _____, 2012

In the matter of the
ENVIRONMENTAL ASSESSMENT ACT
S.8.C. 2002, c. 43
(Act)

and

in the matter of an
Application
for an
Environmental Assessment Certificate
(Application)

by

Pacific Booker Minerals Inc.
(Proponent)

for the

Morrison Copper/Gold Mine Project
(proposed Project)

August 3, 2012

Recommendations of the Executive Director

In accordance with the provisions of section 17(2)(b) of the *Environmental Assessment Act*, the Executive Director of Environmental Assessment Office makes the recommendations contained in this submission, for the reasons indicated, in connection with the application by Pacific Booker Minerals Inc. for an Environmental Assessment Certificate for the proposed Morrison Copper/Gold Mine Project.

A. ISSUE

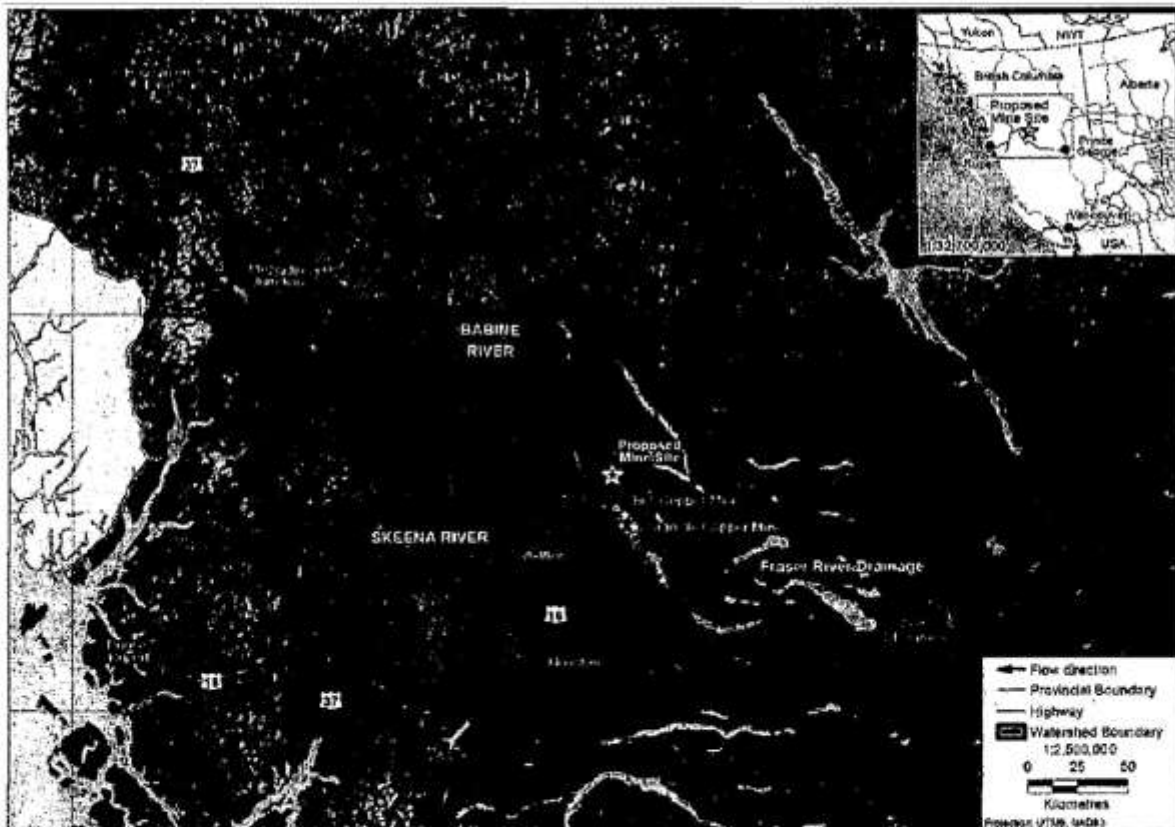
Decision by Ministers on the Application for an Environmental Assessment (EA) Certificate by Pacific Booker Minerals Inc. for the proposed Morrison Copper/Gold Mine Project (proposed Project).

B. BACKGROUND

1. Proponent and Project Description

The Proponent for the proposed Project is Pacific Booker Minerals Inc. (PBM), a publicly-traded, British Columbia-based mineral resource company with its head office in Vancouver.

The Proponent is proposing to develop copper-gold-molybdenum mine in north-central British Columbia. The proposed Project is located on the shoreline of Morrison Lake, a 15 km long lake, on Crown Land. The closest communities to the mine site are Granisle, Houston and Smithers.



The proposed Project is based on a conventional truck-shovel open pit mine and copper flotation process plant that has been designed to produce an average of 160,000 tonnes of concentrate per year containing copper and gold. A separate molybdenum concentrate would be produced. Over the expected 21-year mine life, the proposed Project would produce over 1.37 billion pounds of copper, 658,000 ounces of gold and about 10 million pounds of molybdenum.

The scope of the proposed Project consists of the following on-site and off-site components and activities:

- approximately 30,000 tonnes per day open pit mine and process plant;
- mill tailings storage facilities including containment dams;
- waste rock storage;
- site runoff, diversion and sediment control;
- ore and marginal ore storage;
- borrow pits, overburden and topsoil storage;
- sewage and waste water management facilities;
- water treatment facilities;
- groundwater and/or surface water use for monitoring and/or extraction;
- explosives transport, manufacturing plant and storage;
- an existing 138 kV transmission line from Babine Substation, crossing Babine Lake; to the Project site and a new 25-km extension of the transmission line from the Bell Mine site to the proposed Project site;
- a power substation at the proposed Project site;
- mine haul roads within the mineral property;
- new and/or existing dedicate barge and barge facilities;
- associated mine facilities such as assay buildings, ore load out facilities, labs, maintenance shops, warehouse, equipment lay down areas, office complex parking, change house, security building; and,
- routes for hauling the ore to the milling facility and for personnel access and delivery of supplies and materials to the site, including new or existing roads.

The proposed Project's total estimated capital cost is \$245 million during each of the two years of construction and \$89.5 million during each of the 20 years of operation.

The Proponent estimated that the two year construction period would generate an estimated 1,117 jobs each year, but due to the nature of construction, many of those jobs would be part time temporary or contract; which would not necessarily relate to 1,117 person years (or full time equivalent) of direct employment. The Proponent estimates total of 225 jobs with the Proponent, 422 jobs with direct suppliers, 188 jobs of indirect employment and 282 jobs of induced employment.

The 20 year operations period is estimated to generate approximately 601 jobs per year. Again, those are not necessarily 601 full time positions, although jobs created in the operations phase are more likely to be full-time and longer than construction positions. The Proponent estimates a total of 251 jobs with the Proponent, 94 jobs with direct suppliers, 155 jobs of indirect employment and 101 jobs of induced employment.

The proposed Project would contribute an estimated \$104 million to Provincial Gross Domestic Product over the two year construction period and \$50 million during the 20 years of operations.

During construction, the proposed Project is estimated to generate approximately \$22 million in government tax revenue, with approximately \$10 million payable to the federal government and \$12 million to the province. During the construction phase, the proposed Project is expected to contribute \$2.9 million in federal tax revenue and \$2.5 million in provincial tax revenue.

2. British Columbia Environmental Assessment Process

In September 2003, the Proponent submitted a Project Description to Environmental Assessment Office (EAO). EAO determined that the proposed Project was reviewable under the Act pursuant to Part 3 of the Reviewable Project Regulations (B.C. Reg. 370/02), because the proposed Project is a new mine facility that during operations would have a production capacity of greater than 75,000 tonnes per year of mineral ore.

EAO coordinated and chaired a multi-agency group (Working Group) that provided advice on the potential effects, mitigation measures and conditions required in the EA. The Working Group membership, as well as organization names, has changed significantly over the nine years of review, but the following agencies and First Nations have been engaged:

- **Provincial:** Ministry of Energy and Mines, Ministry of Environment, Ministry of Forests, Lands and Natural Resource Operations; and Ministry of Transportation and Infrastructure
- **Federal Agencies:** Canadian Environmental Assessment Agency, Health Canada, Fisheries and Oceans, Natural Resources Canada, Major Projects Management Office, Environment Canada; and Transport Canada
- **First Nations:** Lake Babine Nation, Yekooche First Nation, Gitanyow Nation, Gitksan Nation
- **Local Government:** Village of Granisle

On September 28, 2009, the Proponent submitted their Application for evaluation to EAO. EAO did not accept the Application for review because it did not contain the information required by the Terms of Reference.

The Proponent provided a revised Application on May 28, 2010, which was evaluated by EAO with input from the Working Group. The Application was accepted for review on June 28, 2010. A 70-day public comment period on the Application was held and open houses occurred in Granisle, Smithers and Burns Lake.

On October 28, 2010, EAO issued a time limit suspension on the Application Review at the Proponent's request in order to provide time for the Proponent to fully respond to issues raised by the technical reviewers.

December 16, 2010, EAO representatives met with representatives of the Proponent and the Canadian Environmental Assessment Agency (CEA Agency) and indicated that EAO had serious concerns about the long-term environmental liability of the proposed Project. EAO highlighted concerns with the proposed land-based waste rock storage, the plan for a mine drainage water collection and treatment system in perpetuity, and the potential impacts on water quality in the receiving environment.

On February 18, 2011, the Proponent advised EAO that they intended to revise the mine plan in order to reduce potential environmental risks associated with the original project design. On March 9, 2011, EAO wrote to the Proponent with a list of information requirements for the new waste and closure plans as well as information related to fish habitat compensation plans.

The Proponent submitted the required supplemental information in June 2011. Following a review of the information, EAO accepted the documents and the time limit suspension was lifted on July 27, 2011. An online-only public comment period was jointly initiated by EAO and CEA Agency on the new information submitted by the Proponent.

On September 29, 2011, EAO again suspended the review of the proposed Project because EAO was unable to develop conclusions on the potential for significant adverse effects to water quality and fish, sockeye salmon in particular.

Following the September 29, 2011 suspension, EAO **undertook** an external, third-party review of the Proponent's water quality, hydrogeology and fisheries effects assessments. These third-party reports, which were delivered to EAO in December 2011, confirmed that there was insufficient information to demonstrate that the proposed Project would not have significant adverse effects on water quality in the long term. The reports provided a number of recommendations for additional work.

EAO informed the Proponent that they must respond to the external review recommendations. EAO also shared the reports with the Working Group and First Nations and sought their input on any additional requirements that should be included in the Proponent's scope of work.

The Proponent provided EAO with an additional submission on January 31, 2012, entitled *3rd Party Review Response Report*. EAO again had this information reviewed by the external third-party hydro-geologist and retained a lake behaviour specialist to also examine the *3rd Party Review Response Report*. EAO indicated to the Proponent that, despite information contained in the *3rd Party Review Response Report*, there were still significant outstanding concerns, particularly as they related to water quality in Morrison Lake and potential impact to sockeye salmon spawning areas.

On April 30, 2012, the Proponent submitted its final addendum, called 3rd Party Review Response Report - Addendum 1. This report provided information on several significant new design options. Models which accompanied these proposed design changes have enabled EAO to develop conclusions on the proposed Project.

EAO referred the Application to Ministers on August 3, 2012. Ministers have until September 17, 2012 to make a decision, unless an extension is ordered in accordance with section 24(4) of the Act.

3. Federal Environmental Assessment Process

CEA Agency determined that a federal review was required for the proposed Project; that the review would be a comprehensive study, and the responsible authorities would include: Fisheries and Oceans Canada (DFO), Transport Canada, and Natural Resources Canada.

Federal authorities actively participated in the EA of this proposed Project. Federal comments received during the cooperative review are reflected in this Assessment Report and have significantly informed the analysis and conclusions.

4. Other Approvals

EAO accepted the Proponent's application for concurrent review of the EA Certificate Application with an application for:

- Mining lease (Ministry of Energy and Mines)
- Crown Land License of Occupation for the proposed Transmission Line (Ministry of Forests, Land and Natural Resource Operations - MFLNRO)
- Occupant License to Cut (MFLNRO)
- Special Use Permit (MFLNRO)
- Road Use Permit (MFLNRO)
- Forest License to Cut (MFLNRO)

Under the Concurrent Approval Regulation, agencies must decide whether to grant the permits and approvals within 60 days of Ministers decision to grant an EA Certificate. In addition to these approvals, there are numerous other approvals which would be required, following the

issuance of the EA Certificate and prior to the Proponent constructing the proposed Project. The principal provincial authorizations required to construct and operate the proposed Project are under the Mines Act.

C DISCUSSION

1. Potential Significant Adverse Effects, Mitigation Measures and Proponent Commitments

The nature and scale of the proposed Project means that there are important considerations for the region and the province in terms of potential environmental economic, social, health and heritage effects. The following categories of Valued Components were considered during the EA for the proposed Project:

- Surface water quality and quantity
- Groundwater quality and quantity
- Aquatic resources
- Ecosystems and wetlands
- Wildlife resources
- Fish and fish habitat
- Employment and economy
- Land and resource uses
- Human and ecological health factors
- Heritage and archaeological resources

EAO considered all the issues and concerns raised by Lake Babine Nation, Yekooche Nation, Gitksan Nation, Gitanyow Nation, the Village of Granisle and the public as well as all provincial and federal agencies. During the review of the Application, a number of environmental and social issues were identified as having the potential for adverse residual effects. A description of the key effects and the corresponding mitigation measures and proposed conditions which would undertaken by the Proponent are found below.

Potential Effects to Water Quantity and Quality

Water dominated the discussions during the EA. The proposed open pit and mine infrastructure is located directly adjacent to Morrison Lake, a 15 km long lake which forms part of the headwaters of Skeena River and contains fish habitat and associated aquatic resources.

The largest potential for effects on Morrison Lake was determined to come from the main mine infrastructure components, including:

- The Tailings Storage Facility (TSF)
- The open pit; and,
- The water treatment plant and Morrison Lake effluent diffuser.

Key Potential Effects	Mitigation Measure/ Commitment	EAO Analysis and Conclusions
<p>Seepage of contaminated water from the open pit into Morrison Lake on closure.</p>	<p>Following closure, the Proponent must maintain the elevation of the pit lake at least one meter below the elevation of Morrison Lake.</p> <p>On closure, all PAG⁴ waste rock must be placed into the open pit and be capped with non-PAG rock and glacial till. High PAG rock must be placed in the bottom of the open pit. The open pit area must be closed with a combination of pond, collector ditch around the perimeter, and an interior wetland.</p> <p>Groundwater monitoring wells must be installed between the open pit and Morrison Lake to monitor potential seepage of contaminated water from the open pit to Morrison Lake.</p> <p>Morrison Lake water quality must be monitored annually in the area west of the open pit to ensure the predicted water quality of Morrison Lake is being met.</p>	<p>EAO undertook a third-party technical review of the Proponent's water quality and hydrogeology models. The review examined potential seepage from the open pit to Morrison Lake. The reviews found that, as long as the open pit remained below the elevation of Morrison Lake, there would be negligible water quality effects from the open pit on Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, there would be no significant adverse effects on water quality resulting from seepage from the open pit to Morrison Lake.</p>

⁴ Potentially acid generating rock is likely to react to water and oxygen and produce acid which can harm the receiving environment.

Key Potential Effects	Mitigation Measure/ Commitment	EAO Analysis and Conclusions
<p>Seepage of tailings water from the TSF into ground and surface water, which could eventually report to Morrison Lake and harm water quality.</p>	<p>Proponent must line at least 96 percent of the TSF area with a geomembrane liner with seepage not to exceed 10m³/hr.</p> <p>The Proponent must monitor sulphate concentrations in the groundwater and surface water downstream of the TSF on a monthly basis, subject to a water monitoring plan approved by the Ministry of Environment (MOE)</p> <p>If seepage occurs in Morrison Lake or receiving streams which exceeds any site specific water quality objectives approved under the Environmental Management Act, the Proponent must prepare, to the satisfaction of MOE, within 30 days, a plan to implement measures, and then implement the</p>	<p>EAO undertook a third-party technical review of the Proponent's water quality and hydrogeology models and employed a third-party technical reviewer who examined how a lined TSF would impact Morrison Lake. The reviews found that the TSF would have a negligible impact on water quality in Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant</p>

	measures, in order to bring the effect within the objectives.	adverse effects on water quality resulting from seepage from the TSF to Morrison Lake.
Potential impacts to Morrison Lake from treated effluent discharged through a water treatment plant.	<p>The Proponent must operate a water treatment plant that produces an "end of pipe" water quality of treated effluent with concentrations of parameters which meet the concentrations used for the effects assessment presented in the Proponent's Application, specifically Addendum 1 to the 3rd Party Review Response Report. These parameters include:</p> <ul style="list-style-type: none"> Nitrate (90 mg/L); Sulphate (2000 mg/L); Aluminum (0.10 mg/L); Cadmium (0.0001 mg/L); Copper (0.007 mg/L); Iron (0.01 mg/L); Magnesium (50 mg/L if it is not present as magnesium sulphate) in the treated effluent; Selenium (0.0019 mg/L); and Zinc (0.02 mg/L). <p>The Proponent must monitor Morrison Lake water quality annually and if water quality does not meet any approved site specific water quality objectives approved under the <i>Environmental Management Act</i>, the Proponent must prepare, to the satisfaction of MOE, within 30 days, a plan to implement measures, and then implement the measures, in order to bring the effect within the objectives.</p>	<p>EAO undertook a third-party technical review of the Proponent's water quality models and employed a third-party technical reviewer who examined how an effluent diffuser would impact Morrison Lake. The reviews found that water quality would meet British Columbia Water Quality Guidelines outside a 40x100 meter mixing zone and that the effluent diffuser would not affect the long-term behaviour of Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the implementation of mitigation measures, there would be no significant adverse effects on water quality or the behaviour of Morrison Lake resulting from effluent discharged into Morrison Lake.</p>
Reduction in flow to Morrison River and level of Morrison Lake due to pit inflows	<p>The Proponent must complete a plan, to the approval of the DFO and FLNRO, to measure year round water flows in the Morrison River.</p> <p>The Proponent must develop, for the approval of the DFO and FLNRO, an Instream Flow Requirement following the Instream Flow Incremental Methodology. The Instream Flow Requirement must be adhered to during operations.</p> <p>An annual site water balance must be</p>	<p>EAO, having considered input from the Working Group, is satisfied that inflows to the open pit from Morrison Lake can manage and that, with the implementation of mitigation measures, there will be no significant adverse effects to water quantity in Morrison Lake or Morrison River.</p>

	<p>calculated and submitted to Ministry of Energy and Mines. If surplus water accumulates for more than two years, the Proponent must construct a water treatment plant and collect, treat and discharge any excess contact³ and non-contact water to Morrison Lake via a pipeline and diffuser.</p>	
--	---	--

³ Water" which has come into contact with acid generating rock

Potential Effects to Fish, Fish Habitat and Aquatic Resources

Morrison Lake and its tributary streams support communities of at least 16 species of resident and anadromous fish, including three species of Pacific salmon which migrate to Morrison Lake via the Skeena and Babine rivers. Babine Lake sockeye were significantly enhanced in the late 1960s, which saw spawning channels and flow controls established on several rivers. As a result, almost 90 percent of all sockeye salmon in Skeena River come from areas around Babine Lake.

The analysis shows that, while Morrison Lake may make a relatively small contribution to the numbers of sockeye salmon (in the range of 2.5 -3.5 percent depending on the years counted) produced from Babine Lake, this number underestimates Morrison Lake's value as one of the largest natural stocks of non-hatchery (unenhanced) sockeye salmon on the Babine Lake system.

Sockeye salmon comprise about 72 percent of the open water fish in Morrison Lake.

Key Potential Effects	Mitigation Measure/ Commitment	EAO Analysis and Conclusions
<p>Direct habitat loss due to reductions in flow in several creeks.</p>	<p>The Proponent must work with DFO, MOE and Lake Babine Nation to finalize an agree upon Fish Habitat Compensation Plan which would compensate for any proposed Project activities that result in Harmful Alteration, Disruption or Destruction of fish and fish habitat as defined under the federal Fisheries Act.</p>	<p>EAO, having considered input from the Working Group, is satisfied that a Fish Habitat Compensation Plan can be developed to the satisfaction of the DFO and that, with the implementation of mitigation measures, there will be no significant adverse effects to fish habitat on Morrison Lake.</p>
<p>Seepage of tailings water into groundwater, which could affect shoreline spawning sockeye salmon.</p>	<p>Proponent must line at least 96 percent of the TSF area with a geomembrane liner with seepage not to exceed 10m³/hr. The Proponent must monitor sulphate concentrations in the groundwater and surface water downstream of the TSF on a monthly basis, subject to a water monitoring plan approved by MOE. If seepage occurs in Morrison Lake or receiving streams which exceeds any site specific water quality objectives approved under the Environmental Management Act,</p>	<p>EAO undertook a third-party technical review of the Proponent's water quality and hydrogeology models and employed a third-party technical reviewer who examined how a lined TSF would impact Morrison Lake. The reviews found that the TSF would have a negligible impact on water quality in Morrison Lake.</p>

	<p>the Proponent must prepare, to the satisfaction of MOE, within 30 days, a plan to implement measures, and then implement the measures, in order to bring the effect within the objectives.</p>	<p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on shoreline sockeye salmon spawning areas resulting from seepage from the TSF.</p>
<p>Reductions in lake level could impact high values spawning areas in Morrison River</p>	<p>The Proponent must complete a plan, to the approval of DFO and FLNRO, to measure year round water flows in Morrison River. Based on this plan, the Proponent must develop, for the approval of DFO and the FLNRO, an Instream Flow Requirement following the Instream Flow Incremental Methodology. The Instream Flow Requirement must be adhered to during operations. The Proponent must complete spawning habitat survey and mapping along the full length of Morrison River to support of the development of the Instream Flow Requirement.</p>	<p>EAO, having considered input from the Working Group, is satisfied that inflows to the open-pit from Morrison Lake, along with other water used during proposed operations, can be managed and that, with the implementation of mitigation measures and monitoring, there will be no significant adverse effects to water quantity in Morrison Lake or Morrison River.</p>
<p>Treated effluent discharged through a water treatment plant could pool on the bottom of Morrison Lake; create "hotspots" of concentrated effluent or change long term lake behavior</p>	<p>The Proponent must operate a water treatment plant that produces an "end of pipe" water quality of treated effluent with concentrations of parameters which meet the concentrations used for the effects assessment presented in the Proponent's Application. The Proponent must monitor Morrison Lake water quality annually and if water quality does not meet any approved site specific water quality objectives approved under the Environmental Management Act, the Proponent must prepare, to the satisfaction of MOE, within 30 days, a plan to implement measures and then implement the measures, in order to bring the effect within the objectives.</p>	<p>EAO undertook a third-party technical review of the Proponent's water quality models and employed a third-party technical reviewer who examined how an effluent diffuser would impact Morrison Lake. The reviews found that water quality would meet British Columbia Water Quality Guidelines outside a 40x100 meter mixing zone, that the effluent diffuser would likely work as designed and would not result in the "pooling" of effluent in the bottom of Morrison Lake and that the effluent diffuser would not affect the long-term behaviour of Morrison Lake. Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the implementation of mitigation</p>

		<p>measures, there would be no significant adverse effects on water quality or the behaviour of Morrison Lake resulting from effluent discharged into Morrison Lake.</p>
<p>Concerns over gaps in understanding fish use and populations in Morrison Lake</p>	<p>The Proponent must develop, for EAO's approval, a plan to collect additional biological, physical and chemical information on Morrison Lake to further validate effects assessment provided during the EA. All information in the approved plan must be collected prior to the Proponent applying for Mines Act or Environmental Management Act permits. The plan must include, at the minimum the following: Additional baseline information on water quality, water chemistry, temperature and lake behaviour, including information on currents, flow regimes and lake turnover.</p> <p>The Proponent must complete spawning surveys along the east shore of Morrison Lake from the confluence of Morrison Lake and Olympic Creek to the outflow of Morrison River from Morrison Lake, including dive surveys, to identify areas of shoreline and deep water spawning habitat.</p> <p>The Proponent must complete spawning habitat survey and mapping along the full length of Morrison River to support of the development of the Instream Flow Requirement.</p> <p>The Proponent must prepare and implement a plan, in consultation with Lake Babine Nation and Skeena Fisheries Commission, to measure annual fish escapement into Morrison River in order to advance the knowledge of fish populations, behaviour and distribution in Morrison Lake.</p>	<p>EAO, having considered the input of the Working Group, with a particular emphasis on comments from First Nations groups, is satisfied that the additional research and monitoring would enhance understanding of the fish populations in Morrison Lake and River.</p>

Potential Effects to Wildlife, Wildlife Habitat, Ecosystems and Wetlands

The Application identifies and examines potential effects to ecosystems and wetlands, with a particular emphasis on those ecosystems considered rare or sensitive or that are used by grizzly bear, moose, mule deer, wolf, fisher, wolverine, American marten, red squirrel and waterfowl. Moose in particular are strongly associated with wetlands and are known to use the wetlands at the proposed TSF location. Potential effects identified in the Application included loss and degradation of ecosystems and wetland habitat due to vegetation clearing from the mine infrastructure and transmission line.

Key Potential Effects	Mitigation Measure/Commitment	EAO Analysis and Conclusions
Loss of wetland habitat and dry grass ecosystems for deer and moose.	Proponent must develop a Vegetation and Ecosystems Management Plan which will provide information to direct the Proponent's actions with respect to maintaining and promoting healthy vegetation and terrestrial and wetland ecosystems in areas associated with mine development. The Plan must be to the approval of MOE and FLNRO.	EAO, having considered input from the Working Group, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on ecosystems.
Concerns about uptake of metals into the tissue of animals such as moose, deer and bear.	The Proponent must develop, in consultation with Lake Babine Nation and for the purposes of monitoring the potential for uptake of metals in tissue, a plan to sample bear, deer and moose tissues within the Local Study Area as described in the Proponent's original Application for an EA Certificate. The Proponent must provide the plan to EAO for its approval. The plan must be implemented.	EAO, having considered input from the Working Group, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on wildlife.
Potential bird electrocutions from the power line.	The Proponent must use a design to minimize bird electrocutions by deterring nest building or perching on power poles through design considerations as well as adopting a design consistent with BC Hydro requirements	EAO, having considered input from the Working Group is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on wildlife.
Potential impacts to wildlife such as grizzly bear, moose, deer, Western toad and other SARA listed species.	Proponent must develop a Wildlife and Wildlife Habitat Management Plan which will provide procedures for minimizing and managing impacts to wildlife from routine mine activities, provide a framework for the development and implementation of wildlife monitoring programs, and processes for improving mitigation and management measures through adaptive management. The Plan must be to the approval of MOE and FLNRO. It will include the following elements: <ul style="list-style-type: none"> • Measures to preserve and protect wetland/riparian habitats; • Measures to reduce impacts to moose, deer, grizzly bear and other furbearers; • Measures to reduce bear/human conflicts; • Measures to expedite the return to productive habitat of riparian habitats; • Measures, such as trials during 	EAO, having considered input from the Working Group, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on wildlife.

	<p>operations, to expedite the tailings beach reclamation;</p> <ul style="list-style-type: none"> • Measures to mitigate impacts to western toad breeding sites; • Development of an Active Migratory Bird Nest Survey to reduce the likelihood of destroying bird nests; • Undertake additional research and surveys to assess habitat and use by the Olive-sided Flycatcher; and, • Undertake additional research and assessment to mitigate the impacts of potential for amphibian crossings areas on the main access road. 	
--	--	--

Potential Social and Economic Effects

The Proponent's Application included a Socio-Economic Baseline Study Report which focused on the Village of Granisle and the nearby Lake Babine Nation communities. The Village of Granisle was constructed for the (now closed) Bell and Granisle Copper Mines. While the current population is only about 300, it still has the primary infrastructure to accommodate 2,000 people.

The Application says that about 1,117 jobs will be created during the two year construction period, which would generate about \$22 million per year in direct tax revenue, of which nearly \$12 million would go the province. During operations, the Application estimates about 601 jobs and \$5.4 million a year in direct federal and provincial taxes.

Key Potential Effects	Mitigation Measure/ Commitment	EAO Analysis and Conclusions
<p>Increased demand on infrastructure and services in the Village of Granisle.</p>	<p>The Proponent signed a Memo of Understanding (MOU) with the Village to address their concerns and to create a framework to resolve identified issues. Proponent must develop a Social Effects Management Plan to address impacts to local communities such as Granisle, Tachet, Smithers Landing and Lake Babine Nation Communities. The Plan will provide a framework for implementing strategies to manage potential social, economic; and cultural changes anticipated in response to the Project, as experienced by local residents and communities.</p> <p>The Proponent must hold at least one job/business fair in both Granisle and a second community (e.g. Burns Lake or Smithers), within one year of the commencement of the Project's construction to inform local residents and businesses of</p>	<p>EAO, having considered input from the Working Group, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse social or economic effects.</p>

	<p>upcoming opportunities for employment and contracts as well as the requirements for obtaining these positions, including skills and certifications.</p> <p>The Proponent must complete, in collaboration with the Village of Granisle and Lake Babine Nation, within one year prior to the commencement of construction, a skill inventory and needs analysis.</p> <p>The Proponent must establish a Community Sustainability Advisory Committee (CSAC), comprising representatives from the Village of Granisle and Lake Babine Nation. The purpose of CSAC is to identify, resolve, and monitor any issues raised by the community with respect to the Project. CSAC must be established within one year of the commencement of the Project's construction.</p> <p>The Proponent must hire a Community Liaison to act as the Proponent's primary point of contact for public and local organizations on community issues. This position must also oversee CSAC and facilitate implementing elected programs and initiatives.</p>	
Impacts to Tukki Hunting Lodge satellite camp on Morrison Lake.	The Proponent has negotiated a mutually satisfactory agreement with the owners of Tukki Lodge which addresses their concerns.	EAO, having considered input from Tukki Lodge, is satisfied that, with the implementation of mitigation measures, there would be no significant adverse social or economic effects.
Impacts to Ookpik Wilderness Lodge on Babine Lake.	The Proponent discussed a compensation package with the owners of Ookpik Lodge, but the parties could not come to a mutually acceptable agreement. In the absence of a negotiated agreement, the Proponent has committed to measures to address the effects of the proposed Project on the operations and business of Ookpik Lodge, including reducing speed and volume of mine traffic on haul roads, improved road maintenance and managing blasting noise.	EAO, having considered input from Ookpik Wilderness Lodge, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse social or economic effects
Impacts to Lake Babine Nation trappers with trap lines in the area of the proposed	The Proponent must compensate Lake Babine Nation, as requested in the July 16, 2010 letter from Lake Babine Nation, for the impact of the Project on Trap-line T049. The Proponent must provide one year notification to the trap-line holder of the	EAO, having considered input from Lake Babine Nation, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant

Project.	commencement of construction.	adverse social or economic effects.
Impacts to Canfor's forestry tenure due to loss of access to mature timber.	Proponent must develop a Social Effects Management Plan. A component of that plan is to coordinate timber removal from the proposed Project site with Canfor and develop mitigation measures specific to address Canfor's interests, including additional information collection on timber volume; and potentially compensating for Canfor's marginal cost to harvest timber elsewhere; and, ensuring consistency with land use planning timber harvest objectives.	EAO is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse social or economic effects

Conclusions on Potential for Significant Adverse Effects

Overall, the assessment and mitigation measures proposed in the final addendums to the original Application for the above-noted issues were considered reasonable and acceptable to EAO, the Working Group and Yekooche Nation, Lake Babine Nation and Gitxsan and Gitanyow Nations.

EAO considered that the major design proposals of the geomembrane liner for the TSF; submerging waste rock in the open pit on closure; construction of a water treatment plant in the early stages of construction and operations; the requirement for an Instream Flow Requirement for Morrison River; additional research and inventory on the physical behaviour and fish habitat of Morrison Lake; and, an ongoing monitoring plan for Morrison Lake would result in no residual adverse effects to environmental or health resources.

EAO's assessment of economic effects, including the existing forest industry and tourism operations concluded that there would be no adverse economic effects resulting from the proposed Project.

EAO assessed the project design, location and mitigation measures proposed to identify and protect any archaeological or heritage resources, and concludes that there would be no residual adverse effects.

EAO assessed the Proponent's Social Effects Management Plan and the MOU signed with the Village of Granisle and concluded there would be no social effects.

The potential effects to Gitxsan, Gitanyow, Yekooche and Lake Babine Nation aboriginal rights and title is further discussed in the next section "Strength of Asserted Rights".

2. First Nations' Asserted Rights and Title

The proposed Project is within the asserted traditional territory claimed by Lake Babine Nation and Yekooche First Nation.

In addition to these two First Nations, EAO consulted with Gitxsan and Gitanyow Nations, who indicated that, while the proposed Project was not within their asserted traditional territory, their rights to access salmon on Skeena River could be affected by the proposed Project.

Lake Babine Nation

EAO-led Consultation

Lake Babine Nation was kept fully informed of progress of the EA and was provided with all information sent to the Working Group. Representatives of Lake Babine Nation Chief and Council participated in the review from about 2005 onwards. Lake Babine Nation Councillor with a Natural Resources Portfolio was the primary contact on the Working Group. Prior to 2005, EAO had been engaging with a group called Nedo'ats Hereditary Chiefs, who EAO, at that time, understood to speak for Lake Babine Nation rights and title. After 2005, Chief and Council clarified that they were the appropriate contact to address Lake Babine Nation rights and title.

In December 2008, the Proponent filed suit against Lake Babine Nation, alleging damages relating to a press release made by the Chief of Lake Babine Nation. In March 2009, Lake

Babine Nation filed a defense and counterclaim. These suits influenced much of the communication between EAO, the Proponent and Lake Babine Nation over the next several years. The Proponent rescinded its suit in 2009 and the parties eventually reached an agreement for Lake Babine Nation to re-engage in discussions with the Proponent. In March 2012, Lake Babine Nation and the Proponent signed an MOU

EAO met with Lake Babine Nation Chief and Council regularly for government-to-government discussions. Lake Babine Nation was invited to comment on all assessment related documents including the draft First Nations Consultation Report, the draft Assessment Report, and the draft Table of Conditions. All comments were fully considered by EAO and incorporated into the final versions.

EAO and the Proponent provided significant capacity funding to Lake Babine Nation during the pre-Application and Application Review stages of the EA.

Proponent-led Consultation

Prior to and after EAO's issuance of the proposed Project's section 10 and 11 Orders (outlining the scope, methods and procedures for the EA), the Proponent engaged with Lake Babine Nation.

During the pre-Application period, the Proponent's consultation activities focused on:

- initiating consultation, including letters, emails, telephone calls and initial meetings confirming nature and scope of the proposed Project and objectives of the consultation process;
- providing Project-related information as required, including maps and figures, work plans, presentations, and studies and meeting materials;
- identifying key interests of Lake Babine Nation for the purposes of the EA;
- arranging and participating in open houses to allow Lake Babine Nation communities to review the proposed Project and EA-related information;
- seeking input on the nature and extent of Lake Babine Nation traditional and current use of the area, and how the proposed Project may affect their Aboriginal interests;
- signing an EA Process Funding Agreement with Lake Babine Nation;
- providing copies of the Application to Lake Babine Nation for screening and review purposes, as required by EAO; and,
- entering into an MOU about the proposed Project.

During the Application review period, the Proponent's consultation activities included:

- distributing notices regarding the Application submission and providing copies of the Application to Lake Babine Nation for review and comment;
- participating in EAO-led Open Houses in Burns Lake, Fort Babine and Tachet;
- providing funding for additional field work related to the location of mine infrastructure and sockeye salmon spawning areas; and,
- addressing issues raised by Lake Babine Nation Chief and Council and their consultants.

The specific terms of the MOU are confidential, however, a number of aspects of the MOU, specifically those related to environmental monitoring, have been incorporated into the Table of Conditions.

Key Issues Raised by Lake Babine Nation

Lake Babine Nation were active participants in the EA process, taking part in Working Group meetings, meeting directly with EAO on numerous occasions and with the Proponent occasionally. They also provided written feedback on their perspectives and interests with respect to the proposed Project as well as a number of technical reports, primarily related to fish and water quality on Morrison and Babine Lake.

During the pre-Application and Application Review stages of the EA, Lake Babine Nation advised EAO of a wide range of concerns related to the-proposed Project. Those issues are primarily focused in the following areas:

- cumulative impacts to water quality in Babine Lake and Babine River due to the now closed Bell and Granisle Mines;
- impacts to wildlife and wildlife habitat;
- impacts to fish and fish habitat;
- incorporation of traditional knowledge into studies and research;
- appropriate engagement of the five Lake Babine Nation communities into decision-making/consultation;
- impacts to traditional harvesting activities;
- jobs and economic opportunities; and,
- impacts on trapping activities of Lake Babine Nation trap line holders.

During the review of the Application, much of the focus of Lake Babine Nation was on potential impacts to water quality and fish in Morrison Lake and Babine Lake and they continued to express concerns regarding existing impacts from Bell and Granisle Copper Mines, which closed in the 1990s.

Many of the major mine design changes made through the EA process by the Proponent, as well as the third-party review undertaken by EAO, were intended to address the key issues of impacts to water quality and fish, values which are central to the aboriginal rights of Lake Babine Nation. It was only when the last major mine design changes were proposed by the Proponent in April 2012 when EAO, with the advice of the third-party technical reviewers, was able to evaluate the effects on the proposed Project on water quality, fisheries and aquatic habitat and develop conclusions about the potential for significant adverse effects, using the six significance factors.⁴ The key mitigation measures for these potential effects are listed on pages 8 to 18 of this report. EAO determined that the magnitude of the effects was not significant, and with the implementation of the proposed mitigation measures and the legally-binding conditions on the Proponent, there would be no residual adverse effects from the Project on water quality and fisheries resources, nor would the proposed Project result in adverse impacts on Lake Babine Nation aboriginal rights to hunt and fish in their traditional territory.

⁴ Magnitude, extent, duration and frequency, probability, reversibility, and context.

Strength of Asserted Rights

The Supreme Court of Canada, in its 2004 decision on *Haida Nation v. British Columbia (Minister of Forests)* ("Haida"), made it clear that the degree of potential impact of a government decision is a key factor in determining the requisite degree of consultation and accommodation. EAO's preliminary assessment, based on available information, was that the Crown's duty to

consult Lake Babine Nation lay at the deep end of the Haida spectrum for consultation.

It is EAO's assessment, based on current information available to it, that Morrison Lake, Morrison River, the Babine Archipelago and the lands surrounding this area were part of the broader territory used by Lake Babine Nation for traditional activities associated with the typical Carrier annual round, and that, consequently, there is a strong prima facie case in support of the assertion that aboriginal rights are exercisable in the proposed Project area. Moreover, it is EAO's assessment that there is a moderate to strong prima facie case in support of Lake Babine Nation's assertion of aboriginal title to the area in which the proposed Project is to be situated. It is important to note that this conclusion is a prima facie determination made in order to discharge EAO's Haida analysis and is focused on the site of the proposed Project. This analysis is not meant to apply to any other part of Lake Babine traditional territory; this assessment is only being made for the purpose of the proposed Project.

Accommodation

The Proponent participated in a pre-Application and Application review consultation program with Lake Babine Nation as summarized earlier in this report. However, due to the litigation between the Proponent and Lake Babine Nation and the challenges in communication flowing from that litigation, many of the major design changes to the proposed Project intended to address issues raised by Lake Babine Nation were identified and facilitated by EAO based on government-to-government discussions with Lake Babine Nation Chief and Council. While the Proponent was not directly involved with Lake Babine Nation in those discussions, they actively supported the work through design changes and funding for Lake Babine Nation to undertake field work. The Proponent also signed an MOU with Lake Babine Nation during the final stages of the EA.

Issues raised by Lake Babine Nation and Gitanyow/Gitxsan Nations were largely the drivers behind many of the major design changes and research conditions which occurred through the EA review. EAO **undertook** a number of third-party reviews (by a professional fisheries biologist, a professional geologist/hydrogeologist and a professional engineer/lake behaviour specialist) to examine in more details the issues raised by Lake Babine Nation to ensure that appropriate mitigations were put in place. In particular, some of the accommodations to address concerns include:

- The Proponent committed to lining **96 percent of** the TSF with a geomembrane liner to vastly reduce seepage and thus potential effects upon sockeye salmon spawning areas.
- EAO engaged a third-party lake behaviour specialist to review issues related to "hotspots" and areas of higher effluent concentration. The review indicated that the Proponent's commitment to a geomembrane liner would effectively eliminate this concern.
- The Proponent has committed to working with Lake Babine Nation and DFO in measuring annual fish escapement into Morrison River and advancing the knowledge of the fish populations, behaviour and distribution in Morrison Lake.
- The Proponent committed to spawning surveys in Morrison River to better quantify the potential effect of the reduction in flow due to the proposed mine. They would also be required to develop an Instream Flow Requirement for Morrison River.
- The Proponent committed to an ongoing monitoring program of bear, deer and moose tissues as well as fish samples. The sampling program would be developed in conjunction with Lake Babine Nation and a component of the monitoring work would be completed by Lake Babine Nation members.
- The Proponent committed to an ongoing water quality monitoring program. The sampling program would be developed in conjunction with Lake Babine Nation and a component of

- the monitoring work would be completed by Lake Babine Nation members.
- The Proponent committed to compensate Lake Babine Nation trap-line holders for the time their trap-line would be unavailable due to project construction and operations, if the proposed Project were approved.
 - The Proponent committed to moving all mine infrastructures (e.g. overburden stockpile, water diversion structures, etc.) from Morrison Point and reserving the area from all mine-related activities due to the spiritual significance of the area to Lake Babine Nation.
 - The Proponent committed to inventorying and assessing the "Old People's Trail" and developing any mitigation as required.
 - The Proponent involved Lake Babine Nation in 2010 and 2011 meetings, field work, helicopter fly-overs, review of its proposed Fish Habitat Compensation Plan compensation sites and options on how best to reduce potential harmful effects and enhance and/or increase fish habitat in the area.

In addition to these accommodations, the Certified Project Description (Appendix 3 to the Assessment Report) which includes a Table of Conditions which the Proponent must adhere to also contains other conditions and project design requirements which further mitigate or otherwise accommodate potential adverse effects on Lake Babine Nation asserted aboriginal rights.

It is EAO's assessment that the Crown's duty to consult and accommodate has been honourably discharged through a process of consultation and accommodation that included flexibility, accountability, inclusiveness, and responsiveness to issues raised by Lake Babine Nation. EAO further concludes that, on behalf of the Province, it acted in good faith at all times to consult with Lake Babine Nation and made available opportunities for deep consultation which ensured that all concerns raised by Lake Babine Nation about the proposed Project were considered.

EAO also concludes that avoidance, mitigation, and accommodation measures identified during the EA process will result in no significant potential adverse effects on Lake Babine Nation interests or asserted aboriginal rights in the proposed Project area. EAO is satisfied that the Crown's duty to consult pursuant to a decision under the Act has been fully discharged for the proposed Project.

Yekooche First Nation

EAO-led Consultation

Yekooche First Nation was kept informed of progress of the EA through notification of major milestones. Yekooche First Nation were initially invited to Working Group meetings but indicated by letter in 2003 that they had little to contribute but would like to receive additional reports and conclusions as the EA proceeded. Yekooche First Nation were invited to participate at the major milestones such as screening, and were invited to comment on all assessment related documents including the draft First Nations Consultation Report, the draft Assessment Report, and the draft Certificated Project Description and Table of Conditions. No comments were received on any of these documents.

Proponent-led Consultation

The Proponent was assigned certain consultation obligations with Yekooche First Nation through the proposed Project's section 11 Order. The Proponent engaged Yekooche First Nation in 2003 when the initial EA began. Yekooche First Nation provided a similar message to the Proponent as it had to EAO, saying they had no additional information to add to the EA, but

that they wished to receive updates and reports on the proposed Project. The Proponent continued to supply copies of all Application materials (including baseline information) to Yekooche First Nation, at the direction of EAO and consistent with the section 11 Order. No comments were received throughout the course of the EA.

Key Issues Raised by Yekooche First Nation

During initial discussions in 2003, Yekooche First Nation noted a concern for the cumulative effects of the proposed Project on the Skeena watershed, although they provided no specific information on which impacts to consider. They also noted a concern regarding wildlife corridors in the area of the proposed Project and expressed a desire to see economic benefits from the proposed Project.

Strength of Asserted Rights

EAO's preliminary assessment, based on available information, was that the Crown's duty to consult Yekooche First Nation lay on the lower end of the Haida spectrum for consultation, based largely on the fact that there is limited evidence that activities that could ground a claim of aboriginal rights may have been exercised historically in the vicinity of the proposed Project and that only a small portion of the transmission line of the proposed Project is within the area claimed by Yekooche First Nation. EAO has consulted in a manner that is consistent with this assessment.

Accommodation

Considering the limited amount of information or concerns noted by Yekooche First Nation, EAO considers that the Certified Project Description, which includes a Table of Conditions which the Proponent must adhere to, contains conditions and project design requirements which will mitigate or otherwise accommodate potential adverse effects on Yekooche First Nation asserted aboriginal rights.

It is EAO's assessment that the Crown's duty to consult and accommodate has been honourably discharged through a process of providing a range of opportunities for consultation. EAO further concludes that, on behalf of the Province, it acted in good faith at all times to consult with Yekooche First Nation, and made available opportunities for consultation which ensured that concerns raised by Yekooche First Nation about the proposed Project were considered.

EAO also concludes that avoidance, mitigation, and accommodation measures identified during the EA process will result in no significant potential adverse effects on Yekooche First Nation interests or asserted aboriginal rights in the proposed Project area. EAO is satisfied that the Crown's duty to consult pursuant to a decision under the Act has been fully discharged for the proposed Project.

Gitxsan and Gitanyow Nations

EAO-led Consultation

Gitanyow Hereditary Chiefs' Office (GHCO) on behalf of Gitanyow Nation and Gitxsan Chiefs' Office (GCO) on behalf of Gitxsan Nation wrote to the Minister of Environment during the review of the Application in 2009. They indicated that Morrison Lake was important to the production of sockeye salmon on Skeena River and stated that, due to this reliance on Skeena sockeye, they had aboriginal rights to the Morrison Lake fishery.

In response, EAO issued a section 13 Order and specified that GHCO and GCO would be consulted on the proposed Project. EAO added a representative of the Skeena Fisheries

Commission (SFC) to the Working Group, a technical body which represented the interests of the two First Nations. SFC representatives were kept fully informed of progress of the EA and were provided with information that was sent to the Working Group.

SFC participated directly in the Application Review by providing comments to EAO, attending Working Group meetings, and meeting with EAO along with GHCO and GCO. GHCO, GCO and SFC were invited to comment on all assessment related documents including the draft First Nations Consultation Report, the draft Assessment Report, and the Certified Project Description and Table of Conditions. All comments were fully considered by EAO and many were incorporated into the final versions.

EAO provided capacity funding to GHCO and GCO to participate in the Application Review stages of the EA.

Proponent-led Consultation

The Proponent was not assigned any consultation obligations with GHCO, GCO or SFC.

Key Issues Raised by Gitanyow and Gitxsan

SFC were active participants in the EA process, taking part in Working Group meetings, meeting directly with EAO on several occasions and provided written feedback on their perspectives and interests with respect to the proposed Project. Much of the input was very high quality and increased EAO's understanding of the fisheries values in the area of the proposed Project.

The focus of SFC comments and concerns was on understanding the importance and contribution of Morrison Lake and Morrison River to the sockeye salmon of the Skeena River system. Many of their comments focused on the need for additional spawning research and understanding the use and numbers of fish in Morrison Lake and the overall behavior of Morrison Lake, including a better characterization of water quality baseline information. They indicated many concerns regarding the Proponent's effects assessment, particularly as it related to fish in Morrison Lake. In particular, they were concerned about the proximity of the open pit to Morrison Lake and the flow of effluent from the open pit to Morrison Lake. They noted deficiencies in the HADD (harmful alteration destruction or disruption of fish habitat) assessment, in particular as it did not include an assessment of all fish habitat around the diffuser and pipeline on the bottom of Morrison Lake. They also questioned the sufficiency the hydrogeology work done by the Proponent.

Strength of Asserted Rights

EAO's preliminary assessment based on current information available, and having regard to the applicable legal test, that there is a strong *prima facie* case in support of Gitanyow and Gitxsan aboriginal rights to fish within their traditional territories on Skeena River. With regard to the Haida spectrum, EAO determined that the scope of the duty to consult with GHCO and GCO was low on the *Haida* spectrum. That initial determination was based on an understanding that, given the significant distance downstream, it was unlikely that any fishing rights could be affected by the proposed Project.

Since that original assessment, EAO met with GHCO and GCO and reviewed technical submissions from SFC. Since the initial assessment, EAO changed its understanding and now recognizes that the shared Gitanyow/Gitxsan fishery takes in the order of 65,000 sockeye from Skeena River annually and that approximately 3.5 percent of those fish come from the Morrison watershed.⁵ As a result of this new information, EAO understands that GHCO and GCO are concerned about impacts to the aboriginal right to fish because a portion of the fish caught on Skeena and Babine Rivers come from Morrison Lake.

⁵ SFC asserts that the number could be as high as eight percent depending on the counting method.

Based on this new information EAO changed its initial assessment of the scope of the duty on this proposed Project to consult from low to moderate. In EAO's view, the engagement process with GHCO and GCO, through its designated representatives and directly, has been consistent with this assessment.

Accommodation

As noted, the Proponent was not assigned any obligations to consult with GHCO and GCO and all consultation occurred through EAO. Issues raised by SFC were largely the driver behind many of the design changes which occurred through the EA review. EAO undertook a number of third-party reviews (by a professional fisheries biologist, a professional geologist/hydrogeologist and a professional engineer/lake behaviour specialist) to examine in more details the issues raised by SFC and to ensure that appropriate mitigations were put in place.

In particular, some of the accommodations to address concerns include:

- The Proponent committed to lining 96 percent of the TSF with a geomembrane liner to vastly reduce seepage and thus potential effects upon sockeye salmon spawning areas.
- The Proponent committed to implementing additional secondary water treatment in the proposed water treatment plant to further remove parameters of concern - cadmium in particular, which was the focus of one of SFC's technical submissions.
- EAO engaged a third-party lake behaviour specialist (a SFC recommendation) to review issues related to "hotspots" and areas of higher effluent concentration. The review indicated that the Proponent's commitment to a geomembrane liner would effectively eliminate this concern.
- EAO engaged a third-party lake behaviour specialist (a SFC recommendation) to review the Proponent's diffuser design, with a specific question on the efficacy of how it could affect lake mixing. These reviews indicated that the diffuser would likely operate as asserted by the Proponent and the effluent diffuser would not be expected to change lake behaviour.
- The Proponent committed to collecting additional information on the physical behaviour of the lake, including water quality monitoring and temperature, conductivity probes and understanding currents and flow regimes.
- EAO undertook a third-party review of the Proponent's hydrogeology baseline and modelling. The third-party reviewer confirmed that the new Proponent models represented a reasonable Upper Bound and that baseline information was sufficient for predictions.
- The Proponent has committed to working with Lake Babine Nation, DFO and SFC in measuring annual fish escapement into Morrison River and advancing the knowledge of the fish populations, behaviour and distribution in Morrison Lake.
- The Proponent committed to spawning surveys in Morrison River to better quantify the potential effect of the reduction in flow due to the proposed mine. They would also be required to develop an Instream Flow Requirement for Morrison River.

In addition to these accommodations, the Certified Project Description, which includes a Table of Conditions which the Proponent must adhere to, also contains other conditions and project design requirements which further mitigate or otherwise accommodate potential adverse effects on Gitksan and Gitanyow asserted aboriginal rights.

It is EAO's assessment that the Crown's duty to consult and accommodate has been honourably discharged through a process of consultation and accommodation that included flexibility, accountability, inclusiveness, and responsiveness to issues raised by GHCO and GCO. EAO further concludes that, on behalf of the Province, it acted in good faith at all times to consult with GHCO and GCO and made available opportunities for consultation which ensured that all concerns raised by GHCO and GCO about the proposed Project were considered.

EAO also concludes that avoidance, mitigation, and accommodation measures identified during the EA process will result in no significant potential adverse effects on GHCO and GCO interests or asserted aboriginal rights in the proposed Project area. EAO is satisfied that the Crown's duty to consult pursuant to a decision under the Act has been fully discharged for the proposed Project.

3 Position of Federal Agencies

The federal government considers that the issues examined by its agencies have been addressed through project design, mitigation measures and other commitments agreed to by the Proponent.

DFO and Natural Resources Canada have indicated that they agree with the conclusions of the Assessment Report. CEA Agency and the federal authorities have also indicated that they agree with the conclusions. CEA Agency reports that they will be independently writing a Comprehensive Study Report, to be completed after this referral.

4 Position of Local Governments

The Village of Granisle (VOG) was a participant in the Working Group and provided comments on the Application. In their submissions to EAO, the VOG expressed support for the proposed Project. However, the VOG indicated that they anticipate some positive and negative impacts to their community and want to build a better relationship with the Proponent and, to that end, signed an MOU with the Proponent to address their concerns around social effects, property values, pressure on community infrastructure and services and local employment.

5 Public Consultation

The Proponent carried out a program of public consultation during both the pre-Application and Application Review stages in local communities that met the requirements of EAO.

EAO held a 30-day public comment period in the pre-Application stage in November 2008 in Granisle, Houston, and Burns Lake. Attendance at the Granisle open house was highest, with nearly 70 participants.

The key issues raised by the public included: employee housing, transportation and safety impacts, water quality and fisheries, and economic revitalization in the region. EAO received 64 comments from five individuals on the draft Terms of Reference, and considered those comments prior to issuing the final Terms of Reference to the Proponent in May 2009.

The formal review of the Application was initiated on July 12, 2010, and the Application was posted to EAO's electronic Project Information Centre (e-PIC). The Application was made available to the public in local libraries, municipal halls and regional district offices in Granisle, Houston, Burns Lake and Smithers.

A 70-day public comment period on the Application was held from July 22, 2010 to September 30, 2010. Four open houses were held by EAO during the Application Review period: two in Granisle (total of 110 attendees) and one each in Burns Lake, (8 attendees) and Smithers (25 attendees)

EAO received 88 comments from seven individuals and organizations. Issues raised by the public generally included: water quality, ML/ARD, dust and air contaminants, wildlife displacement and health risks, increased traffic, accident and contingency planning, and potential economic and employment benefits to the local communities.

A second, online-only, two-week public comment period was jointly initiated by EAO and CEA Agency in July 2011 on the new project information provided by the Proponent.

E. CONCLUSIONS

EAO is satisfied that:

- The Assessment process has adequately identified and addressed the potential adverse environmental, economic, social, heritage and health effects of the proposed Project, having regard to the conditions, and the mitigation measures set out in Schedule B to the draft EA Certificate;
- Public consultation, and the distribution of information about the proposed Project, has been adequately carried out by the Proponent;
- The Crown has fulfilled its obligations for consultation and accommodation to Lake Babine Nation, Yekooche First Nation and Gitksan and Gitanyow Nations relating to the issuance of an EA Certificate for the proposed Project.

RECOMMENDATION:

The Executive Director recommends that an Environmental Assessment Certificate be issued to Pacific Booker Minerals Inc. for the Morrison Copper/Gold Mine Project on terms and conditions that require Pacific Booker Minerals Inc. to comply with all design and mitigation conditions set out in the attachments to the proposed Certificate.

Submitted by:

Derek Sturko
Associate Deputy Minister and Executive Director
Environmental Assessment Office

In the matter of the
ENVIRONMENTAL ASSESSMENT ACT
S.B.C. 2002, c. 43
(Act)

and

in the matter of an
Application
for an
Environmental Assessment Certificate
(Application)

by

Pacific Booker Minerals Inc.
(Proponent)

for the

Morrison Copper/Gold Mine Project
(proposed Project)

August 13, 2012

Recommendations of the Executive Director

In accordance with the provisions of section 17(2)(b) of the *Environmental Assessment Act*, the Executive Director of Environmental Assessment Office makes the recommendations contained in this submission, for the reasons indicated, in connection with the application by Pacific Booker Minerals Inc. for an Environmental Assessment Certificate for the proposed Morrison Copper/Gold Mine Project.

A. ISSUE

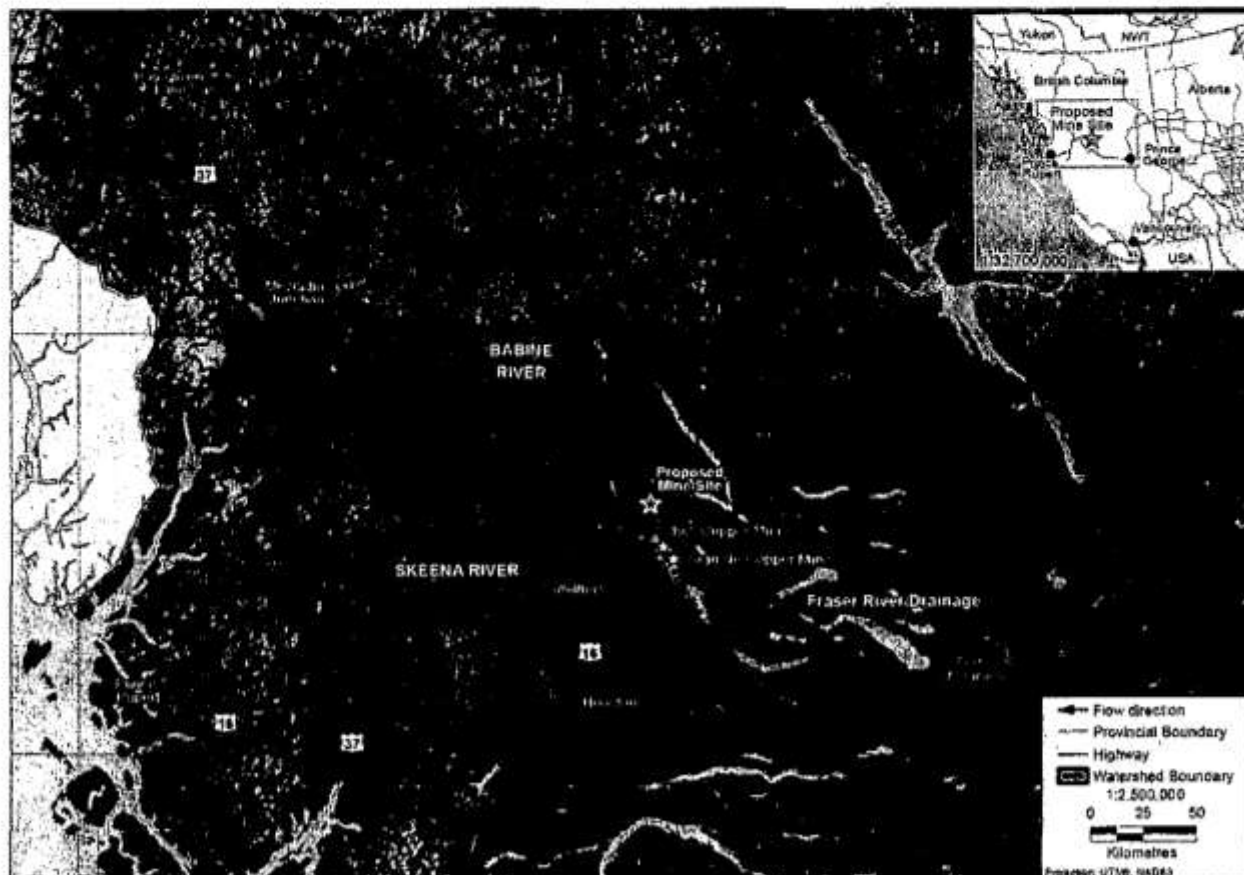
Decision by Ministers on the Application for an Environmental Assessment (EA) Certificate by Pacific Booker Minerals Inc. for the proposed Morrison Copper/Gold Mine Project (proposed Project).

B. BACKGROUND

1. Proponent and Project Description

The Proponent for the proposed Project is Pacific Booker Minerals Inc. (PBM), a publicly-traded, British Columbia-based mineral resource company with its head office in Vancouver.

The Proponent is proposing to develop a copper-gold-molybdenum mine in north-central British Columbia. The proposed Project is located on the shoreline of Morrison Lake, a 15 km long lake, on Crown Land. The closest communities to the mine site are Granisle, Houston and Smithers.



The proposed Project is based on a conventional truck-shovel open pit mine and copper flotation process plant that has been designed to produce an average of 160,000 tonnes of concentrate per year containing copper and gold. A separate molybdenum concentrate

would be produced. Over the expected 21-year mine life, the proposed Project would produce over 1.37 billion pounds of copper, 658,000 ounces of gold and about 10 million pounds of molybdenum.

The scope of the proposed Project consists of the following on-site and off-site components and activities:

- approximately 30,000 tonnes per day open pit mine and process plant;
- mill tailings storage facilities including containment dams;
- waste rock storage;
- site runoff, diversion and sediment control;
- ore and marginal ore storage;
- borrow pits, overburden and topsoil storage;
- sewage and waste water management facilities;
- water treatment facilities;
- groundwater and/or surface water use for monitoring and/or extraction;
- explosives transport, manufacturing plant and storage;
- an existing 138 kV transmission line from Babine Substation, crossing Babine Lake, to the Project site and a new 25-km extension of the transmission line from the Bell Mine site to the proposed Project site;
- a power substation at the proposed Project site;
- mine haul roads within the mineral property;
- new and/or existing dedicated barge and barge facilities;
- associated mine facilities such as assay buildings, ore load out facilities, labs, maintenance shops, warehouse, equipment lay down areas, office complex parking, change house, security building; and,
- routes for hauling the ore to the milling facility and for personnel access and delivery of supplies and materials to the site, including new or existing roads.

The proposed Project's total estimated capital cost is \$245 million during each of the two years of construction and \$89.5 million during each of the 210 years of operation.

The Proponent estimated that the two year construction period would generate an estimated 1,117 jobs each year, but due to the nature of construction, many of those jobs would be part time temporary or contract, which would not necessarily relate to 1,117 person years (or full time equivalent) of direct employment. The Proponent estimates a total of 225 jobs with the Proponent, 422 jobs with direct suppliers, 188 jobs of indirect employment and 282 jobs of induced employment.

The 210 year operations period is estimated to generate approximately 601 jobs per year. Again, those are not necessarily 601 full time positions, although jobs created in the operations phase are more likely to be full-time and longer than construction positions. The Proponent estimates a total of 251 jobs with the Proponent, 94 jobs with direct suppliers, 155 jobs of indirect employment and 101 jobs of induced employment.

The proposed Project would contribute an estimated \$104 million to Provincial Gross Domestic Product over the two year construction period and \$50 million during the 21⁰ years of operations.

During construction, the proposed Project is estimated to generate approximately \$22 million in government tax revenue, with approximately \$10 million payable to the federal government and \$12 million to the province. During the ~~construction~~ operations phase, the proposed Project is expected to contribute \$2.9 million in federal tax revenue and \$2.5 million in provincial tax revenue.

2. British Columbia Environmental Assessment Process

In September 2003, the Proponent submitted a Project Description to Environmental Assessment Office (EAO). EAO determined that the proposed Project was reviewable under the Act pursuant to Part 3 of the Reviewable Project Regulations (B.C. Reg. 370/02), because the proposed Project is a new mine facility that during operations would have a production capacity of greater than 75,000 tonnes per year of mineral ore.

EAO coordinated and chaired a multi-agency group (Working Group) that provided advice on the potential effects, mitigation measures and conditions required in the EA. The Working Group membership, as well as organization names, has changed significantly over the nine years of review, but the following agencies and First Nations have been engaged:

- **Provincial:** Ministry of Energy and Mines, Ministry of Environment, Ministry of Forests, Lands and Natural Resource Operations; and Ministry of Transportation and Infrastructure
- **Federal Agencies:** Canadian Environmental Assessment Agency, Health Canada, Fisheries and Oceans, Natural Resources Canada, Major Projects Management Office, Environment Canada; and Transport Canada
- **First Nations:** Lake Babine Nation, Yekooche First Nation, Gitanyow Nation, Gitxsan Nation
- **Local Government :** Village of Granisle

On September 28, 2009, the Proponent submitted their Application for evaluation to EAO. EAO did not accept the Application for review because it did not contain the information required by the Terms of Reference.

The Proponent provided a revised Application on May 28, 2010, which was evaluated by EAO with input from the Working Group. The Application was accepted for review on June 28, 2010. A 70-day public comment period on the Application was held and open houses occurred in Granisle, Smithers and Burns Lake.

On October 28, 2010, EAO issued a time limit suspension on the Application Review at the Proponent's request in order to provide time for the Proponent to fully respond to issues raised by the technical reviewers.

On December 16, 2010, EAO representatives met with representatives of the Proponent and the Canadian Environmental Assessment Agency (CEA Agency) and indicated that EAO had serious concerns about the long-term environmental liability of the proposed Project. EAO highlighted concerns with the proposed land-based waste rock storage, the plan for a mine drainage water collection and treatment system in perpetuity, and the potential impacts on water quality in the receiving environment.

On February 18, 2011, the Proponent advised EAO that they intended to revise the mine plan in order to reduce potential environmental risks associated with the original project design. On March 9, 2011, EAO wrote to the Proponent with a list of information requirements for the new waste and closure plans as well as information related to fish habitat compensation plans.

The Proponent submitted the required supplemental information in June 2011. Following a review of the information, EAO accepted the documents and the time limit suspension was lifted on July 27, 2011. An online-only public comment period was jointly initiated by EAO and CEA Agency on the new information submitted by the Proponent.

On September 29, 2011, at day 176 of the 180 day review period, EAO again suspended the review of the proposed Project because EAO was unable to develop conclusions on the potential for significant adverse effects to water quality and fish, sockeye salmon in particular.

Following the September 29, 2011 suspension, EAO commissioned ~~undertook~~ an external, third-party review of the Proponent's water quality, hydrogeology and fisheries effects assessments. These third-party reports, which were delivered to EAO in December 2011, confirmed that there was insufficient information to demonstrate that the proposed Project would not have significant adverse effects on water quality in the long term. The reports provided a number of recommendations for additional work.

EAO informed the Proponent that they must respond to the external review recommendations. EAO also shared the reports with the Working Group and First Nations and sought their input on any additional requirements that should be included in the Proponent's scope of work.

The Proponent provided EAO with an additional submission on January 31, 2012, entitled *3rd Party Review Response Report*. EAO again had this information reviewed by the external third-party hydro-geologist and retained a third party lake behaviour specialist to also examine the *3rd Party Review Response Report*. EAO indicated to the Proponent that, despite information contained in the *3rd Party Review Response Report*, there were still significant outstanding concerns, particularly as they related to water quality in Morrison Lake and potential impacts to sockeye salmon spawning areas.

On April 30, 2012, the Proponent submitted its final addendum, called *3rd Party Review Response Report – Addendum 1*. This report provided information on several significant new design options. Models which accompanied these proposed design changes have enabled EAO to develop conclusions on the proposed Project.

EAO ~~has~~ referred the Application to Ministers on August ~~XX3~~, 2012. Ministers have until September ~~4xx7~~, 2012 to make a decision, unless an extension is ordered in accordance with section 24(4) of the Act.

3. Federal Environmental Assessment Process

CEA Agency determined that a federal review was required for the proposed Project; that the review would be a comprehensive study, and the responsible authorities would include: Fisheries and Oceans Canada (DFO), ~~Transport Canada~~, and Natural Resources Canada.

Federal authorities actively participated in the EA of this proposed Project. Federal comments received during the cooperative review are reflected in this Assessment Report and have significantly informed the analysis and conclusions.

4. Other Approvals

EAO accepted the Proponent's application for concurrent review of the EA Certificate Application with an application for:

- Mining lease (Ministry of Energy and Mines)
- Crown Land License of Occupation for the proposed Transmission Line (Ministry of Forests, Land and Natural Resource Operations – MFLNRO)
- Occupant License to Cut (MFLNRO)
- Special Use Permit (MFNRO)
- Road Use Permit (MFLNRO)
- Forest License to Cut (MFLNRO)

Under the *Concurrent Approval Regulation*, agencies must decide whether to grant the permits and approvals within 60 days of Ministers decision to grant an EA Certificate. In addition to these approvals, there are numerous other approvals which would be required, following the issuance of the EA Certificate and prior to the Proponent constructing the proposed Project. The principal provincial authorizations required to construct and operate the proposed Project are under the *Mines Act* and the *Environmental Management Act*.

C. DISCUSSION

1. Potential Significant Adverse Effects, Mitigation Measures and Proponent Commitments

The nature and scale of the proposed Project means that there are important considerations for the region and the province in terms of potential environmental economic, social, health and heritage effects. The following categories of Valued Components were considered during the EA for the proposed Project:

- Surface water quality and quantity
- Groundwater quality and quantity
- Aquatic resources
- Ecosystems and wetlands

- Wildlife resources
- Fish and fish habitat
- Employment and economy
- Land and resource uses
- Human and ecological health factors
- Heritage and archaeological resources

EAO considered all the issues and concerns raised by Lake Babine Nation, Yekooche Nation, Gitksan Nation, Gitanyow Nation, the Village of Granisle and the public as well as all provincial and federal agencies. During the review of the Application, a number of environmental and social issues were identified as having the potential for adverse residual effects. A description of the key effects and the corresponding mitigation measures and proposed conditions which would undertaken by the Proponent are found below.

Potential Effects to Water Quantity and Quality

Water dominated the discussions during the EA. The proposed open pit and mine infrastructure is located directly adjacent to Morrison Lake, a 15 km long lake which forms part of the headwaters of Skeena River and contains fish habitat and associated aquatic resources.

The largest potential for effects on Morrison Lake was determined to come from the main mine infrastructure components, including:

- The Tailings Storage Facility (TSF)
- The open pit; and,
- The water treatment plant and Morrison Lake effluent diffuser.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
Seepage of contaminated water from the open pit into Morrison Lake on closure.	<p>Following closure, the Proponent must maintain the elevation of the pit lake at least one meter below the elevation of Morrison Lake.</p> <p>On closure, all PAG⁴ waste rock must be placed into the open pit and be capped with non PAG rock and glacial till. High PAG rock must be placed in the bottom of the open pit. The open pit area must be closed with a combination of pond,</p>	EAO undertook <u>commissioned</u> a third-party technical review of the Proponent's water quality and hydrogeology models. The review examined potential seepage from the open pit to Morrison Lake. The reviews found that, as long as the open pit remained below the

⁴-Potentially acid-generating rock is likely to react to water and oxygen and produce acid which can harm the receiving environment.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<p>collector ditch around the perimeter, and an interior wetland.</p> <p><u>Following closure, the Proponent must maintain the elevation of the pit lake below the elevation of Morrison Lake to ensure no pit seepage discharge to Morrison Lake.</u></p> <p><u>Groundwater monitoring wells must be installed between the open pit and Morrison Lake to monitor potential seepage of contaminated water from the open pit to Morrison Lake.</u></p> <p><u>Morrison Lake water quality must be monitored to ensure changes to water quality in the lake are detected.</u></p> <p><u>All PAG² waste rock and any unmilled low grade ore must be fully flooded at final closure. High PAG rock and unmilled low grade ore must be placed in the bottom of the open pit. All PAG waste rock and low grade ore must be placed into the open pit and be capped with non-PAG rock and glacial till. Groundwater monitoring wells must be installed between the open pit and Morrison Lake to monitor potential seepage of contaminated water from the open pit to Morrison Lake.</u></p> <p><u>Morrison Lake water quality must be monitored annually in the area west of the open pit to ensure the predicted water quality of Morrison Lake is being met.</u></p>	<p>elevation of Morrison Lake, there would be negligible water quality effects from the open pit on Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the <u>implementation of mitigation measures and monitoring</u>, there would be no significant adverse effects on water quality resulting from seepage from the open pit to Morrison Lake.</p>
<p>Seepage of tailings water from the TSF into ground and surface water, which</p>	<p>a) <u>The Proponent must design and install a geomembrane liner in the TSF area sufficient to ensure that the seepage rate from the TSF does not exceed 10m³/hr.</u></p>	<p>EAO undertook a third-party technical review of the Proponent's water quality and hydrogeology models and employed a third-party technical reviewer who</p>

² Potentially acid generating rock is likely to react to water and oxygen and produce acid which can harm the receiving environment.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
<p>could eventually report to Morrison Lake and harm water quality.</p>	<p><u>b) Without restricting paragraph (a), if any seepage from the TSF to Morrison Lake or any streams occurs which exceeds any limits for seepage specified by MoE, the Proponent must:</u></p> <ul style="list-style-type: none"> <u>i. prepare a plan of measures to control the seepage in order to meet the limits</u> <u>ii. obtain approval of MoE for the plan, and</u> <u>iii. implement the plan.</u> <p><u>c) Annual reports on updated groundwater seepage must be prepared by the Proponent and shared with EAO, MOE and MEM</u></p> <p>Proponent must line at least 96 percent of the TSF area with a geomembrane liner with seepage not to exceed 10m³/hr.</p> <p>The Proponent must monitor sulphate concentrations in groundwater and surface water downstream of the TSF on a monthly basis, subject to a water monitoring plan approved by the Ministry of Environment (MOE).</p> <p>If seepage occurs in Morrison Lake or receiving streams which exceeds any site specific water quality objectives approved under the <i>Environmental Management Act</i>, the Proponent must prepare, to the satisfaction of MOE, within 30 days, a plan to implement measures, and then implement the measures, in order to bring the effect within the objectives.</p>	<p>examined how a lined TSF would impact Morrison Lake. The reviews found that the TSF would have a negligible impact on water quality in Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on water quality resulting from seepage from the TSF to Morrison Lake.</p>

<p>Potential impacts to Morrison Lake from treated effluent discharged through a water treatment plant.</p>	<p>a) <u>The Proponent must prepare an annual calculation of site water balance.</u></p> <p>b) <u>If surplus water accumulates for more than two years and requires treatment according to the requirements of an EMA permit, the Proponent must:</u></p> <ol style="list-style-type: none"> i. <u>construct a water treatment plant; and</u> ii. <u>collect, treat and discharge any excess contact water to Morrison Lake via a pipeline and diffuser.</u> <p>c) <u>Any water discharged to Morrison Lake must meet - outside a mixing zone established by MoE - either British Columbia Water Quality Guidelines, Site Specific Water Quality Objectives, or an alternative requirement defined by the requirements of an EMA Permit.</u></p> <p>The Proponent must operate a water treatment plant that produces an "end-of pipe" water quality of treated effluent with concentrations of parameters which meet the concentrations used for the effects assessment presented in the Proponent's Application, specifically Addendum 1 to the <i>3rd Party Review Response Report</i>. These parameters include:</p> <ul style="list-style-type: none"> — Nitrate (90 mg/L); — Sulphate (2000 mg/L); — Aluminum (0.10 mg/L); — Cadmium (0.0001 mg/L); — Copper (0.007 mg/L); — Iron (0.01 mg/L); — Magnesium (50 mg/L if it is not present as magnesium sulphate) in the treated effluent; — Selenium (0.0019 mg/L); and, — Zinc (0.02 mg/L). <p>The Proponent must monitor Morrison</p>	<p>EAO <u>undertook</u> <u>commissioned</u> a third-party technical review of the Proponent's water quality models and employed a third-party technical reviewer who examined how an effluent diffuser would impact Morrison Lake. The reviews found that water quality would meet British Columbia Water Quality Guidelines outside a 40x100 meter mixing zone and that the effluent diffuser would not affect the long-term behaviour of Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the implementation of mitigation measures, there would be no significant adverse effects on water quality or the behaviour of Morrison Lake resulting from effluent discharged into Morrison Lake.</p>
---	--	---

	<p>Lake water quality annually and if water quality does not meet any approved site specific water quality objectives approved under the Environmental Management Act, the Proponent must prepare, to the satisfaction of MOE, within 30 days, a plan to implement measures, and then implement the measures, in order to bring the effect within the objectives.</p>	
<p>Reduction in flow to Morrison River and level of Morrison Lake due to pit inflows</p>	<p>The Proponent must complete a plan, for the approval of the Department of Fisheries and Oceans and the Ministry of Forests, Lands and Natural Resource Operations, to measure year round water flows in Morrison River.</p> <p>Based on this plan, the Proponent must develop, for the approval of the Department of Fisheries and Oceans and the Ministry of Forests, Lands and Natural Resource Operations, an Instream Flow Requirement following the Instream Flow Incremental Methodology. The Instream Flow Requirement must be adhered to during operations. The Proponent must complete a plan, to the approval of the DFO and FLNRO, to measure year round water flows in Morrison River.</p> <p>The Proponent must develop, for the approval of the DFO and FLNRO, an Instream Flow Requirement following the Instream Flow Incremental Methodology. The Instream Flow Requirement must be adhered to during operations.</p> <p>An annual site water balance must be calculated and submitted to Ministry of Energy and Mines. If surplus water accumulates for more than two years, the Proponent must construct a water treatment plant and collect, treat and discharge any excess contact³ and non-contact water to Morrison Lake via a pipeline and diffuser.</p>	<p>EAO, having considered input from the Working Group, is satisfied that inflows to the open pit from Morrison Lake can be managed and that, with the implementation of mitigation measures, there will be no significant adverse effects to water quantity in Morrison Lake or Morrison River.</p>

³Water which has come into contact with acid-generating rock.

Potential Effects to Fish, Fish Habitat and Aquatic Resources

Morrison Lake and its tributary streams support communities of at least 16 species of resident and anadromous fish, including three species of Pacific salmon which migrate to Morrison Lake via the Skeena and Babine rivers. Babine Lake sockeye were significantly enhanced in the late 1960s, which saw spawning channels and flow controls established on several rivers. As a result, almost 90 percent of all sockeye salmon in Skeena River come from areas around Babine Lake.

The analysis shows that, while Morrison Lake may make a relatively small contribution to the overall numbers of sockeye salmon (in the range of 2.5-3.5 percent depending on the years counted) produced from Babine Lake, this number underestimates Morrison Lake's value-contribution as one of the largest natural stocks of non-hatchery (unenhanced) sockeye salmon on the Babine Lake system. Natural stocks are valued for their genetic diversity.

Sockeye salmon comprise about 72 percent of the open water fish in Morrison Lake.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
Direct habitat loss due to reductions in flow in several creeks.	The Proponent must work with DFO, MOE and Lake Babine Nation to finalize and agree upon a Fish Habitat Compensation Plan which would compensate for any proposed Project activities that result in Harmful Alteration, Disruption or Destruction of fish and fish habitat as defined under the federal <i>Fisheries Act</i> .	EAO, having considered input from the Working Group, is satisfied that <u>with</u> a Fish Habitat Compensation Plan can be developed to the satisfaction of the DFO and that, with the implementation of mitigation measures, there will be no significant adverse effects to fish habitat on Morrison Lake.
Seepage of tailings water into groundwater, which could affect shoreline spawning sockeye salmon.	<p>a) <u>The Proponent must design and install a geomembrane liner in the TSF area sufficient to ensure that the seepage rate from the TSF does not exceed 10m³/hr.</u></p> <p>b) <u>Without restricting paragraph (a), if any seepage from the TSF to Morrison Lake or any streams occurs which exceeds any limits for seepage specified by MoE, the Proponent must:</u></p>	EAO undertook <u>commissioned</u> a third-party technical review of the Proponent's water quality and hydrogeology models and employed a third-party technical reviewer who examined how a lined TSF would impact Morrison Lake. The reviews found that the TSF would have a negligible impact on water

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<p><u>i. prepare a plan of measures to control the seepage in order to meet the limits</u></p> <p><u>ii. obtain approval of MoE for the plan, and,</u></p> <p><u>iii. implement the plan</u></p> <p><u>c) Annual reports on updated groundwater seepage must be prepared by the Proponent and shared with EAO, MOE and MEM</u></p> <p>Proponent must line at least 96 percent of the TSF area with a geomembrane liner with seepage not to exceed 10m³/hr.</p> <p>The Proponent must monitor sulphate concentrations in groundwater and surface water downstream of the TSF on a monthly basis, subject to a water monitoring plan approved by MOE.</p> <p>If seepage occurs in Morrison Lake or receiving streams which exceeds any site specific water quality objectives approved under the <i>Environmental Management Act</i>, the Proponent must prepare, to the satisfaction of MOE, within 30 days, a plan to implement measures, and then implement the measures, in order to bring the effect within the objectives.</p>	<p>quality in Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on shoreline sockeye salmon spawning areas resulting from seepage from the TSF.</p>
<p>Reductions in lake level could impact high values spawning areas in Morrison River</p>	<p><u>The Proponent must complete a plan, to the approval of DFO and FLNRO, to measure year round water flows in Morrison River.</u></p> <p><u>Based on this plan, the Proponent must develop, for the approval of DFO and the FLNRO, an Instream Flow Requirement following the Instream Flow Incremental Methodology. The Instream Flow Requirement must be adhered to during operations.</u></p> <p><u>The Proponent must complete spawning</u></p>	<p>EAO, having considered input from the Working Group, is satisfied that inflows to the open pit from Morrison Lake, along with other water used during proposed operations, can be managed and that, with the implementation of mitigation measures and monitoring, there will be no significant adverse effects to water quantity in</p>

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<p><u>habitat survey and mapping along the full length of Morrison River to support of the development of the Instream Flow Requirement. The Proponent must prepare a plan for the spawning survey for EAO's approval. The activities in the approved plan must be completed prior to the Proponent applying for <i>Mines Act/Environmental Management Act</i> permits. The Proponent must complete a plan, to the approval of DFO and FLNRO, to measure year-round water flows in Morrison River.</u></p> <p>Based on this plan, the Proponent must develop, for the approval of DFO and the FLNRO, an Instream Flow Requirement following the Instream Flow Incremental Methodology. The Instream Flow Requirement must be adhered to during operations.</p> <p>The Proponent must complete spawning habitat survey and mapping along the full length of Morrison River to support of the development of the Instream Flow Requirement.</p>	<p>Morrison Lake or Morrison River.</p>
<p>Treated effluent discharged through a water treatment plant could pool on the bottom of Morrison Lake, create "hotspots" of concentrated effluent or change long term lake</p>	<p>a) <u>The Proponent must prepare an annual calculation of site water balance.</u></p> <p>b) <u>If surplus water accumulates for more than two years and requires treatment according to the requirements of an EMA permit, the Proponent must:</u></p> <ul style="list-style-type: none"> i. <u>construct a water treatment plant;</u> <u>and,</u> ii. <u>collect, treat and discharge any excess contact water to Morrison Lake via a pipeline and diffuser.</u> <p>c) <u>Any water discharged to Morrison</u></p>	<p>EAO undertook <u>commissioned a third-party technical review of the Proponent's water quality models and employed a third-party technical reviewer who examined how an effluent diffuser would impact Morrison Lake. The reviews found that water quality would meet British Columbia Water Quality Guidelines outside a 40x100 meter mixing zone, that the effluent diffuser would likely</u></p>

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
behavior.	<p><u>Lake must meet - outside a mixing zone established by MoE - either British Columbia Water Quality Guidelines, Site Specific Water Quality Objectives, or an alternative requirement defined by the requirements of an EMA Permit.</u></p> <p>The Proponent must operate a water treatment plant that produces an "end of pipe" water quality of treated effluent with concentrations of parameters which meet the concentrations used for the effects assessment presented in The Proponent's Application.</p> <p>The Proponent must monitor Morrison Lake water quality annually and if water quality does not meet any approved site specific water quality objectives approved under the <i>Environmental Management Act</i>, the Proponent must prepare, to the satisfaction of MOE, within 30 days, a plan to implement measures, and then implement the measures, in order to bring the effect within the objectives.</p>	<p>work as designed and would not result in the "pooling" of effluent in the bottom of Morrison Lake and that the effluent diffuser would not affect the long-term behaviour of Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the implementation of mitigation measures, there would be no significant adverse effects on water quality or the behaviour of Morrison Lake resulting from effluent discharged into Morrison Lake.</p>
Concerns over gaps in understanding fish use and populations in Morrison Lake	<p><u>The Proponent must complete, prior to applying for <i>Mines Act/Environmental Management Act</i> permits, a baseline fish tissue sampling program in a reference lake (Tochka Lake or another lake approved by MoE). The program must be developed and implemented to the satisfaction of MoE and MFLNRO.</u></p> <p><u>The Proponent must complete spawning surveys along the east shore of Morrison Lake from the confluence of Morrison Lake and Olympic Creek to the outflow of Morrison River from Morrison Lake, including dive surveys, to identify areas of shoreline and deep water spawning habitat.</u></p>	<p>EAO, having considered the input of the Working Group, with a particular emphasis on comments from First Nation groups, is satisfied that the additional research and monitoring would enhance understanding of the fish populations in Morrison Lake and River.</p>

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<p><u>The Proponent must prepare and implement a plan, in consultation with the Lake Babine Nation and the Skeena Fisheries Commission, to measure annual fish escapement into Morrison River in order to advance the knowledge of fish populations, behaviour and distribution in Morrison Lake. The plan must be developed for the approval of the Department of Fisheries and Oceans and EAO</u></p> <p><u>The Proponent must develop a plan, in consultation with Lake Babine Nation and Skeena Fisheries Commission and MoE, for the purposes of monitoring metal concentrations in resident Morrison Lake fish tissue. The Proponent must provide the plan to EAO for its approval. Once approved, sampling under the program must commence prior to the Proponent applying for a <i>Mines Act</i> or <i>Environmental Management Act</i> permit and must continue until mine closure. The plan must be implemented, and may be revised under EMA permit requirement beyond the first year of implementation</u></p> <p><u>The Proponent must develop, for EAO's approval, a plan to collect additional biological, physical and chemical information on Morrison Lake to further validate effects assessment provided during the EA. All information in the approved plan must be collected prior to the Proponent applying for <i>Mines Act</i> or <i>Environmental Management Act</i> permits. The plan must include, at the minimum, the following: Additional baseline information on water quality, water chemistry, temperature and lake behaviour, including information on currents, flow regimes and lake turnover.</u></p>	

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<p>The Proponent must complete spawning surveys along the east shore of Morrison Lake from the confluence of Morrison Lake and Olympic Creek to the outflow of Morrison River from Morrison Lake, including dive surveys, to identify areas of shoreline and deep water spawning habitat.</p> <p>The Proponent must complete spawning habitat survey and mapping along the full length of Morrison River to support of the development of the Instream Flow Requirement.</p> <p>The Proponent must prepare and implement a plan, in consultation with Lake Babine Nation and Skeena Fisheries Commission, to measure annual fish escapement into Morrison River in order to advance the knowledge of fish populations, behaviour and distribution in Morrison Lake.</p>	

Potential Effects to Wildlife, Wildlife Habitat, Ecosystems and Wetlands

The Application identifies and examines potential effects to ecosystems and wetlands, with a particular emphasis on those ecosystems considered rare or sensitive or that are used by grizzly bear, moose, mule deer, wolf, fisher, wolverine, American marten, red squirrel and waterfowl. Moose in particular are strongly associated with wetlands and are known to use the wetlands at the proposed TSF location. Potential effects identified in the Application included loss and degradation of ecosystems and wetland habitat due to vegetation clearing from the mine infrastructure and transmission line.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
Loss of wetland habitat and dry grass ecosystems for deer and moose.	Proponent must develop a Vegetation and Ecosystems Management Plan which will provide information to direct the Proponent's actions with respect to maintaining and promoting healthy vegetation and terrestrial and wetland ecosystems in areas associated with mine development. The Plan must be to the approval of MOE and FLNRO.	EAO, having considered input from the Working Group, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on ecosystems.
Concerns about uptake of metals into the tissue of animals such as moose, deer and bear.	<u>The Proponent must develop, in consultation with the Lake Babine Nation and MoE, and for the purposes of monitoring the potential for uptake of metals in tissue, a plan to sample bear, deer, and moose tissues within the Local Study Area as described in the Proponent's original Application for an Environmental Assessment Certificate. The Proponent must provide the plan to EAO for its approval. The plan must be implemented.</u> The Proponent must develop, in consultation with Lake Babine Nation and for the purposes of monitoring the potential for uptake of metals in tissue, a plan to sample bear, deer, and moose tissues within the Local Study Area as described in the Proponent's original Application for an EA Certificate. The Proponent must provide the plan to EAO for its approval. The plan must be implemented.	EAO, having considered input from the Working Group, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on wildlife.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
Potential bird electrocutions from the power line.	The Proponent must use a design to minimize bird electrocutions by deterring nest building or perching on power poles through design considerations as well as adopting a design consistent with BC Hydro requirements.	EAO, having considered input from the Working Group, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on wildlife.
Potential impacts to wildlife such as grizzly bear, moose, deer, Western toad and other SARA listed species.	<p>Proponent must develop a Wildlife and Wildlife Habitat Management Plan which will provide procedures for minimizing and managing impacts to wildlife from routine mine activities, provide a framework for the development and implementation of wildlife monitoring programs, and processes for improving mitigation and management measures through adaptive management. The Plan must be to the approved by of MOE and FLNRO. It will <u>must</u> include the following elements:</p> <ul style="list-style-type: none"> • Measures to preserve and protect wetland/riparian habitats; • Measures to reduce impacts to moose, deer, grizzly bear and other furbearers; • Measures to reduce bear/human conflicts; • Measures to expedite the return to productive habitat of riparian habitats; • Measures, such as trials during operations, to expedite the tailings beach reclamation; • Measures to mitigate impacts to western toad breeding sites; • Development of an Active Migratory Bird Nest Survey to reduce the likelihood of destroying bird nests; • Undertake additional research and surveys to assess habitat and use by the Olive-sided Flycatcher; and, 	EAO, having considered input from the Working Group, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse effects on wildlife.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<ul style="list-style-type: none"> Undertake additional research and assessment to mitigate the impacts of potential for amphibian crossings areas on the main access road. 	

Potential Social and Economic Effects

The Proponent's Application included a *Socio-Economic Baseline Study Report* which focused on the Village of Granisle and the nearby Lake Babine Nation communities. The Village of Granisle was constructed for the (now closed) Bell and Granisle Copper Mines. While the current population is only about 300, it still has the primary infrastructure to accommodate 2,000 people.

The Application says that about 1,117 jobs will be created during the two year construction period, which would generate about \$22 million per year in direct tax revenue, of which nearly \$12 million would go the province. During operations, the Application estimates about 601 jobs and \$5.4 million a year in direct federal and provincial taxes.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
<p>Increased demand on infrastructure and services in the Village of Granisle.</p>	<p>The Proponent signed a Memo of Understanding (MOU) with the Village to address their concerns and to create a framework to resolve identified issues.</p> <p>Proponent must develop a Social Effects Management Plan to address impacts to local communities such as Granisle, Tachet, Smithers Landing and Lake Babine Nation Communities. The Plan must be approved by EAO and will provide a framework for implementing strategies to manage potential social, economic, and cultural changes anticipated in response to the Project, as experienced by local residents and communities.</p> <p>The Proponent must hold at least one job/business fair in both Granisle and a second community (e.g. Burns Lake or</p>	<p>EAO, having considered input from the Working Group, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse social or economic effects.</p>

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<p>Smithers), within one year of the commencement of the Project's construction to inform local residents and businesses of upcoming opportunities for employment and contracts as well as the requirements for obtaining these positions, including skills and certifications.</p> <p>The Proponent must complete, in collaboration with the Village of Granisle and Lake Babine Nation, within one year prior to the commencement of construction, a skill inventory and needs analysis.</p> <p>The Proponent must establish a Community Sustainability Advisory Committee (CSAC) comprising representatives from the Village of Granisle and Lake Babine Nation. The purpose of CSAC is to identify, resolve, and monitor any issues raised by the community with respect to the Project. CSAC must be established within one year of the commencement of the Project's construction.</p> <p>The Proponent must hire a Community Liaison to act as the Proponent's primary point of contact for public and local organizations on community issues. This position must also oversee CSAC and facilitate implementing elected programs and initiatives.</p>	
<p>Impacts to Tukki Hunting Lodge satellite camp on Morrison Lake.</p>	<p>The Proponent has negotiated a mutually satisfactory agreement with the owners of Tukki Lodge which addresses their concerns.</p>	<p>EAO, having considered input from Tukki Lodge, is satisfied that, with the implementation of mitigation measures, there would be no significant adverse social or economic effects.</p>

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
Impacts to Ookpik Wilderness Lodge on Babine Lake.	<p>The Proponent discussed a compensation package with the owners of Ookpik Lodge, but the parties could not come to a mutually acceptable agreement.</p> <p>In the absence of a negotiated agreement, the Proponent has committed to measures to address the effects of the proposed Project on the operations and business of Ookpik Lodge, including reducing speed and volume of mine traffic on haul roads, improved road maintenance and managing blasting noise.</p>	EAO, having considered input from Ookpik Wilderness Lodge, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse social or economic effects.
Impacts to Lake Babine Nation trappers with trap lines in the area of the proposed Project.	The Proponent must compensate Lake Babine Nation, as requested in the July 16, 2010 letter from Lake Babine Nation, for the impact of the Project on Trap-line T049. The Proponent must provide one year notification to the trap-line holder of the commencement of construction.	EAO, having considered input from Lake Babine Nation, is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse social or economic effects.
Impacts to Canfor's forestry tenure due to loss of access to mature timber.	Proponent must develop a Social Effects Management Plan. A component of that plan is to coordinate timber removal from the proposed Project site with Canfor and develop mitigation measures specific to address Canfor's interests, including additional information collection on timber volume; and potentially compensating for Canfor's marginal cost to harvest timber elsewhere; and, ensuring consistency with land use planning timber harvest objectives.	EAO is satisfied that, with the implementation of mitigation measures and monitoring, there would be no significant adverse social or economic effects.

Conclusions on Potential for Significant Adverse Effects

Overall, the assessment and mitigation measures proposed in the final addendums to the original Application for the above-noted issues were considered reasonable and acceptable to EAO, the Working Group and Yekooche Nation, Lake Babine Nation and Gitksan and Gitanyow Nations.

EAO considered that the major design proposals, including ~~of~~ the geomembrane liner for the TSF; submerging waste rock in the open pit on closure; construction of a water treatment plant in the early stages of construction and operations; the requirement for an Instream Flow Requirement for Morrison River; additional research and inventory on the physical behaviour and fish habitat of Morrison Lake; and, an ongoing monitoring plan for Morrison Lake (fully implemented subject to *Environmental Management Act* permit conditions) would result in no significant residual adverse effects to environmental or health resources.

EAO's assessment of economic effects, including the existing forest industry and tourism operations concluded that there would be no adverse economic effects resulting from the proposed Project.

EAO assessed the project design, location and mitigation measures proposed to identify and protect any archaeological or heritage resources, and concludes that there would be no residual adverse effects.

EAO assessed the Proponent's Social Effects Management Plan and the MOU signed with the Village of Granisle and concluded there would be no significant adverse social effects.

The potential effects to Gitksan, Gitanyow, Yekooche and Lake Babine Nation aboriginal rights and title is further discussed in the next section "Strength of Asserted Rights".

2. First Nations' Asserted Rights and Title

The proposed Project is within the asserted traditional territory claimed by Lake Babine Nation and Yekooche First Nation.

In addition to these two First Nations, EAO consulted with Gitksan and Gitanyow Nations, who indicated that, while the proposed Project was not within their asserted traditional territory, their rights to access salmon on Skeena River could be affected by the proposed Project. EAO consulted the Gitksan and Gitanyow Nations on this basis.

Lake Babine Nation

EAO-led Consultation

Lake Babine Nation was kept fully informed of progress of the EA and was provided with all information sent to the Working Group. Representatives of Lake Babine Nation Chief and Council participated in the review from about 2005 onwards. A Lake Babine Nation Councillor with a Natural Resources Portfolio was the primary contact on the Working Group. Prior to 2005, EAO had been engaging with a group called Nedo'ats Hereditary Chiefs, who EAO, at that time, understood to speak for Lake Babine Nation rights and title. After 2005, Chief and Council clarified that they were the appropriate contact to

address Lake Babine Nation rights and title.

In December 2008, the Proponent filed suit against Lake Babine Nation, alleging damages relating to a press release made by the Chief of Lake Babine Nation. In March 2009, Lake Babine Nation filed a defense and counterclaim. These suits influenced much of the communication between EAO, the Proponent and Lake Babine Nation over the next several years. The Proponent rescinded its suit in 2009 and the parties eventually reached an agreement for Lake Babine Nation to re-engage in discussions with the Proponent. In March 2012, Lake Babine Nation and the Proponent signed an MOU.

EAO met with Lake Babine Nation Chief and Council regularly for government-to-government discussions. EAO and the Proponent provided significant capacity funding to Lake Babine Nation during the pre-Application and Application Review stages of the EA. Lake Babine Nation was invited to comment on all assessment related documents including the draft First Nations Consultation Report, the draft Assessment Report, and the draft Table of Conditions. All comments were fully considered by EAO and incorporated into the final versions.

~~EAO and the Proponent provided significant capacity funding to Lake Babine Nation during the pre-Application and Application Review stages of the EA.~~

Proponent-led Consultation

Prior to and after EAO's issuance of the proposed Project's section 10 and 11 Orders (outlining the scope, methods and procedures for the EA), the Proponent engaged with Lake Babine Nation.

During the pre-Application period, the Proponent's consultation activities focused on:

- initiating consultation, including letters, emails, telephone calls and initial meetings confirming nature and scope of the proposed Project and objectives of the consultation process;
- providing Project-related information as required, including maps and figures, work plans, presentations, and studies and meeting materials;
- identifying key interests of Lake Babine Nation for the purposes of the EA;
- arranging and participating in open houses to allow Lake Babine Nation communities to review the proposed Project and EA-related information;
- seeking input on the nature and extent of Lake Babine Nation traditional and current use of the area, and how the proposed Project may affect their Aboriginal interests;
- signing an EA Process Funding Agreement with Lake Babine Nation;
- providing copies of the Application to Lake Babine Nation for screening and review purposes, as required by EAO; and,
- attempts to entering into an MOU about the proposed Project.

During the Application review period, the Proponent's consultation activities included:

- distributing notices regarding the Application submission and providing copies of the Application to Lake Babine Nation for review and comment;
- participating in EAO-led Open Houses in Burns Lake, Fort Babine and Tachet;
- providing funding for additional field work related to the location of mine infrastructure and sockeye salmon spawning areas; and,
- addressing issues raised by Lake Babine Nation Chief and Council and their consultants.
- Signing an MOU with the Lake Babine Nation in March 4, 2012.

The MOU had been confidential until late July 2012. Now that the MOU between the Proponent and the Lake Babine Nation has been made public, EAO incorporated a number of aspects of components of the MOU into the Table of Conditions-specific terms of the MOU are confidential, however, a number of aspects of the MOU, specifically those related to long term monitoring of impacts to fish, wildlife and water quality environmental monitoring, have been incorporated into the Table of Conditions.

Key Issues Raised by Lake Babine Nation

Lake Babine Nation were active participants in the EA process, taking part in Working Group meetings, meeting directly with EAO on numerous occasions and with the Proponent occasionally. They also provided written feedback on their perspectives and interests with respect to the proposed Project as well as a number of technical reports, primarily related to fish and water quality on Morrison and Babine Lake.

During the pre-Application and Application Review stages of the EA, Lake Babine Nation advised EAO of a wide range of concerns related to the proposed Project. Those issues are primarily focused in the following areas:

- cumulative impacts to water quality in Babine Lake and Babine River due to the now closed Bell and Granisle Mines;
- impacts to wildlife and wildlife habitat;
- impacts to fish and fish habitat;
- incorporation of traditional knowledge into studies and research;
- appropriate engagement of the five Lake Babine Nation communities into decision-making/consultation;
- impacts to traditional harvesting activities;
- jobs and economic opportunities; and,
- impacts on trapping activities of Lake Babine Nation trap line holders.

During the review of the Application, much of the focus of Lake Babine Nation was on potential impacts to water quality and fish in Morrison Lake and Babine Lake and they continued to express concerns regarding existing impacts from Bell and Granisle Copper Mines, which closed in the 1990s.

Many of the major mine design changes made through the EA process by the Proponent, as well as the third-party review ~~undertaken~~ commissioned by EAO, were intended to address the key issues of impacts to water quality and fish, values which are central to

the aboriginal rights of Lake Babine Nation. It was only when the last major mine design changes were proposed by the Proponent in April 2012 when EAO, with the advice of the third-party technical reviewers, was able to evaluate the effects on the proposed Project on water quality, fisheries and aquatic habitat and develop conclusions about the potential for significant adverse effects, using the six significance factors.⁴ The key mitigation measures for these potential effects are listed on pages 8 to 18 of this report. EAO determined that the magnitude of the effects was not significant, and with the implementation of the proposed mitigation measures and the legally-binding conditions on the Proponent, there would be no significant residual adverse effects from the Project on water quality and fisheries resources, nor would the proposed Project result in significant adverse impacts on Lake Babine Nation aboriginal rights to hunt and fish in their traditional territory.

In their final submission, LBN indicate ...

Strength of Asserted Rights

The Supreme Court of Canada, in its 2004 decision on *Haida Nation v. British Columbia (Minister of Forests)* ("*Haida*"), made it clear that the degree of potential impact of a government decision is a key factor in determining the requisite degree of consultation and accommodation. EAO's preliminary assessment, based on available information, was that the Crown's duty to consult Lake Babine Nation lay at the deep end of the *Haida* spectrum for consultation.

It is EAO's assessment, based on current information available to it, that Morrison Lake, Morrison River, the Babine Archipelago and the lands surrounding this area were part of the broader territory used by Lake Babine Nation for traditional activities associated with the typical Carrier annual round, and that, consequently, there is a strong *prima facie* case in support of the assertion that aboriginal rights are exercisable in the proposed Project area. Moreover, it is EAO's assessment that there is a moderate to strong *prima facie* case in support of Lake Babine Nation's assertion of aboriginal title to the area in which the proposed Project is to be situated. It is important to note that this conclusion is a *prima facie* determination made in order to discharge EAO's *Haida* analysis and is focused on the site of the proposed Project. This analysis is not meant to apply to any other part of Lake Babine traditional territory; this assessment is only being made for the purpose of the proposed Project.

Accommodation

The Proponent participated in a pre-Application and Application review consultation program with Lake Babine Nation as summarized earlier in this report. However, due to the litigation between the Proponent and Lake Babine Nation and the challenges in communication flowing from that litigation, many of the major design changes to the proposed Project intended to address issues raised by Lake Babine Nation were identified and facilitated by EAO based on government-to-government discussions with Lake Babine Nation Chief and Council. While the Proponent was not directly involved with Lake Babine Nation in those discussions, they actively supported the work through

⁴ Magnitude, extent, duration and frequency, probability, reversibility, and context.

design changes and funding for Lake Babine Nation to undertake field work. The Proponent also signed an MOU with Lake Babine Nation during the final stages of the EA.

Issues raised by Lake Babine Nation and Gitanyow/Gitxsan Nations were largely the drivers behind many of the major design changes and research conditions which occurred through the EA review. EAO ~~undertook~~ commissioned a number of third-party reviews (by a professional fisheries biologist, a professional geologist/hydro geologist and a professional engineer/lake behaviour specialist) to examine in more details the issues raised by Lake Babine Nation to ensure that appropriate mitigations were put in place. In particular, some of the accommodations to address concerns include:

- The Proponent committed to lining ~~96 percent of the~~ TSF with a geomembrane liner to vastly reduce seepage and thus potential effects upon sockeye salmon spawning areas. This is reflected in EAO's Table of Conditions.
- EAO engaged a third-party lake behaviour specialist to review issues related to "hotspots" and areas of higher effluent concentration. The review indicated that the Proponent's commitment to a geomembrane liner would effectively eliminate this concern.
- The Proponent has committed to working with Lake Babine Nation and DFO in measuring annual fish escapement into Morrison River and advancing the knowledge of the fish populations, behaviour and distribution in Morrison Lake. This is reflected in EAO's Table of Conditions.
- The Proponent committed to spawning surveys in Morrison River to better quantify the potential effect of the reduction in flow due to the proposed mine. They would also be required to develop an Instream Flow Requirement for Morrison River. This is reflected in EAO's Table of Conditions.
- The Proponent committed to an ongoing monitoring program of bear, deer and moose tissues as well as fish samples. The sampling program would be developed in conjunction with Lake Babine Nation and a component of the monitoring work would be completed by Lake Babine Nation members. This is reflected in EAO's Table of Conditions.
- The Proponent committed to an ongoing water quality monitoring program. The sampling program would be developed in conjunction with Lake Babine Nation and a component of the monitoring work would be completed by Lake Babine Nation members. This is reflected in EAO's Table of Conditions.
- The Proponent committed to compensate Lake Babine Nation trap-line holders for the time their trap-line would be unavailable due to project construction and operations, if the proposed Project were approved. This is reflected in EAO's Table of Conditions.
- The Proponent committed to moving all mine infrastructures (e.g. overburden stockpile, water diversion structures, etc.) from Morrison Point and reserving the area from all mine-related activities due to the spiritual significance of the area to Lake Babine Nation.
- The Proponent committed to inventorying and assessing the "Old People's Trail"

and developing any mitigation as required.

- The Proponent involved Lake Babine Nation in 2010 and 2011 meetings, field work, helicopter fly-overs, review of its proposed Fish Habitat Compensation Plan compensation sites and options on how best to reduce potential harmful effects and enhance and/or increase fish habitat in the area.
- The Proponent signed an MoU with the Lake Babine Nation, a component which included a commitment to negotiate an Impact Benefit Agreement.

In addition to these accommodations, the Certified Project Description (Appendix 3 to the Assessment Report) which includes a Table of Conditions which the Proponent must adhere to also contains other conditions and project design requirements which further mitigate or otherwise accommodate potential adverse effects on Lake Babine Nation asserted aboriginal rights.

It is EAO's assessment that the Crown's duty to consult and accommodate has been honourably discharged through a process of consultation and accommodation that included flexibility, accountability, inclusiveness, and responsiveness to issues raised by Lake Babine Nation. EAO further concludes that, on behalf of the Province, it acted in good faith at all times to consult with Lake Babine Nation and made available opportunities for deep consultation which ensured that all concerns raised by Lake Babine Nation about the proposed Project were considered.

EAO also concludes that avoidance, mitigation, and accommodation measures identified during the EA process will result in no significant potential adverse effects on Lake Babine Nation interests or asserted aboriginal rights in the proposed Project area. EAO is satisfied that the Crown's duty to consult pursuant to a decision under the Act has been fully discharged for the proposed Project.

Yekooche First Nation

EAO-led Consultation

Yekooche First Nation was kept informed of progress of the EA through notification of major milestones. Yekooche First Nation were initially invited to Working Group meetings but indicated by letter in 2003 that they had little to contribute but would like to receive additional reports and conclusions as the EA proceeded. Yekooche First Nation were invited to participate at the major milestones such as screening, and were invited to comment on all assessment related documents including the draft First Nations Consultation Report, the draft Assessment Report, and the draft Certificated Project Description and Table of Conditions. No comments were received on any of these documents.

Proponent-led Consultation

The Proponent was assigned certain consultation obligations with Yekooche First Nation through the proposed Project's section 11 Order. The Proponent engaged Yekooche First Nation in 2003 when the initial EA began. Yekooche First Nation provided

a similar message to the Proponent as it had to EAO, saying they had no additional information to add to the EA, but that they wished to receive updates and reports on the proposed Project. The Proponent continued to supply copies of all Application materials (including baseline information) to Yekooche First Nation, at the direction of EAO and consistent with the section 11 Order. No comments were received throughout the course of the EA.

Key Issues Raised by Yekooche First Nation

During initial discussions in 2003, Yekooche First Nation noted a concern for the cumulative effects of the proposed Project on the Skeena watershed, although they provided no specific information on which impacts to consider. They also noted a concern regarding wildlife corridors in the area of the proposed Project and expressed a desire to see economic benefits from the proposed Project.

Strength of Asserted Rights

EAO's preliminary assessment, based on available information, was that the Crown's duty to consult Yekooche First Nation lay on the lower end of the *Haida* spectrum for consultation, based largely on the fact that there is limited evidence that activities that could ground a claim of aboriginal rights may have been exercised historically in the vicinity of the proposed Project and that only a small portion of the transmission line of the proposed Project is within the area claimed by Yekooche First Nation. EAO has consulted in a manner that is consistent with this assessment.

Accommodation

Considering the limited amount of information or concerns noted by Yekooche First Nation, EAO considers that the Certified Project Description, which includes a Table of Conditions which the Proponent must adhere to, contains conditions and project design requirements which will mitigate or otherwise accommodate potential adverse effects on Yekooche First Nation asserted aboriginal rights.

It is EAO's assessment that the Crown's duty to consult and accommodate has been honourably discharged through a process of providing a range of opportunities for consultation. EAO further concludes that, on behalf of the Province, it acted in good faith at all times to consult with Yekooche First Nation, and made available opportunities for consultation which ensured that concerns raised by Yekooche First Nation about the proposed Project were considered.

EAO also concludes that avoidance, mitigation, and accommodation measures identified during the EA process will result in no significant potential adverse effects on Yekooche First Nation interests or asserted aboriginal rights in the proposed Project area. EAO is satisfied that the Crown's duty to consult pursuant to a decision under the Act has been fully discharged for the proposed Project.

Gitxsan and Gitanyow Nations

EAO-led Consultation

Gitanyow Hereditary Chiefs' Office (GHCO) on behalf of Gitanyow Nation and Gitxsan Chiefs' Office (GCO) on behalf of Gitxsan Nation wrote to the

Minister of Environment during the review of the Application in 2009. They indicated that Morrison Lake was important to the production of sockeye salmon on Skeena River and stated that, due to this reliance on Skeena sockeye, they had aboriginal rights to the Morrison Lake fishery.

In response, EAO issued a section 13 Order and specified that GHCO and GCO would be consulted on the proposed Project. EAO added a representative of the Skeena Fisheries Commission (SFC) to the Working Group, a technical body which represented the interests of the two First Nations. SFC representatives were kept fully informed of progress of the EA and were provided with information that was sent to the Working Group.

SFC participated directly in the Application Review by providing comments to EAO, attending Working Group meetings, and meeting with EAO along with GHCO and GCO. EAO provided capacity funding to GHCO and GCO to participate in the Application Review stages of the EA. GHCO, GCO and SFC were invited to comment on all assessment related documents including the draft First Nations Consultation Report, the draft Assessment Report, and the Certified Project Description and Table of Conditions. All comments were fully considered by EAO and many were incorporated into the final versions.

~~EAO provided capacity funding to GHCO and GCO to participate in the Application Review stages of the EA.~~

Proponent-led Consultation

The Proponent was not assigned any consultation obligations with GHCO, GCO or SFC.

Key Issues Raised by Gitanyow and Gitxsan

SFC were active participants in the EA process, taking part in Working Group meetings, meeting directly with EAO on several occasions and provided written feedback on their perspectives and interests with respect to the proposed Project. ~~Much of their input was very high quality and increased EAO's understanding of the fisheries values in the area of the proposed Project.~~

The focus of SFC comments and concerns was on understanding the importance and contribution of Morrison Lake and Morrison River to the sockeye salmon of the Skeena River system. Many of their comments focused on the need for additional spawning research and understanding the use and numbers of fish in Morrison Lake and the overall behavior of Morrison Lake, including a better characterization of water quality baseline information. They indicated many concerns regarding the Proponent's effects assessment, particularly as it related to fish in Morrison Lake. In particular, they were concerned about the proximity of the open pit to Morrison Lake and the flow of effluent from the open pit to Morrison Lake. They noted deficiencies in the HADD (harmful alteration destruction or disruption of fish habitat) assessment, in particular as it did not include an assessment of all fish habitat around the diffuser and pipeline on the bottom of Morrison Lake. They also questioned the sufficiency the hydrogeology work done by the Proponent.

In their final submission, Gitxsan and Gitanyow indicate...

Strength of Asserted Rights

EAO's preliminary ~~assessment~~, assessment based on current information available, and having regard to the applicable legal test, that there is a strong *prima facie* case in support of Gitanyow and Gitxsan aboriginal rights to fish within their traditional territories on

Skeena River. With regard to the *Haida* spectrum, EAO initially determined that the scope of the duty to consult with GHCO and GCO was low on the *Haida* spectrum. That initial determination was based on an understanding that, given the significant distance downstream, it was unlikely that any fishing rights could be affected by the proposed Project.

Since that original assessment, EAO met with GHCO and GCO and reviewed technical submissions from SFC. Since the initial assessment, EAO changed its understanding and now recognizes that the shared Gitanyow/Gitxsan fishery takes in the order of 65,000 sockeye from Skeena River annually and that approximately 3.5 percent of those fish come from the Morrison watershed⁵. As a result of this new information, EAO understands that GHCO and GCO are concerned about impacts to the aboriginal right to fish because a portion of the fish caught on Skeena and Babine Rivers come from Morrison Lake.

Based on this new information EAO changed its initial assessment of the scope of the duty on this proposed Project to consult from low to moderate. In EAO's view, the engagement process with GHCO and GCO, through its designated representatives and directly, has been consistent with this assessment.

Accommodation

As noted, the Proponent was not assigned any obligations to consult with GHCO and GCO and all consultation occurred through EAO. Issues raised by SFC were largely the driver behind many of the design changes which occurred through the EA-review. EAO ~~undertook~~ commissioned a number of third-party reviews (by a professional fisheries biologist, a professional geologist/hydro geologist and a professional engineer/lake behaviour specialist) to examine in more details the issues raised by SFC and to ensure that appropriate mitigations were put in place.

In particular, some of the accommodations to address concerns include:

- The Proponent committed to lining ~~96 percent of the~~ TSF with a geomembrane liner to vastly reduce seepage and thus potential effects upon sockeye salmon spawning areas. This is reflected in EAO's Table of Conditions.
- The Proponent committed to implementing additional secondary water treatment in the proposed water treatment plant to further remove parameters of concern – cadmium in particular, which was the focus of one of SFC's technical submissions.
- EAO engaged a third-party lake behaviour specialist (a SFC recommendation) to review issues related to "hotspots" and areas of higher effluent concentration. The

⁵ SFC asserts that the number could be as high as eight percent depending on the counting method.

review indicated that the Proponent's commitment to a geomembrane liner would effectively eliminate this concern.

- EAO engaged a third-party lake behaviour specialist (a SFC recommendation) to review the Proponent's diffuser design, with a specific question on the efficacy of how it could affect lake mixing. These reviews indicated that the diffuser would likely operate as asserted by the Proponent and the effluent diffuser would not be expected to change lake behaviour.
- The Proponent committed to collecting additional information on the physical behaviour of the lake, including water quality monitoring and temperature, conductivity probes and understanding currents and flow regimes. This is reflected in EAO's Table of Conditions.
- EAO undertook a third-party review of the Proponent's hydrogeology baseline and modelling. The third-party reviewer confirmed that the new Proponent models represented a reasonable Upper Bound and that baseline information was sufficient for predictions.
- The Proponent has committed to working with Lake Babine Nation, DFO and SFC in measuring annual fish escapement into Morrison River and advancing the knowledge of the fish populations, behaviour and distribution in Morrison Lake. This is reflected in EAO's Table of Conditions.
- The Proponent committed to spawning surveys in Morrison River to better quantify the potential effect of the reduction in flow due to the proposed mine. They would also be required to develop an Instream Flow Requirement for Morrison River. This is reflected in EAO's Table of Conditions.

In addition to these accommodations, the Certified Project Description, which includes a Table of Conditions which the Proponent must adhere to, also contains other conditions and project design requirements which further mitigate or otherwise accommodate potential adverse effects on Gitxsan and Gitanyow asserted aboriginal rights.

It is EAO's assessment that the Crown's duty to consult and accommodate has been honourably discharged through a process of consultation and accommodation that included flexibility, accountability, inclusiveness, and responsiveness to issues raised by GHCO and GCO. EAO further concludes that, on behalf of the Province, it acted in good faith at all times to consult with GHCO and GCO and made available opportunities for consultation which ensured that all concerns raised by GHCO and GCO about the proposed Project were considered.

EAO also concludes that avoidance, mitigation, and accommodation measures identified during the EA process will result in no significant potential adverse effects on GHCO and GCO interests or asserted aboriginal rights in the proposed Project area. EAO is satisfied that the Crown's duty to consult pursuant to a decision under the Act has been fully discharged for the proposed Project.

3. Position of Federal Agencies

The federal government considers that the issues examined by its agencies have been addressed through project design, mitigation measures and other commitments agreed to by the Proponent. The CEA Agency has produced a draft Comprehensive Study Report that concludes that the proposed Project is not likely to cause which indicates that it has not found the potential for significant adverse environmental effects.

~~DFO and Natural Resources Canada have indicated that they agree with the conclusions of the Assessment Report. CEA Agency and the federal authorities have also indicated that they agree with the conclusions. CEA Agency reports that they will be independently writing a Comprehensive Study Report, to be completed after this referral.~~

4. Position of Local Governments

The Village of Granisle (VOG) was a participant in the Working Group and comments on the Application. In their submissions to EAO, VOG expressed the proposed Project. However, VOG indicated that they anticipate some negative impacts to their community and wanted to build a better relationship with the Proponent and, to that end, signed an MOU with the Proponent to address issues around social effects, property values, pressure on community infrastructure and services and local employment.

Derek, this is just a marker for what I THINK the CEA Agency report, due within a week or so, will say.

5. Public Consultation

The Proponent carried out a program of public consultation during both the pre-Application and Application Review stages in local communities that met the requirements of EAO.

EAO held a 30-day public comment period in the pre-Application stage in November 2008 in Granisle, Houston, and Burns Lake. Attendance at the Granisle open house was highest, with nearly 70 participants.

The key issues raised by the public included: employee housing, transportation and safety impacts, water quality and fisheries, and economic revitalization in the region. EAO received 64 comments from five individuals on the draft Terms of Reference, and considered those comments prior to issuing the final Terms of Reference to the Proponent in May 2009.

The formal review of the Application was initiated on July 12, 2010, and the Application was posted to EAO's electronic Project Information Centre (e-PIC). The Application was made available to the public in local libraries, municipal halls and regional district offices in Granisle, Houston, Burns Lake and Smithers.

A 70-day public comment period on the Application was held from July 22, 2010 to September 30, 2010. Four open houses were held by EAO during the Application Review

period: two in Granisle (total of 110 attendees) and one each in Burns Lake (8 attendees) and Smithers (25 attendees).

EAO received 88 comments from seven individuals and organizations. Issues raised by the public generally included: water quality, ML/ARD, dust and air contaminants, wildlife displacement and health risks, increased traffic, accident and contingency planning, and potential economic and employment benefits to the local communities.

A second, online-only, two-week public comment period was jointly initiated by EAO and CEA Agency in July 2011 on the new project information provided by the Proponent.

E. CONCLUSIONS

EAO is satisfied that:

- The Assessment process has adequately identified and addressed the potential adverse environmental, economic, social, heritage and health effects of the proposed Project, having regard to the conditions, and the mitigation measures set out in Schedule B to the draft EA Certificate;
- Public consultation, and the distribution of information about the proposed Project, has been adequately carried out by the Proponent;
- The Crown has fulfilled its obligations for consultation and accommodation to Lake Babine Nation, Yekooche First Nation and Gitksan and Gitanyow Nations relating to the issuance of a decision on whether to issue an EA Certificate for the proposed Project.

RECOMMENDATION:

The Executive Director recommends that an Environmental Assessment Certificate be issued to Pacific Booker Minerals Inc. for the Morrison Copper/Gold Mine Project on terms and conditions that require Pacific Booker Minerals Inc. to comply with all design and mitigation conditions set out in the attachments to the proposed Certificate.

OR ????

I recommend Ministers consider, in addition to the Assessment Report prepared by my delegate which indicated no potential for significant adverse effects, and that First Nations had been consulted and accommodated appropriately, the following factors when making a decision to issue/not issue/ask for more information:

- The long term liability of this project particularly as it relates to provincial policy on ML/ARD prevention.
- The financial liability to the Province should:
 - the Proponent's operations and closure plans not be successful, or,
 - the Proponent be unable to resource long term closure plans.
- Use of the dilution capacity of Morrison Lake as the primary mitigation for the long term discharge of mine effluent
- The proximity of the project to a highly valued population of sockeye salmon used by First Nations
- Views of the Gitksan and Gitanyow Nations and the Lake Babine Nations
- The strength of claim of the Lake Babine Nation, in particular their moderate to strong prima facie case for aboriginal title.
- The economic benefit to the Province, including tax revenue and job creation.

Submitted by:

Derek Sturko
Associate Deputy Minister and Executive Director
Environmental Assessment Office

Referral Documents as at August 21, 2012

- Title Page
- Table of Contents
- Cover letter to Ministers Lake and Coleman dated August 21, 2012
- Cover letter to Deputy Ministers Cairine MacDonald and Steve Carr
- Power Point Summary (**for "Booker Pacific Minerals Inc"**)
- Recommendations of the Executive Director dated August 21, 2012
- Assessment Report dated August 21, 2012 including Appendix 1 - Issue Tracking Tables and Appendix B - Table of Conditions
- Compliance Management Plan dated August 21, 2012
- August 9, 2012 letter from Chris Hamilton to Erik Tornquist
- August 13, 2012 letter from Erik Tornquist to Chris Hamilton
- August 8, 2012 memorandum from Kim Bellefontaine to Chris Hamilton
- August 2, 2012 memorandum from Greg Tamblyn to Chris Hamilton
- July 26, 2012 letter from Chief Wilf Adam, Lake Babine Nation, to Chris Hamilton
- August 3, 2012 letter from Beverley Clifton Percival, Gitxan Chiefs' Office, to Ministers Lake and Coleman c/o Chris Hamilton
- August 2, 2012 letter from Glen Williams, Gitanyow Hereditary Chiefs, to Ministers Lake and Coleman c/o Chris Hamilton
- Ministerial Decision Record
- Draft environmental assessment certificate for signature in the event of a decision in favour of issuance with attached Schedule A - Certified Project Description and Schedule B - Table of Conditions
- Disc containing 3D computer simulation of the proposed project, prepared by the petitioner.

This is Exhibit " A " referred to in the
affidavit of Derek Starke
sworn before me at VICTORIA
in the Province of British Columbia this
3rd day of JUNE, 2013

[Signature]
A Commissioner for taking Affidavits
within the Province of British Columbia

Proposed Morrison Copper Gold/Mine Project

Environmental Assessment Office

August 21, 2012

FILE COPY
30200-20/MORR-17
EPIC # 101752



Proposed Morrison Copper/Gold Mine Project

Referral Package Documents

- Referral memo to Ministers from ADM

TAB 1 – POWER POINT SUMMARY

TAB 2 – RECOMMENDATIONS OF THE EXECUTIVE DIRECTOR

TAB 3 – ASSESSMENT REPORT

TAB 4 – MANAGEMENT PLAN

TAB 5 - SUBMISSIONS

TAB 6 – MINISTERIAL DECISION RECORD

TAB 7 – ENVIRONMENTAL ASSESSMENT CERTIFICATE /
SCHEDULE A & B

TAB 8 – 3D COMPUTER SIMULATION OF PROJECT
(5 MINUTE VIDEO)



Environmental
Assessment Office

MEMORANDUM

File: 30200-20/MORR-10

Ref: 101572

August 21, 2012

Honourable Terry Lake
Minister of Environment

Honourable Rich Coleman
Minister of Energy and Mines and Minister
Responsible for Housing

Re: Morrison Copper/Gold Mine Project

Environmental Assessment Office (EAO) has completed the review of the application by Pacific Booker Minerals Inc. for an Environmental Assessment Certificate for the proposed Morrison Copper/Gold Mine Project. The Application for a Certificate is now being referred to you both for a decision in accordance with the provisions of section 17 of the *Environmental Assessment Act* (Act).

Attached for consideration in this binder are materials to inform your decision, including a PowerPoint Summary (Tab 1), my Recommendations of the Executive Director (Tab 2), the Assessment Report (Tab 3), and the Compliance Management Plan (Tab 4). Arrangements are being made to brief both of you on this matter in the near future.

The Act provides that Ministers have 45 days from the date of this referral to make a decision on the Application for a Certificate. A decision is due on October 5, 2012 regarding whether to issue an Environmental Assessment Certificate. There are three options for a decision:

- issue an Environmental Assessment Certificate;
- decline to issue an Environmental Assessment Certificate; or,
- order that further assessment be conducted.

Both Ministers are required to sign the Ministerial Decision Record at Tab 6. If you decide to issue the Environmental Assessment Certificate as recommended, each Minister must also sign both copies of the Environmental Assessment Certificate.

A handwritten signature in black ink, appearing to read "DSturko".

Derek Sturko
Associate Deputy Minister and Executive Director

.../2

Enclosures

cc: Cairine MacDonald, Deputy Minister
Ministry of Environment

Steve Carr, Deputy Minister
Ministry of Energy and Mines



Environmental
Assessment Office

MEMORANDUM

file: 30200-20/MORR-10

Ref: 101752

Date: August 21, 2012

To: Cairine MacDonald Deputy Minister Ministry of Environment
Steve Carr Deputy Minister Ministry of Energy and Mines

Re: **Morrison Copper/Gold Mine Project
Environmental Assessment Certificate Package**

Environmental Assessment Office has completed the review of the Application by Pacific Booker Minerals Inc. for an Environmental Assessment Certificate for the proposed Morrison Copper/Gold Mine Project. The Referral Package is now being sent to your Minister for his consideration.

I am pleased to enclose for your information, copies of the following:

- PowerPoint Summary
- Recommendations of the Executive Director
- Assessment Report
- A copy of the Ministerial Decision Record
- A copy of the Environmental Assessment Certificate (with Schedules A and B)

If you have any questions, please contact me at 250-356-7475.

A handwritten signature in black ink, appearing to be "DSturko".

Derek Sturko
Associate Deputy Minister and Executive Director

Enclosures

Power Point Summary for "Booker Pacific Minerals Inc.'s" Application from Derek Sturko

According to Derek Sturko's affidavit, it (the Power Point Summary) "was a document that EAO project director Chris Hamilton prepared at my direction and with my input, with the aim of providing a high-level visual overview of key information in the Assessment Report, Recommendations, and submissions contained in the referral package."

Errors or misinformation in the PowerPoint:

- Slide 1 Company's name shows as "Booker Pacific Minerals Inc." After working on the project for many years, it is hard to believe that Chris Hamilton would get the Company's name wrong on the title page and correct in the balance of the document.
- Slide 4 The project components list includes "sludge storage facilities". The mine plan does not include a "sludge storage facility". Sludge is produced at active water treatment plants and consists of the solids that had been removed from the water as well as any chemicals that had been added to improve the efficiency of the water treatment process. The water treatment for the Morrison is needed during the closing phases of the mine.
On closure of the mine, any residual surface water in the Tailings Storage Facility will be directed to the open-pit, which will be filled with waste rock and allowed to fill with water to a level below the level of Morrison Lake. The open-pit water will be treated by a water treatment plant. A conceptual design of a HDS water treatment plant was carried out by SGS-CEMI. That plant is capable of treating the full range of water quality estimates in the open-pit.
- Slide 5 Project Benefits as shown in the power point:
Estimated Capital Investment: -\$2.3 billion (life of mine)--the capital cost to build the mine is estimated as \$516.68 million. Total expenditures by the Company for the life of the mine are estimated as \$4.7 billion.
Total provincial revenue over project life (construction and operations): -\$64.5 million--The BC government's input-output model (BCIOM) was used to estimate the economic effects for both the construction and operations phases of the proposed Project), the revenue (over the life of the mine) for BC Mineral Taxes would be \$208 million. Also, PBM would pay both federal and provincial income tax on earnings. The induced and indirect jobs would also pay both federal and provincial income tax on earnings. Provincial Sales Tax would be paid by PBM on purchases (with the exception of some mining equipment purchases that may be PST exempt). The induced and indirect jobs would also generate sales tax income for both governments.
Construction employment: 1,117 part-time, temporary & full time jobs per year over two years--422 of the 1,117 jobs are direct construction jobs. 225 jobs are on the project and the rest are induced and indirect jobs. The construction jobs are full time jobs of short term duration. The project jobs are calculated as full time, long term jobs. Some of the induced and indirect jobs may be part-time or temporary jobs.
Operations employment: 601 part-time, temporary & full-time jobs per year over the 21-year mine life--94 of the 601 jobs are direct construction jobs. 251 jobs are on the project and the rest are induced and indirect jobs.
- The jobs for the 5 years of the early closure phase are estimated at 144 (22 direct, 24 induced, 37 indirect and 60 project) and 4 years of the closure phase jobs are estimated as 14 (2 direct, 2 induced, 4 indirect and 6 project). These jobs were not included in the information shown in the PowerPoint.
- Slide 9 **First Nations**--The PowerPoint shows different levels of prima facie case for title and rights for the First Nations involved. It does not indicate that the determination of the "prima facie" was made by the EAO for this project only. These rights and title have not been determined by the treaty process. (Per Executive Directors report, page 24 as follows "It is important to note that this conclusion is a prima facie determination made in order to discharge EAO's Haida analysis and is focused on the site of the proposed Project. This analysis is not meant to apply to any other part of Lake Babine traditional territory; this assessment is only being made for the purpose of the proposed Project. A similar statement addresses each of the First Nations involved in the process.)

Slide 10 Under Key Issues Identified during the EA, there is a bullet point that says: Impacts to several small tourism/guide outfitter facilities. Impacts to local business were part of the EA process and in the Executive Directors report on page 19, the EAO indicates that the most impacted businesses have been accommodated as follows: EAO, having considered input from Tukki Lodge and Ookpik Wilderness Lodge, is satisfied that, with the successful implementation of mitigation measures, there would be no significant adverse social or economic effects.

Slide 12 EAO Conclusions--"If mitigation measures and commitments proposed by Proponent are successfully implemented, they will prevent or reduce potential proposed Project impacts such that no significant adverse effects are expected to occur". The **IF** at the beginning implies that there is doubt about the effectiveness of the mitigations proposed and of the ability of PBM to implement them. That determination is one of the key aspects of the EA process and PBM has committed in writing to comply with those conditions.

This slide also shows the conclusion of "potential effects on asserted Aboriginal rights and title and other interests of First Nations have been appropriately mitigated or otherwise accommodated." Yet opposition from Gitxsan and Gitanyow Nations and Lake Babine Nation is shown as one of the bullet points in the recommendation from Derek Sturko to refuse to grant the EA Certificate.



Environmental
Assessment Office



Environmental Assessment Office

**MORRISON COPPER/GOLD
MINE PROJECT**

**Booker Pacific Minerals Inc.'s
Application for an
Environmental Assessment Certificate**

August 21, 2012



Environmental Assessment Office



Morrison Copper/Gold Mine Project Location Map



Proposed Project

The proposed Project is:

- Located 65 km northeast of Smithers and 35 km north of Village of Granisle
- A conventional open pit, truck and shovel copper/gold/molybdenum mine
- ~30,000 tonnes of ore per day over 21 years

Proponent:

- Pacific Booker Minerals Inc. is a publicly-traded, BC-based junior mining company with its head office in Vancouver

3



Project components include:

- Open pit
- Tailings Storage Facility
- Processing plant
- 25-km 138-kV transmission line from old Bell Mine
- Access roads
- Associated mine facilities (e.g. maintenance buildings)
- Water treatment plant and water management facilities
- Explosives storage and mixing plant
- Fuel storage
- Overburden stockpiles
- Waste rock storage
- Low grade ore stockpile
- Sludge storage facilities



Environmental Assessment Office

Project Benefits

Financial:

- Estimated Capital Investment: ~\$2.3 billion (life of mine)
- Total provincial revenue over project life (construction and operations): ~\$64.5 million

Employment:

- Construction: 1,117 part-time, temporary & full time jobs per year over two years
- Operations: 601 part-time, temporary & full-time jobs per year over the 21-year mine life



Environmental Assessment Office

Coordinated Environmental Assessment Process

- Requires an EA Certificate because it is a new metal mine with an ore production capacity which exceeds the *Reviewable Projects Regulation* threshold of 75,000 tonnes per year.
- Proposed Project triggers the *Canadian Environmental Assessment Act* because it requires a Natural Resources Canada explosives permit, and has a potential “Harmful Alteration, Disruption or Destruction” of fish habitat under the federal *Fisheries Act*.
- EAO and CEAA have attempted to keep the EA process harmonized. CEAA has prepared a Comprehensive Study Report which has similar findings as the EAO Report and has circulated a draft to First Nations and federal agencies.



Environmental Assessment Office

Working Group

Provincial Agencies

- Ministry of Energy and Mines
- Ministry of Environment
- Ministry of Forests, Lands and Natural Resource Operations
- Ministry of Transportation and Infrastructure

Federal Agencies

- Health Canada
- Fisheries and Oceans Canada
- Natural Resources Canada
- Environment Canada
- Transport Canada

7

Local Governments

- Village of Granisle

First Nations

- Lake Babine Nation
- Gitanyow Nation
- Gitxsan Nation
- Skeena Fisheries Commission (supporting Gitxsan and Gitanyow)
- Yekooche First Nation*

* Invited but did not participate



Environmental Assessment Office

Public Consultation

Application Information Requirements:

- 30-day and 40-day public comment periods in 2008 and 2009
- Open houses in Granisle, Houston and Burns Lake (highest participation was in Granisle - 70 attendees)
- 64 public comments from five individuals

Application Review:

- 70-day comment period on Application from July 22-Sept. 30, 2010
- Open houses in Granisle, Smithers and Burns Lake (eight attendees in Burns Lake, 25 in Smithers and 110 in Granisle)
- 88 public comments from seven individuals and organizations
- Online only 14-day comment period on Proponent's supplemental
8 information in July 2011



Environmental Assessment Office

First Nations

- Proposed Project is located within territory of Lake Babine Nation. Lake Babine Nation has a moderate to strong *prima facie* case for title and a strong case for rights.
- A small portion of the proposed transmission line is in the territory of Yekooche First Nation. EAO's preliminary assessment is the *prima facie* case for rights and title are low.
- Potential impacts to Gitanyow & Gitxsan Nation rights to fish sockeye salmon on Skeena River. No rights and title on the Project site but *prima facie* case to fish on Skeena is very strong.



Key Issues Identified During the EA

- Impacts to water quality & quantity in Morrison Lake
- Impacts to fish & fish habitat in Morrison Lake, Morrison River & several streams flowing into Morrison Lake (particularly sockeye)
- Metal leaching/acid rock drainage
- Air quality
- Wildlife impacts
- Health risks
- Increased traffic
- Impacts to several small tourism/guide outfitter facilities
- Potential economic and employment benefits to local communities
- Impacts to aboriginal rights



Environmental Assessment Office

Key Mitigation Measures

- Design & install geomembrane liner for tailings storage facility
- Replace waste rock back into the open pit on closure
- Construction of a water treatment plant and effluent diffuser
- Collection of more information on the behaviour of Morrison Lake
- Develop an Instream Flow Requirement for Morrison River
- Additional fisheries research and surveys on Morrison Lake
- Creating a Community Sustainability Advisory Committee
- Hiring residents from primary and secondary communities
- MOU between Proponent & Village of Granisle
- MOU between Lake Babine Nation and Proponent

EAO Conclusions

- If mitigation measures and commitments proposed by Proponent are successfully implemented, they will prevent or reduce potential proposed Project impacts such that no significant adverse effects are expected to occur.
- The Crown has fulfilled its obligations to consult and accommodate First Nations.
- Potential effects on asserted Aboriginal rights and title and other interests of First Nations have been appropriately mitigated or otherwise accommodated.

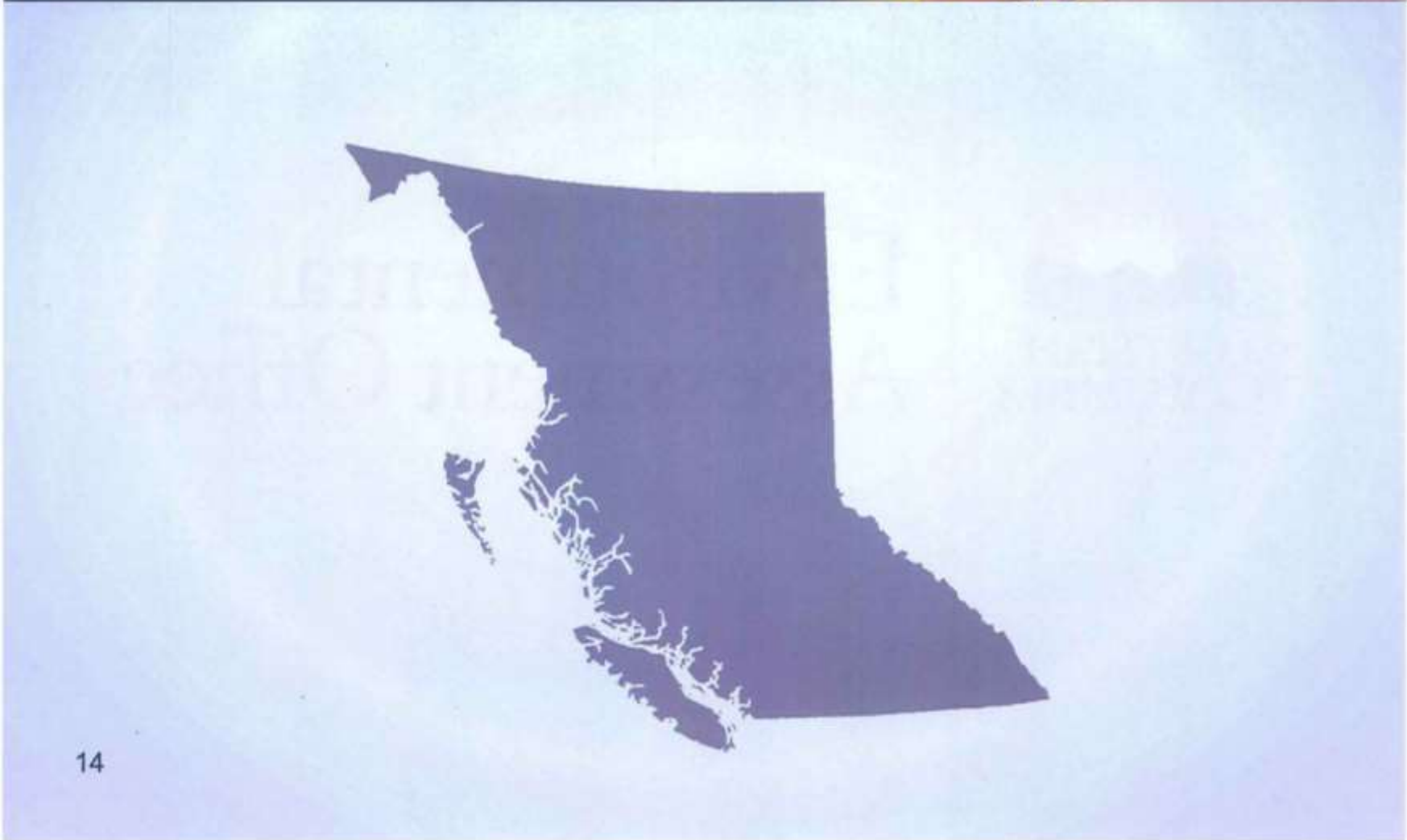


Executive Director Recommendation

- Consider EAO's Assessment Report (technical review that resulted in conclusion of no significant adverse effects if mitigation/commitments successfully implemented) and,
- Adopt a risk/benefit approach and look at other factors:
 - location of Project, particularly in relation to fish habitat;
 - the long term environmental liability and risk;
 - “in-perpetuity” nature of water treatment and discharge;
 - the long term change in water quality in Morrison Lake;
 - views of First Nations;
 - the economic effects; and,
 - the Proponent's views of these additional factors.
- Recommend not issuing an EA Certificate for the proposed Project.



Environmental Assessment Office





Environmental Assessment Office

In the matter of the
ENVIRONMENTAL ASSESSMENT ACT
S.B.C. 2002, c. 43
(Act)

and

in the matter of an
Application
for an
Environmental Assessment Certificate
(Application)

by

Pacific Booker Minerals Inc.
(Proponent)

for the

Morrison Copper/Gold Mine Project
(proposed Project)

August 21, 2012

Recommendations of the Executive Director

In accordance with the provisions of section 17(2)(b) of the *Environmental Assessment Act*, the Executive Director of Environmental Assessment Office makes the recommendations contained in this submission, for the reasons indicated, in connection with the application by Pacific Booker Minerals Inc. for an Environmental Assessment Certificate for the proposed Morrison Copper/Gold Mine Project.

A. ISSUE

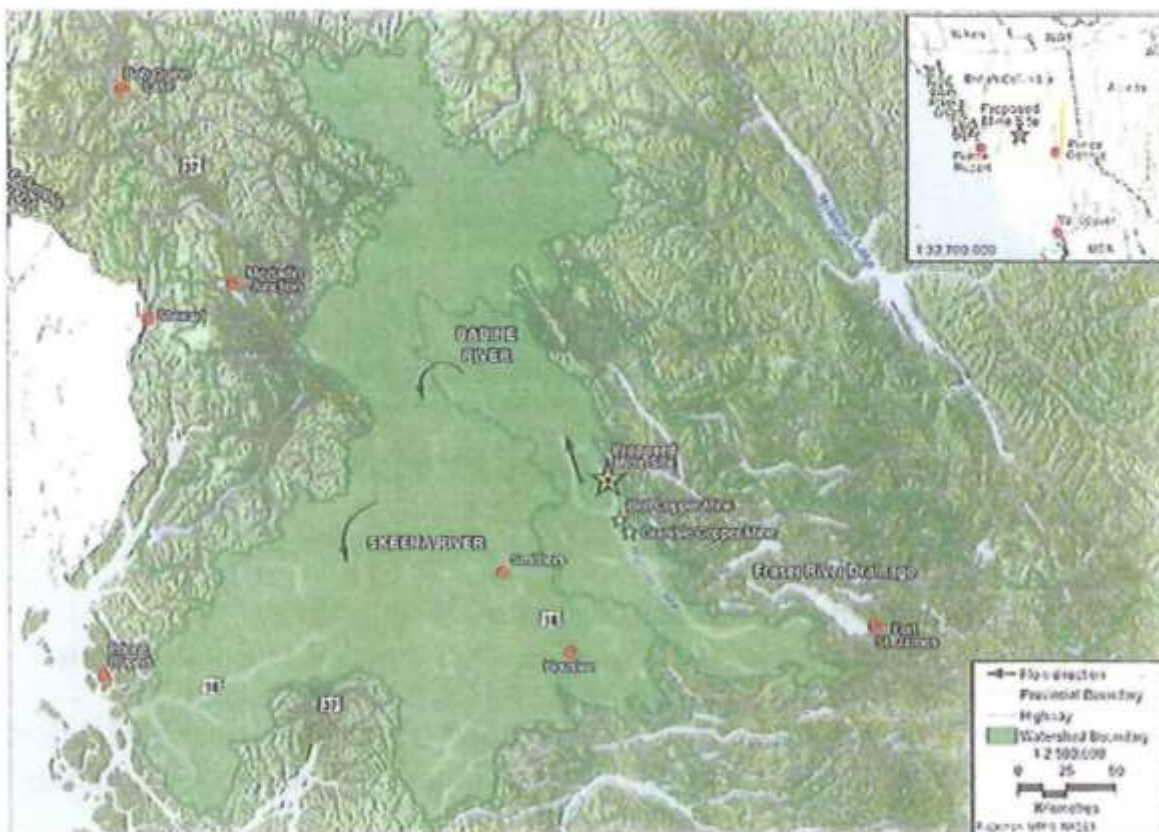
Decision by Ministers on the Application for an Environmental Assessment (EA) Certificate by Pacific Booker Minerals Inc. for the proposed Morrison Copper/Gold Mine Project (proposed Project).

B. BACKGROUND

1. Proponent and Project Description

The Proponent for the proposed Project is Pacific Booker Minerals Inc., a publicly-traded, British Columbia-based mineral resource company with its head office in Vancouver.

The Proponent is proposing to develop a copper-gold-molybdenum mine in north-central British Columbia. The proposed Project is located on the shoreline of Morrison Lake, a 15-km long lake, on Crown Land. The closest communities to the mine site are Granisle, Houston and Smithers.



The proposed Project is based on a conventional truck-shovel open pit mine and copper flotation process plant that has been designed to produce an average of 160,000 tonnes of concentrate per year containing copper and gold. A separate molybdenum concentrate would be produced. Over the expected 21-year mine life, the proposed Project would

produce over 1.37 billion pounds of copper, 658,000 ounces of gold and about 10 million pounds of molybdenum.

The scope of the proposed Project consists of the following on-site and off-site components and activities:

- approximately 30,000 tonnes per day, open pit mine and process plant;
- mill tailings storage facilities, including containment dams;
- waste rock storage;
- site runoff, diversion and sediment control;
- ore and marginal ore storage;
- borrow pits, overburden and topsoil storage;
- sewage and waste water management facilities;
- water treatment facilities;
- groundwater and/or surface water use for monitoring and/or extraction;
- explosives transport, manufacturing plant and storage;
- an existing 138-kV transmission line from Babine Substation, crossing Babine Lake, to the Project site and a new 25-km extension of the transmission line from the Bell Mine site to the proposed Project site;
- a power substation at the proposed Project site;
- mine haul roads within the mineral property;
- new and/or existing dedicated barge and barge facilities;
- associated mine facilities such as assay buildings, ore load out facilities, labs, maintenance shops, warehouse equipment lay down areas, office complex parking, change house, security building; and,
- routes for hauling the ore to the milling facility and for personnel access and delivery of supplies and materials to the site, including new or existing roads.

The proposed Project's total estimated capital cost is \$245 million during each of the two years of construction and \$89.5 million during each of the 21 years of operation.

The Proponent estimated that the two-year construction period would generate an estimated 1,117 jobs each year, but due to the nature of construction, many of those jobs would be part time, temporary or contract, which would not necessarily translate to 1,117 person years (or full time equivalent) of direct employment. The Proponent estimates a total of 225 jobs with the Proponent, 422 jobs with direct suppliers, 188 jobs of indirect employment and 282 jobs of induced employment.

The 21-year operation period is estimated to generate approximately 601 jobs per year. Again, those are not necessarily 601 full time positions, although jobs created in the operations phase are more likely to be full-time and longer than construction positions. The Proponent estimates a total of 251 jobs with the Proponent, 94 jobs with direct suppliers, 155 jobs of indirect employment and 101 jobs of induced employment.

The proposed Project would contribute an estimated \$104 million to Provincial Gross Domestic Product over the two-year construction period and \$50 million during the 21 years of operations.

During construction, the proposed Project is estimated to generate approximately \$22 million in government tax revenue, with approximately \$10 million payable to the federal government and \$12 million to the province. During the operations phase, the proposed Project is expected to contribute \$2.9 million in federal tax revenue and \$2.5 million in provincial tax revenue.

2. British Columbia Environmental Assessment Process

In September 2003, the Proponent submitted a Project Description to Environmental Assessment Office (EAO). EAO determined that the proposed Project was reviewable under the Act pursuant to Part 3 of the Reviewable Project Regulations (B.C. Reg. 370/02), because the proposed Project is a new mine facility that, during operations, would have a production capacity of greater than 75,000 tonnes per year of mineral ore.

EAO coordinated and chaired a multi-agency group (Working Group) that provided advice on the potential effects, mitigation measures and conditions required in the EA. The Working Group membership, as well as organization names, has changed significantly over the nine years of review, but the following agencies and First Nations have been engaged:

- **Provincial:** Ministry of Energy and Mines, Ministry of Environment, Ministry of Forests, Lands and Natural Resource Operations; and Ministry of Transportation and Infrastructure;
- **Federal Agencies:** Canadian Environmental Assessment Agency, Health Canada, Fisheries and Oceans, Natural Resources Canada, Major Projects Management Office, Environment Canada, and Transport Canada;
- **First Nations:** Lake Babine Nation, Yekooche First Nation, Gitanyow Nation, and Gitxsan Nation; and,
- **Local Government:** Village of Granisle.

On September 28, 2009, the Proponent submitted their Application for evaluation to EAO. EAO did not accept the Application for review because it did not contain the information required by the Terms of Reference. In a letter, EAO identified "... major issues related to water quality, hydrogeology, geotechnics, ML/ARD and specifically, the lack of information relating to the long-term impacts of a collect-and-treat system on Morrison Lake" in the Proponent's Application.

The Proponent provided a revised Application on May 28, 2010, which was evaluated by EAO with input from the Working Group. The Application was accepted for review on June 28, 2010. A 70-day public comment period on the Application was held, and open houses occurred in Granisle, Smithers and Burns Lake.

On October 28, 2010, EAO issued a time limit suspension on the Application Review at the Proponent's request in order to provide time for the Proponent to fully respond to

significant issues related to water quality and impacts to fish raised by the technical reviewers.

On December 16, 2010, EAO representatives met with representatives of the Proponent and the Canadian Environmental Assessment Agency (CEA Agency) and indicated that EAO had serious concerns about the long-term environmental liability of the proposed Project. EAO highlighted concerns with the proposed land-based waste rock storage, the plan for a mine drainage water collection and treatment system in perpetuity and the potential impacts on water quality in the receiving environment.

On February 18, 2011, the Proponent advised EAO that they intended to revise the mine plan in order to reduce potential environmental risks associated with the original project design. On March 9, 2011, EAO wrote to the Proponent with a list of information requirements for the new waste and closure plans as well as information related to fish habitat compensation plans. EAO also informed the Proponent that, in light of EAO's preliminary assessment of the strong *prima facie* strength of claim of Lake Babine First Nation for the proposed Project area, they should seriously consider the issues which Lake Babine Nation had raised regarding aspects of the Project design and mine component locations.

The Proponent submitted the required supplemental information in June 2011. Following a review of the information, EAO accepted the documents and the time limit suspension was lifted on July 27, 2011. An online-only public comment period was jointly initiated by EAO and CEA Agency on the new information submitted by the Proponent.

On September 29, 2011, at day 176 of the 180-day review period, EAO again suspended the review of the proposed Project because EAO was unable to develop, due to uncertainties related to the information presented by the Proponent, conclusions on the potential for significant adverse effects to water quality and fish, sockeye salmon in particular.

Following the September 29, 2011 suspension, EAO commissioned an external, third-party review of the Proponent's water quality, hydrogeology and fisheries effects assessments. These third-party reports, which were delivered to EAO in December 2011, confirmed that there was insufficient information to demonstrate that the proposed Project would not have significant adverse effects on water quality in the long term. The reports provided a number of recommendations for additional work.

EAO informed the Proponent that they must respond to the external review recommendations. EAO also shared the reports with the Working Group and First Nations and sought their input on any additional requirements that should be included in the Proponent's scope of work.

The Proponent provided EAO with an additional submission on January 31, 2012, entitled *3rd Party Review Response Report*. EAO again had this information reviewed by the external third-party hydrogeologist and retained a third party lake behaviour specialist to also examine the *3rd Party Review Response Report*. EAO indicated to the Proponent that, despite information contained in the *3rd Party Review Response Report*, there were still significant outstanding concerns, particularly as they related to water quality in Morrison Lake and potential impacts to sockeye salmon spawning areas.

On April 30, 2012, the Proponent submitted its final addendum, called *3rd Party Review Response Report – Addendum 1*. This report provided information on several new design options, most significantly a geomembrane liner for the Tailings Storage Facility. Models which accompanied these proposed design changes enabled EAO to develop conclusions on the proposed Project.

EAO referred the Application to Ministers on August 21, 2012. Ministers have until October 5, 2012 to make a decision, unless an extension is ordered in accordance with section 24(4) of the Act.

3. Federal Environmental Assessment Process

CEA Agency determined that a federal review was required for the proposed Project, that the review would be a comprehensive study, and the responsible authorities would include Fisheries and Oceans Canada (DFO), and Natural Resources Canada.

Federal authorities actively participated in the EA of this proposed Project. Federal comments received during the cooperative review are reflected in the Assessment Report and have significantly informed the analysis and conclusions.

4. Other Approvals

EAO accepted the Proponent's application for concurrent review of the EA Certificate Application with an application for:

- Mining lease (Ministry of Energy and Mines - MEM);
- Crown Land License of Occupation for the proposed Transmission Line (Ministry of Forests, Lands and Natural Resource Operations – FLNRO);
- Occupant License to Cut (FLNRO);
- Special Use Permit (FLNRO);
- Road Use Permit (FLNRO); and,
- Forest License to Cut (FLNRO).

Under the *Concurrent Approval Regulation*, agencies must decide whether to grant the permits and approvals within 60 days of Ministers' decision to grant an EA Certificate. In addition to these approvals, there are numerous other approvals which would be required, following the issuance of the EA Certificate, prior to the Proponent constructing the proposed Project. The principal provincial authorizations required to construct and operate the proposed Project are under the *Mines Act* and the *Environmental Management Act*.

C. DISCUSSION

1. Potential Significant Adverse Effects, Mitigation Measures and Proponent Commitments

The nature and scale of the proposed Project means that there are important considerations for the region and the province in terms of potential environmental, economic, social, health and heritage effects. The following categories of Valued Components were considered during the EA for the proposed Project:

- surface water quality and quantity;
- groundwater quality and quantity;
- aquatic resources;
- ecosystems and wetlands;
- wildlife resources;
- fish and fish habitat;
- employment and economy;
- land and resource uses;
- human and ecological health factors; and,
- heritage and archaeological resources.

EAO considered all the issues and concerns raised by Lake Babine Nation, Yekooche First Nation, Gitxsan Nation, Gitanyow Nation, the Village of Granisle and the public, as well as all provincial and federal agencies. During the review of the Application, a number of environmental and social issues were identified as having the potential for residual adverse effects. A description of the key effects and the corresponding mitigation measures and proposed conditions which would be undertaken by the Proponent are found below.

Potential Effects to Water Quantity and Quality

Water dominated the discussions during the EA. The proposed open pit and mine infrastructure is located directly adjacent to Morrison Lake, a 15-km long lake which forms part of the headwaters of Skeena River and contains important fish habitat and associated aquatic resources.

The largest potential for effects on Morrison Lake was determined to come from the main mine infrastructure components, including:

- the Tailings Storage Facility (TSF);
- the open pit; and,
- the water treatment plant and Morrison Lake effluent diffuser.

Key Potential Effects	Mitigation Measure / Condition	EAO Analysis and Conclusions
Seepage of contaminated water from the open pit into Morrison Lake on closure.	Following closure, the Proponent must maintain the elevation of the pit lake below the elevation of Morrison Lake to ensure no pit seepage discharge to Morrison Lake. Groundwater monitoring wells must be installed between the open pit and Morrison Lake to monitor potential seepage of contaminated water from the open pit to Morrison Lake.	EAO commissioned a third-party technical review of the Proponent's water quality and hydrogeology models. The review examined potential seepage from the open pit to Morrison Lake. The reviews found that, as long as the open pit remained below the

Key Potential Effects	Mitigation Measure / Condition	EAO Analysis and Conclusions
	<p>Morrison Lake water quality must be monitored at least twice each year (summer and winter) to ensure changes to water quality in the lake are detected.</p> <p>All PAG¹ waste rock and any unmilled low grade ore must be fully flooded at final closure. High PAG rock and unmilled low grade ore must be placed in the bottom of the open pit. All PAG waste rock and low grade ore must be placed into the open pit and be capped with non-PAG rock and glacial till.</p>	<p>elevation of Morrison Lake, there would be negligible water quality effects from the open pit on Morrison Lake.</p> <p>Having considered the third-party reviews and input from the Working Group, EAO is satisfied that, with the successful implementation of mitigation measures and monitoring, there would be no significant adverse effects on water quality resulting from seepage from the open pit to Morrison Lake.</p>
<p>Seepage of tailings water from the TSF into ground and surface water, which could eventually report to Morrison Lake and harm water quality.</p>	<p>a) The Proponent must design and install a geomembrane liner in the TSF area sufficient to ensure that the seepage rate from the TSF does not exceed 10m³/hr.</p> <p>b) Without restricting paragraph (a), if any seepage from the TSF to Morrison Lake or any streams occurs which exceeds any limits for seepage specified by the Ministry of Environment (MOE), the Proponent must:</p> <ol style="list-style-type: none"> i. prepare a plan of measures to control the seepage in order to meet the limits; ii. obtain approval of MOE for the plan; and, iii. implement the plan. <p>c) Annual reports on updated</p>	<p>EAO undertook a third-party technical review of the Proponent's water quality and hydrogeology models and employed a third-party technical reviewer who examined how a lined TSF would impact Morrison Lake. The reviews found that, if the TSF liner operated as presented, the TSF would have a minor impact on water quality in Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the successful implementation of</p>

¹ Potentially acid generating rock is likely to react to water and oxygen and produce acid which can harm the receiving environment.

Key Potential Effects	Mitigation Measure / Condition	EAO Analysis and Conclusions
	groundwater seepage must be prepared by the Proponent and shared with EAO, MOE and MEM.	mitigation measures and monitoring, there would be no significant adverse effects on water quality resulting from seepage from the TSF to Morrison Lake.
Potential impacts to Morrison Lake from treated effluent discharged through a water treatment plant.	<p>a) The Proponent must prepare an annual calculation of site water balance.</p> <p>b) If surplus water accumulates for more than two years and requires treatment according to the requirements of an <i>Environmental Management Act</i> permit, the Proponent must:</p> <ol style="list-style-type: none"> i. construct a water treatment plant; and, ii. collect, treat and discharge any excess contact water to Morrison Lake via a pipeline and diffuser. <p>c) Any water discharged to Morrison Lake must meet - outside a mixing zone established by MOE - either British Columbia Water Quality Guidelines, Site Specific Water Quality Objectives, or an alternative requirement defined by the requirements of an <i>Environmental Management Act</i> Permit.</p>	<p>EAO commissioned a third-party technical review of the Proponent's water quality models and employed a third-party technical reviewer who examined how an effluent diffuser would impact Morrison Lake. The reviews found that water quality would likely meet British Columbia Water Quality Guidelines outside a 40x100 meter mixing zone and that the effluent diffuser could be engineered in a manner that was unlikely to affect the long-term behaviour of Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the successful implementation of mitigation measures and conditions, there would be no significant adverse effects on water quality or the behaviour of Morrison Lake resulting from effluent discharged into Morrison Lake.</p> <p>EAO notes that the long</p>

Key Potential Effects	Mitigation Measure / Condition	EAO Analysis and Conclusions
		term water quality of Morrison Lake will change to a new permanent baseline because of the discharge of treated effluent through the effluent diffuser. EAO interprets "no significant adverse effects" to mean that the Proponent has demonstrated that long term water quality can likely still meet British Columbia Water Quality Guidelines for the protection of aquatic life.
Reduction in flow to Morrison River and level of Morrison Lake due to groundwater inflows into the open pit.	<p>The Proponent must complete a plan, for the approval of DFO and FLNRO, to measure year round water flows in Morrison River. The plan must include a follow-up monitoring program to verify the Proponent's predictions that there will be no adverse effects to physical fish habitat due to flow augmentation if flow augmentation is used as mitigation.</p> <p>Based on this plan, the Proponent must develop, for the approval of DFO and FLNRO, an Instream Flow Requirement following the Instream Flow Incremental Methodology. The Instream Flow Requirement must be adhered to during operations.</p>	EAO, having considered input from the Working Group, is satisfied that inflows to the open pit from Morrison Lake can be managed and that, with the successful implementation of mitigation measures, including an appropriate and adhered-to Instream Flow Requirement that protects spawning areas in Morrison River, there will be no significant adverse effects to water quantity in Morrison Lake or Morrison River.

Potential Effects to Fish, Fish Habitat and Aquatic Resources

Morrison Lake and its tributary streams support communities of at least 16 species of resident and anadromous fish, including three species of Pacific salmon which migrate to Morrison Lake via the Skeena and Babine rivers. Babine Lake sockeye were significantly enhanced in the late 1960s, which saw spawning channels and flow controls established on several rivers. As a result, almost 90 percent of all sockeye salmon in the Skeena River come from areas around Babine Lake.

The analysis shows that, while Morrison Lake may make a relatively small contribution to the overall numbers of sockeye salmon (in the range of 2.5 to 3.5 percent depending on the years counted)² produced from Babine Lake, this number underestimates Morrison Lake's contribution as one of the largest natural stocks of non-hatchery (unenhanced) sockeye salmon on the Babine Lake system. Natural stocks are valued for their genetic diversity and cannot be replaced if they are lost.

Sockeye salmon comprise about 72 percent of the open water fish in Morrison Lake.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
Direct habitat loss due to reductions in flow in several creeks.	EAO understands the Proponent will work with DFO, MOE and Lake Babine Nation to finalize and agree upon a Fish Habitat Compensation Plan which would compensate for any proposed Project activities that result in Harmful Alteration, Disruption or Destruction of fish and fish habitat as defined under the federal <i>Fisheries Act</i> .	EAO, having considered input from the Working Group, is satisfied that, with a Fish Habitat Compensation Plan developed to the satisfaction of DFO and the successful implementation of mitigation measures, there will be no significant adverse effects to fish habitat on Morrison Lake.
Seepage of tailings water into groundwater, which could affect shoreline spawning sockeye salmon.	<p>a) The Proponent must design and install a geomembrane liner in the TSF area sufficient to ensure that the seepage rate from the TSF does not exceed 10m³/hr.</p> <p>b) Without restricting paragraph (a), if any seepage from the TSF to Morrison Lake or any streams occurs which exceeds any limits for seepage specified by MOE, the Proponent must:</p> <ol style="list-style-type: none"> i. prepare a plan of measures to control the seepage in order to meet the limits ii. obtain approval of MOE for the plan, and, iii. implement the plan 	<p>EAO commissioned a third-party technical review of the Proponent's water quality and hydrogeology models and employed a third-party technical reviewer who examined how a geomembrane-lined TSF would impact Morrison Lake. The reviews found that the TSF would have a minor impact on water quality in Morrison Lake and in particular those areas of the shoreline that are used for spawning.</p> <p>Having considered these third-party reviews and</p>

² The Gitksan and Gitanyow presented information that suggested Morrison Lake could contribute as much as 8% of the Skeena sockeye salmon population.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<p>c) Annual reports on updated groundwater seepage must be prepared by the Proponent and shared with EAO, MOE and MEM.</p>	<p>input from the Working Group, EAO is satisfied that, with the successful implementation of mitigation measures and monitoring, there would be no significant adverse effects on shoreline sockeye salmon spawning areas resulting from seepage from the TSF.</p>
<p>Reductions in lake levels could impact high value spawning areas in Morrison River</p>	<p>The Proponent must complete a plan, to the approval of DFO and FLNRO, to measure year round water flows in Morrison River.</p> <p>Based on this plan, the Proponent must develop, for the approval of DFO and FLNRO, an Instream Flow Requirement following the Instream Flow Incremental Methodology. The Instream Flow Requirement must be adhered to, during operations.</p> <p>The Proponent must complete the spawning habitat survey and mapping along the full length of Morrison River, including the low flow channels which may be affected during low flow periods, to support of the development of the Instream Flow Requirement.</p> <p>The Proponent must prepare a plan for the spawning survey for EAO's approval. The activities in the approved plan must be completed prior to the Proponent applying for <i>Mines Act/Environmental Management Act</i> permits.</p> <p>The Proponent must also develop a plan to reassess the spawning areas identified during the spawning surveys to determine if spawning areas are being negatively</p>	<p>EAO, having considered input from the Working Group, is satisfied that inflows to the open pit from Morrison Lake, along with other water used during proposed operations, can be managed and that, with the successful implementation of mitigation measures and monitoring, including an appropriate and adhered to Instream Flow Requirement that protects spawning areas in Morrison River, there will be no significant adverse effects to fish habitat in Morrison Lake or Morrison River.</p>

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
<p>Treated effluent discharged through a water treatment plant could pool on the bottom of Morrison Lake, create "hotspots" of concentrated effluent or change long term lake behavior.</p>	<p>impacted by the Project.</p> <p>a) The Proponent must prepare an annual calculation of site water balance.</p> <p>b) If surplus water accumulates for more than two years and requires treatment according to the requirements of an EMA permit, the Proponent must:</p> <ul style="list-style-type: none"> i. construct a water treatment plant; and, ii. collect, treat and discharge any excess contact water to Morrison Lake via a pipeline and diffuser. <p>c) Any water discharged to Morrison Lake must meet - outside a mixing zone established by MOE - either British Columbia Water Quality Guidelines, Site Specific Water Quality Objectives, or an alternative requirement defined by the requirements of an <i>Environmental Management Act</i> Permit.</p>	<p>EAO commissioned a third-party technical review of the Proponent's water quality models and employed a third-party technical reviewer who examined how an effluent diffuser would impact Morrison Lake. The reviews found that water quality would likely meet British Columbia Water Quality Guidelines outside a 40x100 meter mixing zone, and that the effluent diffuser would likely work as designed and would not result in the significant "pooling" of effluent in the bottom of Morrison Lake and that the effluent diffuser would likely not affect the long-term behaviour of Morrison Lake.</p> <p>Having considered these third-party reviews and input from the Working Group, EAO is satisfied that, with the successful implementation of mitigation measures, there would be no significant adverse effects on water quality or the behaviour of Morrison Lake resulting from effluent discharged into Morrison Lake.</p> <p>EAO notes that the long term water quality of</p>

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
		Morrison Lake will change to a new permanent baseline because of the discharge of treated effluent through the effluent diffuser. EAO interprets "no significant adverse effects" to mean that the Proponent has demonstrated that long term water quality can likely still meet British Columbia Water Quality Guidelines for the protection of aquatic life.
Concerns over gaps in understanding fish use and populations in Morrison Lake	<p>The Proponent must complete, prior to applying for <i>Mines Act/Environmental Management Act</i> permits, a baseline fish tissue sampling program in a reference lake with non-anadromous fish (Tochka Lake or another lake approved by MOE) and another lake with anadromous fish. The program must be developed and implemented to the satisfaction of MOE and MFLNRO and in consultation with the Gitksan and Gitanyow Nations, Lake Babine Nation and DFO.</p> <p>The Proponent must complete spawning surveys along the east shore of Morrison Lake from the confluence of Morrison Lake and Olympic Creek to the outflow of Morrison River from Morrison Lake, including dive surveys, to identify areas of shoreline and deep water spawning habitat.</p> <p>The Proponent must complete spawning habitat survey and mapping along the full length of Morrison River, including the low flow channels which may be affected during low flow periods, to support the development of the Instream Flow</p>	EAO, having considered the input of the Working Group, with a particular emphasis on comments from First Nation groups, is satisfied that the additional research and monitoring would enhance understanding of the fish populations in Morrison Lake and River.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<p>Requirement.</p> <p>The Proponent must prepare a plan for the spawning survey for EAO's approval. The activities in the approved plan must be completed prior to the Proponent applying for <i>Mines Act/Environmental Management Act</i> permits.</p> <p>The Proponent must also develop a plan to reassess the spawning areas identified during the spawning surveys to determine if spawning areas are being negatively impacted by the proposed Project.</p> <p>The Proponent must prepare and implement a plan, in consultation with Lake Babine Nation and Gitxsan and Gitanyow Nations, to measure annual sockeye salmon escapement in Morrison River and enumerate juvenile sockeye salmon in Morrison Lake in order to advance the knowledge of fish populations, behaviour and distribution in Morrison Lake. The plan must be developed for the approval of DFO and EAO.</p> <p>The Proponent must develop a plan, in consultation with Lake Babine Nation, Gitxsan and Gitanyow Nations and MOE, for the purposes of monitoring metal concentrations in the tissues of resident and anadromous fish in Morrison Lake.</p> <p>The Proponent must provide the plan to EAO for its approval. Once approved, sampling under the program must commence prior to the Proponent applying for a <i>Mines Act</i> or <i>Environmental Management Act</i> permit and must continue until mine closure. The plan must be implemented, and may be revised under EMA permit requirement beyond the first year of implementation.</p>	

Potential Effects to Wildlife, Wildlife Habitat, Ecosystems and Wetlands

The Application identifies and examines potential effects to ecosystems and wetlands, with a particular emphasis on those ecosystems considered rare or sensitive or that are used by grizzly bear, moose, mule deer, wolf, fisher, wolverine, american marten, red squirrel and waterfowl. Moose in particular, are strongly associated with wetlands and are known to use the wetlands at the proposed TSF location. Potential effects identified in the Application included loss and degradation of ecosystems and wetland habitat due to vegetation clearing from the mine infrastructure and transmission line.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
Loss of wetland habitat and dry grass ecosystems for deer and moose.	Proponent must develop a Vegetation and Ecosystems Management Plan which will provide information to direct the Proponent's actions with respect to maintaining and promoting healthy vegetation and terrestrial and wetland ecosystems in areas associated with mine development but not covered under reclamation plans issued under a <i>Mines Act</i> permit.	EAO, having considered input from the Working Group, is satisfied that, with the successful implementation of mitigation measures and monitoring, there would be no significant adverse effects on ecosystems.
Concerns about uptake of metals into the tissue of animals such as moose, deer and bear.	The Proponent must develop, in consultation with Lake Babine Nation and MOE, and for the purposes of monitoring the potential for uptake of metals in tissue, a plan to sample bear, deer, and moose tissues within the Local Study Area as described in the Proponent's original Application for an EA Certificate. The Proponent must provide the plan to EAO for its approval. The plan must be implemented.	EAO, having considered input from the Working Group, is satisfied that, with the successful implementation of mitigation measures and monitoring, there would be no significant adverse effects on wildlife.
Potential bird electrocutions from the power line.	The Proponent must use a design to minimize bird electrocutions by deterring nest building or perching on power poles through design considerations as well as adopting a design consistent with BC Hydro requirements.	EAO, having considered input from the Working Group, is satisfied that, with the successful implementation of mitigation measures and monitoring, there would be no significant adverse effects on wildlife.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
<p>Potential impacts to wildlife, such as grizzly bear, moose, deer, Western toad and other <i>Species at Risk Act</i> listed species.</p>	<p>The Proponent must develop a Wildlife and Wildlife Habitat Management Plan which will provide procedures for minimizing and managing impacts to wildlife from routine mine activities, provide a framework for the development and implementation of wildlife monitoring programs, and processes for improving mitigation and management measures through adaptive management. The Plan must be approved by MOE and FLNRO. It must include the following elements:</p> <ul style="list-style-type: none"> • measures to preserve and protect wetland/riparian habitats; • measures to reduce impacts to moose, deer, grizzly bear and other furbearers; • measures to reduce bear/human conflicts; • measures to expedite the return to productive habitat of riparian habitats; • measures, such as trials during operations, to expedite the tailings beach reclamation; • measures to mitigate impacts to western toad breeding sites; • development of an Active Migratory Bird Nest Survey to reduce the likelihood of destroying bird nests; • undertake additional research and surveys to assess habitat and use by the Olive-sided Flycatcher; and, • undertake additional research and assessment to mitigate the impacts of potential for amphibian crossings areas on the main access road. 	<p>EAO, having considered input from the Working Group, is satisfied that, with the successful implementation of mitigation measures and monitoring, there would be no significant adverse effects on wildlife.</p>

Potential Social and Economic Effects

The Proponent's Application included a *Socio-Economic Baseline Study Report* which focused on the Village of Granisle and the nearby Lake Babine Nation communities. The

Village of Granisle was constructed for the (now closed) Bell and Granisle Copper Mines. While the current population is only about 300, it still has the primary infrastructure to accommodate 2,000 people.

The Application says that about 1,117 jobs will be created during the two-year construction period, which would generate about \$22 million per year in direct tax revenue, of which nearly \$12 million would go the province. During operations, the Application estimates about 601 jobs and \$5.4 million a year in direct federal and provincial taxes.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
<p>Increased demand on infrastructure and services in the Village of Granisle.</p>	<p>The Proponent signed a Memo of Understanding (MOU) with the Village of Granisle to address their concerns and to create a framework to resolve identified issues.</p> <p>Proponent must develop a Social Effects Management Plan to address impacts to local communities such as the Village of Granisle, Tachet, Smithers Landing and Lake Babine Nation Communities. The Plan must be approved by EAO and will provide a framework for implementing strategies to manage potential social, economic, and cultural changes anticipated in response to the Project, as experienced by local residents and communities.</p> <p>The Proponent must hold at least one job/business fair in both the Village of Granisle and a second community (e.g. Burns Lake or Smithers), within one year of the commencement of the Project's construction to inform local residents and businesses of upcoming opportunities for employment and contracts as well as the requirements for obtaining these positions, including skills and certifications.</p> <p>The Proponent must complete, in collaboration with the Village of Granisle and Lake Babine Nation, at least one year</p>	<p>EAO, having considered input from the Working Group, is satisfied that, with the successful implementation of mitigation measures and monitoring, there would be no significant adverse social or economic effects.</p>

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	<p>prior to the commencement of construction, a skill inventory and needs analysis.</p> <p>The Proponent must establish a Community Sustainability Advisory Committee (CSAC) comprising representatives from the Village of Granisle and Lake Babine Nation. The purpose of CSAC is to identify, resolve, and monitor any issues raised by the community with respect to the Project. CSAC must be established within one year of the commencement of the Project's construction.</p> <p>The Proponent must hire a Community Liaison to act as the Proponent's primary point of contact for public and local organizations on community issues. This position must also oversee CSAC and facilitate implementing elected programs and initiatives.</p>	
Impacts to Tukki Hunting Lodge satellite camp on Morrison Lake.	The Proponent has negotiated a mutually satisfactory agreement with the owners of Tukki Lodge which addresses their concerns.	EAO, having considered input from Tukki Lodge, is satisfied that, with the successful implementation of mitigation measures, there would be no significant adverse social or economic effects.
Impacts to Ookpik Wilderness Lodge on Babine Lake.	<p>The Proponent discussed a compensation package with the owners of Ookpik Lodge, but the parties could not come to a mutually acceptable agreement.</p> <p>In the absence of a negotiated agreement, the Proponent has committed to measures to address the effects of the proposed Project on the operations and business of Ookpik Lodge, including</p>	EAO, having considered input from Ookpik Wilderness Lodge, is satisfied that, with the successful implementation of mitigation measures and monitoring, there would be no significant adverse social or economic effects.

Key Potential Effects	Mitigation Measure / Commitment	EAO Analysis and Conclusions
	reducing speed and volume of mine traffic on haul roads, improved road maintenance and managing blasting noise.	
Impacts to Lake Babine Nation trappers with trap lines in the area of the proposed Project.	The Proponent must compensate Lake Babine Nation, as requested in the July 16, 2010 letter from Lake Babine Nation, for the impact of the Project on Trap-line T049. The Proponent must provide one year notification to the trap-line holder of the commencement of construction.	EAO, having considered input from Lake Babine Nation, is satisfied that, with the successful implementation of this mitigation measures, there would be no significant adverse social or economic effects.
Impacts to Canfor's forestry tenure due to loss of access to mature timber.	The Proponent must develop a Social Effects Management Plan. A component of that plan is to coordinate timber removal from the proposed Project site with Canfor and develop mitigation measures specific to address Canfor's interests, including additional information collection on timber volume, potentially compensating for Canfor's marginal cost to harvest timber elsewhere and ensuring consistency with land use planning timber harvest objectives.	EAO is satisfied that, with the successful implementation of mitigation measures, there would be no significant adverse social or economic effects.

Conclusions on Potential for Significant Adverse Effects

Overall, the assessment and mitigation measures proposed in the final addendums to the original Application for the above-noted issues were considered reasonable and acceptable to EAO, on the assumption that all mitigations would perform as described and that modelled outcomes could be achieved.

EAO considered that major design proposals, including the geomembrane liner for the TSF, submerging waste rock in the open pit on closure, construction of a water treatment plant in the early stages of construction and operations, the requirement for an Instream Flow Requirement for Morrison River, additional research and inventory on the physical behaviour and fish habitat of Morrison Lake, and an ongoing monitoring plan for Morrison Lake (fully implemented subject to *Environmental Management Act* permit conditions) would result in no significant residual adverse effects to environmental or health resources. EAO's assessment of economic effects, including the existing forest industry and tourism operations concluded that there would be no adverse economic

effects resulting from the proposed Project. EAO assessed the proposed Project design, location and mitigation measures proposed, to identify and protect any archaeological or heritage resources, and concludes that there would be no residual adverse effects. EAO assessed the Proponent's Social Effects Management Plan and the MOU signed with the Village of Granisle and concluded there would be no significant adverse social effects.

As noted below, Lake Babine Nation, Gitxsan Nation and Gitanyow Nation have taken strong positions against the proposed Project and have not accepted EAO's conclusions on the potential for adverse effects. Provincial and federal agencies have also indicated that the proposed Project has significant long-term environmental liabilities and have raised issues related to the long term risk of the proposed Project, given its close proximity to Morrison Lake.

The potential effects to Gitxsan, Gitanyow, Yekooche and Lake Babine Nation aboriginal rights and title is further discussed in the next section "Strength of Asserted Rights".

2. First Nations' Asserted Rights and Title

The proposed Project is within the asserted traditional territory claimed by Lake Babine Nation and Yekooche First Nation.

In addition to these two First Nations, EAO consulted with Gitxsan and Gitanyow Nations, who indicated that, while the proposed Project was not within their asserted traditional territory, their rights to access salmon on the Skeena River could be affected by the proposed Project. EAO consulted Gitxsan and Gitanyow Nations on this basis.

Lake Babine Nation

EAO-led Consultation

Lake Babine Nation was kept fully informed of progress of the EA and was provided with all information sent to the Working Group. Representatives of Lake Babine Nation Chief and Council participated in the review from about 2005 onward. A Lake Babine Nation Councillor with a Natural Resources Portfolio was the primary contact on the Working Group. Prior to 2005, EAO had been engaging with a group called Nedo'ats Hereditary Chiefs, who EAO, at that time, understood to speak for Lake Babine Nation rights and title. After 2005, Chief and Council clarified that they were the appropriate contact to address Lake Babine Nation rights and title.

In December 2008, the Proponent filed suit against Lake Babine Nation, alleging damages relating to a press release made by the Chief of Lake Babine Nation. In March 2009, Lake Babine Nation filed a defense and counterclaim. These suits influenced much of the communication between EAO, the Proponent and Lake Babine Nation over the next several years. The Proponent rescinded its suit in 2009 and the parties eventually reached an agreement for Lake Babine Nation to re-engage in discussions with the Proponent. In March 2012, Lake Babine Nation and the Proponent signed an MOU.

EAO met with Lake Babine Nation Chief and Council regularly for government-to-government discussions. EAO and the Proponent provided significant capacity funding to Lake Babine Nation during the pre-Application and Application Review stages of the EA. Lake Babine Nation was invited to comment on all assessment related documents

including the draft First Nations Consultation Report, the draft Assessment Report, and the draft Table of Conditions. All comments were fully considered by EAO and incorporated into the final versions.

Proponent-led Consultation

Prior to and after EAO's issuance of the proposed Project's section 10 and 11 Orders (outlining the scope, methods and procedures for the EA), the Proponent engaged with Lake Babine Nation.

During the pre-Application period, the Proponent's consultation activities focused on:

- initiating consultation, including letters, emails, telephone calls and initial meetings confirming nature and scope of the proposed Project and objectives of the consultation process;
- providing Project-related information as required, including maps and figures, work plans, presentations and studies and meeting materials;
- identifying key interests of Lake Babine Nation for the purposes of the EA;
- arranging and participating in open houses to allow Lake Babine Nation communities to review the proposed Project and EA-related information;
- seeking input on the nature and extent of Lake Babine Nation traditional and current use of the area, and how the proposed Project may affect their aboriginal interests;
- signing an EA Process Funding Agreement with Lake Babine Nation;
- providing copies of the Application to Lake Babine Nation for screening and review purposes, as required by EAO; and,
- attempts to enter into an MOU about the proposed Project.

During the Application review period, the Proponent's consultation activities included:

- distributing notices regarding the Application submission and providing copies of the Application to Lake Babine Nation for review and comment;
- participating in EAO-led open houses in Burns Lake, Fort Babine and Tachet;
- providing funding for additional field work related to the location of mine infrastructure and sockeye salmon spawning areas;
- addressing issues raised by Lake Babine Nation Chief and Council and their consultants; and,
- signing an MOU with Lake Babine Nation on March 4, 2012.

The MOU had been confidential until late July 2012. Once the MOU between the Proponent and Lake Babine Nation was made public, EAO incorporated a number of aspects of components of the MOU into the Table of Conditions, specifically those related to long-term monitoring of impacts to fish, wildlife and water quality.

Key Issues Raised by Lake Babine Nation

Lake Babine Nation was an active participant in the EA process, taking part in working group meetings, meeting directly with EAO on numerous occasions and with the Proponent occasionally. They also provided written feedback on their perspectives and interests with respect to the proposed Project as well as a number of technical reports,

primarily related to fish and water quality on Morrison and Babine Lake.

During the pre-Application and Application Review stages of the EA, Lake Babine Nation advised EAO of a wide range of concerns related to the proposed Project. Those issues are primarily focused in the following areas:

- cumulative impacts to water quality in Babine Lake and Babine River due to the now closed Bell and Granisle Mines;
- impacts to wildlife and wildlife habitat;
- impacts to fish and fish habitat;
- incorporation of traditional knowledge into studies and research;
- appropriate engagement of the five Lake Babine Nation communities into decision-making/consultation;
- impacts to traditional harvesting activities;
- jobs and economic opportunities; and,
- impacts on trapping activities of Lake Babine Nation trapline holders.

During the review of the Application, much of the focus of Lake Babine Nation was on potential impacts to water quality and fish in Morrison Lake and Babine Lake and they continued to express concerns regarding existing impacts from Bell and Granisle Copper Mines, which closed in the 1990s.

Many of the major mine design changes made through the EA process by the Proponent, as well as the third-party review commissioned by EAO, were intended to address the key issues of impacts to water quality and fish, values which are central to the aboriginal rights of Lake Babine Nation. It was only when the last major mine design changes were proposed by the Proponent in April 2012 when EAO, with the advice of the third-party technical reviewers, was able to evaluate the effects on the proposed Project on water quality, fisheries and aquatic habitat and develop conclusions about the potential for significant adverse effects, using the six significance factors.³ The key mitigation measures for these potential effects are listed on pages 7 to 20 of this report. EAO determined that the magnitude of the effects was not significant, and with the successful implementation of the proposed mitigation measures and the legally-binding conditions on the Proponent, there would be no significant residual adverse effects from the proposed Project on water quality and fisheries resources; nor would the proposed Project result in significant adverse impacts on Lake Babine Nation aboriginal rights to hunt and fish in their traditional territory.

Strength of Asserted Rights

The Supreme Court of Canada, in its 2004 decision on *Haida Nation v. British Columbia (Minister of Forests)* (*Haida*), made it clear that the degree of potential impact of a government decision is a key factor in determining the requisite degree of consultation and accommodation. EAO's preliminary assessment, based on available information, was that the Crown's duty to consult Lake Babine Nation lay at the deep end of the *Haida* spectrum for consultation.

³ Magnitude, extent, duration and frequency, probability, reversibility, and context.

It is EAO's assessment, based on current information available to it, that Morrison Lake, Morrison River, the Babine Archipelago and the lands surrounding this area were part of the broader territory used by Lake Babine Nation for traditional activities associated with the typical Carrier annual round, and that, consequently, there is a strong *prima facie* case in support of the assertion that aboriginal rights are exercisable in the proposed Project area. Moreover, it is EAO's assessment that there is a moderate to strong *prima facie* case in support of Lake Babine Nation's assertion of aboriginal title to the area in which the proposed Project is to be situated. It is important to note that this conclusion is a *prima facie* determination made in order to discharge EAO's *Haida* analysis and is focused on the site of the proposed Project. This analysis is not meant to apply to any other part of Lake Babine traditional territory; this assessment is only being made for the purpose of the proposed Project.

Accommodation

The Proponent participated in a pre-Application and Application review consultation program with Lake Babine Nation as summarized earlier in this report. However, due to the litigation between the Proponent and Lake Babine Nation, and the challenges in communication flowing from that litigation, many of the major design changes to the proposed Project intended to address issues raised by Lake Babine Nation were identified and facilitated by EAO based on government-to-government discussions with Lake Babine Nation Chief and Council. While the Proponent was not directly involved with Lake Babine Nation in those discussions, they actively supported the work through design changes and funding for Lake Babine Nation to undertake field work. The Proponent also signed an MOU with Lake Babine Nation during the final stages of the EA.

Issues raised by Lake Babine Nation and Gitanyow/Gitksan Nations were largely the drivers behind many of the major design changes and research conditions which occurred through the EA. EAO commissioned a number of third-party reviews (by a professional fisheries biologist, a professional geologist/hydrogeologist and a professional engineer/lake behaviour specialist) to examine in more detail the issues raised by Lake Babine Nation to ensure that appropriate mitigations were put in place. In particular, some of the accommodations to address concerns include:

- the Proponent committed to lining the TSF with a geomembrane liner to vastly reduce seepage and thus potential effects upon sockeye salmon spawning areas. This is reflected in EAO's Table of Conditions;
- EAO engaged a third-party lake behaviour specialist to review issues related to "hotspots" and areas of higher effluent concentration. The review indicated that the Proponent's commitment to a geomembrane liner would effectively eliminate this concern;
- the Proponent has committed to working with Lake Babine Nation and DFO in measuring annual fish escapement into Morrison River and advancing the knowledge of the fish populations, behaviour and distribution in Morrison Lake. This is reflected in EAO's Table of Conditions;
- the Proponent committed to spawning surveys in Morrison River to better quantify the potential effect of the reduction in flow due to the proposed mine. They would

also be required to develop an Instream Flow Requirement for Morrison River. This is reflected in EAO's Table of Conditions;

- the Proponent committed to an ongoing monitoring program of bear, deer and moose tissues as well as fish samples. The sampling program would be developed in conjunction with Lake Babine Nation and a component of the monitoring work would be completed by Lake Babine Nation members. This is reflected in EAO's Table of Conditions;
- the Proponent committed to an ongoing water quality monitoring program. The sampling program would be developed in conjunction with Lake Babine Nation and a component of the monitoring work would be completed by Lake Babine Nation members. This is reflected in EAO's Table of Conditions;
- the Proponent committed to compensate Lake Babine Nation trapline holders for the time their trapline would be unavailable due to project construction and operations, if the proposed Project were approved. This is reflected in EAO's Table of Conditions;
- the Proponent committed to moving all mine infrastructures (e.g. overburden stockpile, water diversion structures, etc.) from Morrison Point and reserving the area from all mine-related activities due to the spiritual significance of the area to Lake Babine Nation;
- the Proponent committed to inventorying and assessing the "Old People's Trail" and developing any mitigation as required;
- the Proponent involved Lake Babine Nation in 2010 and 2011 meetings, field work, helicopter fly-overs, review of its proposed Fish Habitat Compensation Plan compensation sites and options on how best to reduce potential harmful effects and enhance and/or increase fish habitat in the area; and,
- the Proponent signed an MOU with Lake Babine Nation, a component which included a commitment to negotiate an Impact Benefit Agreement.

In addition to these accommodations, the Certified Project Description (which includes a Table of Conditions to which the Proponent must adhere) also contains other conditions and project design requirements which further mitigate or otherwise accommodate potential adverse effects on Lake Babine Nation asserted aboriginal rights.

It is EAO's assessment that the Crown's duty to consult and accommodate has been honourably discharged through a process of consultation and accommodation that included flexibility, accountability, inclusiveness, and responsiveness to issues raised by Lake Babine Nation. EAO further concludes that, on behalf of the Province, it acted in good faith at all times to consult with Lake Babine Nation and made available opportunities for deep consultation which ensured that all concerns raised by Lake Babine Nation about the proposed Project were considered.

EAO also concludes that avoidance, mitigation, and accommodation measures identified during the EA process will result in no significant potential adverse effects on Lake Babine Nation interests or asserted aboriginal rights in the proposed Project area with the successful implementation of mitigation measures and conditions. EAO is satisfied that the Crown's duty to consult, pursuant to a decision under the Act, has been

fully discharged for the proposed Project.

In their final submission, Lake Babine Nation stated they were strongly opposed to the proposed Project and indicated they did not agree with EAO's assessment that the proposed Project would not have significant adverse effects. They also did not agree that they had been consulted and accommodated appropriately.

Yekooche First Nation

EAO-led Consultation

Yekooche First Nation was kept informed of progress of the EA through notification of major milestones. Yekooche First Nation was initially invited to Working Group meetings, and indicated by letter in 2003 that they had little to contribute, but would like to receive additional reports and conclusions as the EA proceeded. Yekooche First Nation was invited to participate in the major milestones such as the Application screening, and was invited to comment on all assessment-related documents, including the draft First Nations Consultation Report, the draft Assessment Report, and the draft Certified Project Description and Table of Conditions. No comments were received on any of these documents and Yekooche First Nation did not provide a final submission to Ministers.

Proponent-led Consultation

The Proponent was assigned certain consultation obligations with Yekooche First Nation through the proposed Project's section 11 Order. The Proponent engaged Yekooche First Nation in 2003 when the initial EA began. Yekooche First Nation provided a similar message to the Proponent as it had to EAO, saying they had no additional information to add to the EA, but that they wished to receive updates and reports on the proposed Project. The Proponent continued to supply copies of all Application materials (including baseline information) to Yekooche First Nation, at the direction of EAO and consistent with the section 11 Order. No comments were received throughout the course of the EA.

Key Issues Raised by Yekooche First Nation

During initial discussions in 2003, Yekooche First Nation noted a concern regarding the cumulative effects of the proposed Project on the Skeena watershed, although they provided no specific information on which impacts to consider. They also noted a concern regarding wildlife corridors in the area of the proposed Project and expressed a desire to see economic benefits from the proposed Project.

Strength of Asserted Rights

EAO's preliminary assessment, based on available information, was that the Crown's duty to consult Yekooche First Nation lay on the lower end of the *Haida* spectrum for consultation, based largely on the fact that there is limited evidence that activities that could ground a claim of aboriginal rights may have been exercised historically in the vicinity of the proposed Project, and that only a small portion of the transmission line of the proposed Project is within the area claimed by Yekooche First Nation. EAO has consulted in a manner that is consistent with this assessment.

Accommodation

Considering the limited amount of information or concerns noted by Yekooche First Nation, EAO considers that the Certified Project Description (which includes a Table of Conditions which the Proponent must adhere to) contains conditions and project design requirements which will mitigate or otherwise accommodate potential adverse effects on Yekooche First Nation asserted aboriginal rights.

It is EAO's assessment that the Crown's duty to consult and accommodate has been honourably discharged through a process of providing a range of opportunities for consultation. EAO further concludes that, on behalf of the Province, it acted in good faith at all times to consult with Yekooche First Nation, and made available opportunities for consultation which ensured that concerns raised by Yekooche First Nation about the proposed Project were considered.

EAO also concludes that avoidance, mitigation, and accommodation measures identified during the EA process will result in no significant potential adverse effects on Yekooche First Nation interests or asserted aboriginal rights in the proposed Project area with the successful implementation of mitigation measures and conditions. EAO is satisfied that the Crown's duty to consult pursuant to a decision under the Act has been fully discharged for the proposed Project.

Gitxsan and Gitanyow Nations

EAO-led Consultation

Gitanyow Hereditary Chiefs' Office (GHCO) on behalf of Gitanyow Nation and Gitxsan Chiefs' Office (GCO) on behalf of Gitxsan Nation wrote to the Minister of Environment during the review of the Application in 2009. They indicated that Morrison Lake was important to the production of sockeye salmon on Skeena River and stated that, due to this reliance on Skeena sockeye, they had aboriginal rights to the Morrison Lake fishery.

In response, EAO issued a section 13 Order and specified that GHCO and GCO would be consulted on the proposed Project. EAO added a representative of the Skeena Fisheries Commission (SFC) to the Working Group, a technical body which represented the interests of the two First Nations. SFC representatives were kept fully informed of progress of the EA and were provided with information that was sent to the Working Group.

SFC participated directly in the Application Review by providing comments to EAO, attending Working Group meetings, and meeting with EAO along with GHCO and GCO. EAO provided capacity funding to GHCO and GCO to participate in the Application review stages of the EA. GHCO, GCO and SFC were invited to comment on all assessment related documents, including the draft First Nations Consultation Report, the draft Assessment Report, and the Certified Project Description and Table of Conditions. All comments were fully considered by EAO and many were incorporated into the final versions. In particular, a number of significant changes were made to the Table of Conditions to address fish habitat and fishing monitoring issues raised by Gitanyow and Gitxsan.

Proponent-led Consultation

The Proponent was not assigned any consultation obligations with GHCO, GCO or SFC by EAO.

Key Issues Raised by Gitanyow and Gitxsan

SFC were active participants in the EA process, taking part in Working Group meetings, meeting directly with EAO on several occasions and providing written feedback on their perspectives and interests with respect to the proposed Project. Their input increased EAO's understanding of the fisheries values in the area of the proposed Project.

The focus of SFC comments and concerns was on understanding the importance and contribution of Morrison Lake and Morrison River to the sockeye salmon of the Skeena River system. Many of their comments focused on the need for additional spawning research and understanding the use and numbers of fish in Morrison Lake and the overall behavior of Morrison Lake, including a better characterization of water quality baseline information. They indicated many concerns regarding the Proponent's effects assessment, particularly as it related to fish in Morrison Lake. In particular, they were concerned about the proximity of the open pit to Morrison Lake and the flow of effluent from the open pit to Morrison Lake. They noted deficiencies in the HADD (harmful alteration destruction or disruption of fish habitat) assessment, in particular as it did not include an assessment of all fish habitat around the diffuser and pipeline on the bottom of Morrison Lake. They also questioned the sufficiency and hydrogeology work done by the Proponent as well as the third party reviews commissioned by EAO.

Strength of Asserted Rights

EAO's preliminary assessment, based on currently available information and having regard to the applicable legal test, found that there is a strong *prima facie* case in support of Gitanyow and Gitxsan aboriginal rights to fish within their traditional territories on the Skeena River. With regard to the *Haida* spectrum, EAO initially determined that the scope of the duty to consult with GHCO and GCO was low on the *Haida* spectrum. That initial determination was based on an understanding that, given the significant distance downstream, it was unlikely that any fishing rights could be affected by the proposed Project.

Since that original assessment, EAO met with GHCO and GCO and reviewed technical submissions from SFC. Since the initial assessment, EAO changed its understanding and now recognizes that the shared Gitanyow/Gitxsan fishery takes in the order of 65,000 sockeye from the Skeena River annually and that approximately 3.5 percent of those fish come from the Morrison watershed⁴. As a result of this new information, EAO understands that GHCO and GCO are concerned about impacts to the aboriginal right to fish because a portion of the fish caught on Skeena and Babine Rivers come from Morrison Lake.

Based on this new information EAO changed its initial assessment of the scope of the duty on this proposed Project to consult from low to moderate. In EAO's view, the

⁴ SFC asserts that the number could be as high as eight percent depending on the counting method.

engagement process with GHCO and GCO, through its designated representatives and directly, has been consistent with this assessment.

Accommodation

As noted, the Proponent was not assigned any obligations to consult with GHCO and GCO by EAO and all consultation occurred through EAO. Issues raised by SFC were largely the driver behind many of the design changes which occurred through the EA. EAO commissioned a number of third-party reviews (by a professional fisheries biologist, a professional geologist/hydrogeologist, and a professional engineer/lake behaviour specialist) to examine in more details the issues raised by SFC, and to ensure that appropriate mitigations were put in place.

In particular, some of the accommodations to address concerns include:

- the Proponent committed to lining the TSF with a geomembrane liner to vastly reduce seepage and thus potential effects upon sockeye salmon spawning areas. This is reflected in EAO's Table of Conditions;
- the Proponent committed to implementing additional secondary water treatment in the proposed water treatment plant to further remove parameters of concern – cadmium in particular, which was the focus of one of SFC's technical submissions;
- EAO engaged a third-party lake behaviour specialist (a SFC recommendation) to review issues related to "hotspots" and areas of higher effluent concentration. The review indicated that the Proponent's commitment to a geomembrane liner would effectively eliminate this concern;
- EAO engaged a third-party lake behaviour specialist (a SFC recommendation) to review the Proponent's diffuser design, with a specific question on the efficacy of how it could affect lake mixing. These reviews indicated that the diffuser would likely operate as asserted by the Proponent and the effluent diffuser would not be expected to change lake behaviour;
- the Proponent committed to collecting additional information on the physical behaviour of the lake, including water quality monitoring and temperature, conductivity probes and understanding currents and flow regimes. This is reflected in EAO's Table of Conditions;
- EAO undertook a third-party review of the Proponent's hydrogeology baseline and modelling. The third-party reviewer confirmed that the new Proponent models represented a reasonable Upper Bound and that baseline information was sufficient for predictions;
- the Proponent has committed to working with Lake Babine Nation, DFO and SFC in measuring annual fish escapement into Morrison River and advancing the knowledge of the fish populations, behaviour and distribution in Morrison Lake. This is reflected in EAO's Table of Conditions; and,
- the Proponent committed to spawning surveys in Morrison River to better quantify the potential effect of the reduction in flow due to the proposed mine. They would also be required to develop an Instream Flow Requirement for Morrison River. This is reflected in EAO's Table of Conditions.

In addition to these accommodations, the Certified Project Description (which includes a Table of Conditions to which the Proponent must adhere) also contains other conditions and project design requirements which further mitigate or otherwise accommodate potential adverse effects on Gitxsan and Gitanyow asserted aboriginal rights.

It is EAO's assessment that the Crown's duty to consult and accommodate has been honourably discharged through a process of consultation and accommodation that included flexibility, accountability, inclusiveness, and responsiveness to issues raised by GHCO and GCO. EAO further concludes that, on behalf of the Province, it acted in good faith at all times to consult with GHCO and GCO and made available opportunities for consultation which ensured that all concerns raised by GHCO and GCO about the proposed Project were considered.

EAO also concludes that avoidance, mitigation, and accommodation measures identified during the EA process will result in no significant potential adverse effects on GHCO and GCO interests or asserted aboriginal rights in the proposed Project area with the successful implementation of mitigation measures and conditions. EAO is satisfied that the Crown's duty to consult pursuant to a decision under the Act has been fully discharged for the proposed Project.

In their final submission, both Gitxsan and Gitanyow Nations stated they were strongly opposed to the proposed Project and indicated they did not agree with EAO's assessment that the proposed Project would not have significant adverse effects. They also did not agree that they had been consulted and accommodated appropriately.

3. Position of Federal Agencies

The CEA Agency considers that the issues examined by its agencies have been addressed through project design, mitigation measures and other commitments agreed to by the Proponent. The CEA Agency has produced a draft Comprehensive Study Report that concludes that the proposed Project is not likely to cause significant adverse environmental effects.

4. Position of Local Governments

The Village of Granisle was a participant in the Working Group and provided comments on the Application. In their submissions to EAO, the Village of Granisle expressed support for the proposed Project. However, the Village of Granisle indicated that they anticipate some positive and negative impacts to their community and want to build a better relationship with the Proponent and, to that end, signed an MOU with the Proponent to address their concerns around social effects, property values, pressure on community infrastructure and services and local employment.

5. Public Consultation

The Proponent carried out a program of public consultation during both the pre-Application and Application review stages in local communities that met the requirements of EAO.

EAO held a 30-day public comment period in the pre-Application stage in November 2008 in the Village of Granisle, Houston, and Burns Lake. Attendance at the Village of Granisle open house was highest, with nearly 70 participants.

The key issues raised by the public included: employee housing, transportation and safety impacts, water quality and fisheries and economic revitalization in the region. EAO received 64 comments from five individuals on the draft Terms of Reference, and considered those comments prior to issuing the final Terms of Reference to the Proponent in May 2009.

The formal review of the Application was initiated on July 12, 2010, and the Application was posted to EAO's electronic Project Information Centre (e-PIC). The Application was made available to the public in local libraries, municipal halls and regional district offices in the Village of Granisle, Houston, Burns Lake and Smithers.

A 70-day public comment period on the Application was held from July 22, 2010 to September 30, 2010. Four open houses were held by EAO during the Application Review period: two in the Village of Granisle (total of 110 attendees) and one each in Burns Lake (eight attendees) and Smithers (25 attendees).

EAO received 88 comments from seven individuals and organizations. Issues raised by the public generally included: water quality, ML/ARD, dust and air contaminants, wildlife displacement and health risks, increased traffic, accident and contingency planning and potential economic and employment benefits to the local communities.

A second, online-only, two-week public comment period was jointly initiated by EAO and CEA Agency in July 2011 on the new proposed Project information provided by the Proponent.

D. CONCLUSIONS

EAO is satisfied that:

- the Assessment process has adequately identified and addressed the potential adverse environmental, economic, social, heritage and health effects of the proposed Project, having regard to the successful implementation of the conditions and the mitigation measures set out in Schedule B to the draft EA Certificate;
- public consultation, and the distribution of information about the proposed Project, has been adequately carried out by the Proponent; and,
- the Crown has fulfilled its obligations for consultation and accommodation to Lake Babine Nation, Yekooche First Nation and Gitksan and Gitanyow Nations relating to a decision on whether to issue an EA Certificate for the proposed Project.

RECOMMENDATION:

I recommend Ministers consider the Assessment Report prepared by my delegate, which was an analysis of the technical aspects of the Project as proposed by the Proponent. The Assessment Report indicates that, with the successful implementation of mitigation measures and conditions:

- the proposed Project does not have the potential for significant adverse effects; and,
- First Nations have been consulted and accommodated appropriately.

I also recommend that Ministers consider a number of additional factors which were raised during the assessment of the proposed Project. In particular, I recommend that Ministers adopt a risk/benefit approach when weighing the conclusions of EAO's Assessment Report against these additional factors. These factors include:

- the location of the proposed Project directly adjacent to Morrison Lake, which has a genetically unique population of sockeye salmon at the headwaters of the Skeena River;
- the long-term environmental liability and risk from the proposed Project to the environment, particularly should:
 - the Proponent's operations and closure plans not be successful; or,
 - the Proponent be unable to resource long term closure plans;
- the use of the dilution capacity of Morrison Lake as the primary means of mitigation for mine effluent, and in particular the "in-perpetuity" nature of water treatment and discharge into Morrison Lake;
- the long term change in water quality in Morrison Lake;
- views of the Gitxsan and Gitanyow Nations and Lake Babine Nation;
- the strength of claim of the Lake Babine Nation, in particular their moderate to strong *prima facie* case for aboriginal title;
- the economic effects on the Province, including tax revenue and job creation; and,
- the Proponent's views of these additional factors.

I recommend that an Environmental Assessment Certificate not be issued to Pacific Booker Minerals Inc. in connection with its application for the Morrison Copper/Gold Mine Project.

Submitted by:



Derek Sturko
Associate Deputy Minister and Executive Director
Environmental Assessment Office

Following is the link:

<https://projects.eao.gov.bc.ca/api/document/5888e594817b85ae43cf7b4f/fetch>

Appendix 1--Issue Tracking Tables

Following is the link:

<https://projects.eao.gov.bc.ca/api/document/5886a781a4acd4014b81f934/fetch>

Appendix B--Table of Conditions

Following is the link:

<https://projects.eao.gov.bc.ca/api/document/5886a782a4acd4014b81f936/fetch>

Morrison Copper/Gold Mine Project
Compliance Management Plan

Project phase	Compliance Plan Version/Date
EA certificate referral	August 21, 2012
Pre-construction and authorizations	
Construction	
Pre-commissioning and authorizations	
Operations	
Decommissioning	

Table of Contents

Risk Assessment Summary.....	1
Compliance Plan Procedure.....	2
Project Non-Compliance Risk Assessment.....	3
EA Certificate Compliance Management Table Definitions.....	5
Potential for Non-compliance – Factors to Consider.....	22
Impacts of Non-compliance – Factors to Consider.....	23
Risk Rating Scales.....	24

Appendix 1: Risk Assessment Factors and Scales

Risk Assessment Summary

Potential for Non-Compliance	5 - High					
	4 -				★	
	3 -					
	2 -					
	1 - Low					
		1 Low	2	3	4	5 High

Level of Harm (adverse effects)

Morrison Copper/Gold Mine Project is deemed to be of high risk in terms of the potential for non-compliance and the level of harm associated with non-compliance. As a consequence, the compliance management strategy is to include the project in the portfolio of BC EAO projects that are subject to regular inspections.

The activities considered to have the highest potential for significant adverse effects in the event of non-compliance with the environmental assessment certificate conditions are:

- the maintenance of in-stream flow rates in Morrison River;
- water quality monitoring of Morrison Lake;
- monitoring of fish populations in Morrison Lake and Morrison River;
- the performance of the effluent diffuser and its ability to equally distribute treated effluent in Morrison Lake;
- the ability of a water treatment facility to meet water quality targets;
- the potential for the Tailings Storage Facility geomembrane liner to not perform as designed (e.g. it leaks more than predicted or fails in the long term); and,
- for the fish habitat compensation structures to not perform as designed.

Failure of some or all of these conditions could potentially lead to diminished water quality/quantity in Morrison Lake and Morrison River and adversely affect fish populations and aquatic resources.

INTRODUCTION

The purpose of this compliance management plan is to act as a compliance management tool that will assist Environmental Assessment Office (EAO) and other agencies to coordinate and undertake compliance and enforcement activities over the life of the Morrison Copper/Gold Mine Project (Project).

This document:

- provides an assessment of the risk of non-compliance for the project with each environmental assessment (EA) certificate condition (see Appendix 1 for risk assessment factors);
- identifies activities that can be conducted to verify and promote compliance with each environmental assessment certificate condition;
- identifies agencies that have compliance inspection and enforcement authority for each EA certificate condition; and,
- establishes a basis for planning inter-agency inspection and enforcement activities, informed by risk assessment information.

EAO and other agencies will use this document to assist with planning, coordinating and tracking compliance activities over the life of the Project. The project compliance management plan was initiated by EAO prior to the Ministers making a decision on the Application for an EA certificate. If the Ministers issue a certificate for the Project and subsequent authorizations are issued, further agency roles and responsibilities will be identified in collaboration with the other agencies that have compliance and enforcement authorities relating to: a) EA certificate conditions, and b) EA certificate conditions that are also reflected in authorizations.

There are numerous provincial authorizations that would be required for the Project to proceed, following issuance of an EA certificate and prior to the proponent constructing and operating the Project. Some of these provincial authorizations may incorporate conditions set out in the EA certificate. EAO and permitting agencies will have follow-up meetings to identify or refine roles and responsibilities associated with such conditions.

Compliance Plan Procedure

The project compliance management plan will be assessed and refined as necessary over the life of the Project, as project development and operations proceed. As such, this plan is a living document that will be added to, over the life of the Project. This plan will be updated as new compliance information is gathered, such as information related to inspection findings, resolution of non-compliance issues and risk ratings.

Project Non-Compliance Risk Assessment

Project: Morrison Copper/Gold Mine Project	Rating (1 to 5) 1 = low; 5=high	Rationale for Rating
Potential for Non-compliance	5	
Project Type	5	130,000 tonnes per day, standard truck and shovel open pit copper/gold/molybdenum mine. Technical complexities associated with construction of the Project center around the management of water and potential impacts to fisheries due to the extremely close proximity of the open pit to Morrison Lake. Morrison Lake forms part of the headwaters of the Skeena River and has a large population of spawning sockeye salmon and other high-value fish. Key project components include a geomembrane-lined Tailings Storage Facility, water treatment plant and effluent diffuser, discharging to Morrison Lake in perpetuity, and an open pit and other associated mine infrastructure. Project footprint of close to 7 km ² .
Proponent Compliance Behaviour	5	During the Morrison Copper/Gold EA, the Proponent demonstrated limited willingness and ability to respond to issues raised in a reasonable and timely manner. The Proponent has no experience with similar mining projects in British Columbia.
Government Oversight	5	<p>The Project would receive a significant amount of continued oversight by the two primary provincial regulators: Ministry of Energy and Mines and Ministry of Environment.</p> <p>The Project would be required to retain a qualified professional Independent Environmental Monitor (IEM) that is selected by, and reports to, BC government, to monitor and report on compliance during construction activities. The IEM's workplan and reporting requirements are subject to approval by MFLNRO.</p> <p>The Project will be subject to compliance management activities identified in this plan. In addition, a number of the EA certificate conditions will also be reflected in the requirements of other provincial authorizations (e.g. environmental management plans, water quality monitoring, mine operations and construction)</p>
Level of Harm Associated with Non-compliance	5	
Social Effects	2	Adverse social effects would primarily be those related to an influx of workers to the Village of Granisle during construction and, to a lesser extent, operations. Other types of social effects are addressed below in relation to First Nations and health and safety.
Prevalence and Magnitude of adverse	5	Potential adverse effects include: effects to water quality and fish and aquatic habitat

Project: Morrison Copper/Gold Mine Project	Rating (1 to 5) 1 = low; 5=high	Rationale for Rating
effects - Environment		from construction and operation of the open pit and associated mine infrastructure near Morrison Lake. This includes potential impacts on riparian areas in Morrison River from potential reductions in stream flow. Adverse effects would likely be primarily localized to Morrison Lake and Morrison River and perhaps Babine Lake, but would be long term in duration.
Prevalence and Magnitude of adverse effects – Human Health and Safety	2	Primarily related to potential for accidents during construction and operations period.
Prevalence and magnitude of adverse effects to First Nations (infringement related impacts, or relationship impacts)	5	The Project is in Lake Babine Nation's asserted territory, who have a moderate to strong <i>prima facie</i> case for title in the project area. Fish; sockeye salmon in particular, are extremely important to Lake Babine Nation and form much of the core of their culture. The Morrison watershed makes a significant contribution of non-enhanced (non-hatchery) sockeye to Babine Lake and the Skeena River. The Gitksan and Gitanyow have territory which is farther down the Skeena River and significantly outside the project area, but they rely on fish produced in the Morrison watershed.

EA Certificate Compliance Management Table Definitions

- a. **Topic** – The category or component under which certificate conditions have been grouped. If the certificate has not been organized using this approach, the Compliance Management Plan should aim to retroactively organize conditions into category.
- b. **Environmental Assessment Certificate Condition** – the conditions, as stated in the certificate, should each be included under the relevant project phase. In some cases, a condition may need to be included under more than one project phase.
- c. **Potential for Non-compliance** –includes the rating applied to the condition. Refer to Appendix 1 for an overview of the factors considered for this rating.
- d. **Level of Harm Associated with Non-compliance** – Would include average of the relevant ratings applied to the condition. Refer to Appendix 1 for an overview of the factors considered for this rating.
- e. **Aggregate Score** – Is the total of the rating given to "potential for non-compliance" and "level of harm associated with non-compliance".
- f. **Overview of the Rationale for the Aggregate Score** – Identifies the key factors driving the ratings.
- g. **Permit Reflecting Specified Condition** – Identifies the specific permit that the condition has been carried into (if any).
- h. **Compliance Activity** – Specifies compliance activities to manage identified risks.
- i. **Compliance Agencies** – This identifies the specific agencies that have compliance and enforcement roles and/or responsibilities for the specific condition.
- j. **Lead Inspection Agency** – Identifies the agency that has agreed to take the lead on verifying compliance with the condition, subject to regional work planning, priorities, and risks. In general, EAO will verify compliance with conditions that can be verified from Victoria and other agencies will verify compliance with conditions that require on-site inspections to verify. On occasion EAO compliance staff will also conduct on-site inspections.
- k. **Enforcement Authority or Agency** - Identifies the authorities and/or agencies that can enforce compliance with the condition, whether that authority is through the Environmental Assessment Act or another statute under which a permit has been issued and has attached the same condition.
- l. **Inspection Report** – Identifies whether an inspection was undertaken to verify compliance with the condition and summarizes findings (e.g., in compliance or not in compliance).
- m. **Comments** – General comments should be included here to provide a record of key issues needing follow-up.
- n. **Status** – Describes the extent to which the condition has been subject to compliance activities, such as:
 - "in progress" if compliance activities have been undertaken;
 - "no further action required" if the condition has been satisfied and no additional need for compliance management is required; and,
 - "further action required" if compliance activities indicate non-compliance or indicate a significant risk of non-compliance that requires further action.

EA Certificate Compliance Management Table

Number	Topic	Project Phase	Environmental Assessment Certificate Condition	Score (L = low, M = medium, H = high)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency ¹	Inspection Report	Comments	Status
4	ML/ARD – Neutral tailings for downstream construction and final tailings beaches	PC/CON/COM/OP	If tailings do not meet specifications for non-potentially acid generating, then a sulphide removal circuit must be installed in the mill.	L	Subject to a Mines Act Permit and part of initial project construction.		MEM to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting	MEM, EAO	EAO, (MEM will take over once a permit has been authorized)	Minister of Environment, Ministry of Energy and Mines	Insert date permit was issued. Reporting information on any review / inspection activity will be reported here	Assess compliance with condition during on-site compliance inspection.	
14	Water management - Morrison Lake characterization	PC	The Proponent must develop, for EAO's approval, a plan to collect additional biological, physical and chemical information on Morrison Lake to further validate the effects assessment provided during the environmental assessment. This information must also be used by the Proponent to support and supplement <i>Environmental Management Act</i> permitting and must be collected prior to applying for those permits. The plan must include, at the minimum, the following: additional baseline information on water quality, water chemistry, temperature and lake behaviour, including information on currents, flow regimes, and lake turnover, with a focus on those areas around the location of the proposed effluent diffuser. The plan should also indicate the period of time over which the information will be	M	Subject to EMA permitting – critical to mitigating adverse effects		EAO/MFLNRO and MEM to review the plan upon its completion.	EAO/MFLNRO/MEM	EAO	Minister of Environment		Plan will be assessed by EAO and various permitting agencies.	

¹ All conditions to be under enforcement authority of Minister of Environment, and agencies that have issued permits reflecting EAC conditions.

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction CON = Construction COM = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Score (L = low, M = medium, H = high)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
			collected										
15	Water management – Morrison River flows	PC/COM/OP	The Proponent must complete a plan for the approval of the Department of Fisheries and Oceans and the Ministry of Forests, Lands and Natural Resource Operations, to measure year round water flows in Morrison River. The plan must include a follow-up monitoring program to verify the Proponent's predictions that there will be no adverse effects to physical fish habitat due to flow augmentation if flow augmentation is used as mitigation. Based on this plan, the Proponent must develop, for the approval of the Department of Fisheries and Oceans and the Ministry of Forests, Lands and Natural Resource Operations, an Instream Flow Requirement following the Instream Flow Incremental Methodology. The instream Flow Requirement must be adhered to during operations.	H	Subject to FLNRO / DFO approval – critical to mitigating adverse effects		MFLNRO and DFO to review the plan upon its completion. MFLNRO to conduct site inspections to ensure Proponent is adhering to plan.	MFLNRO C&E Branch	MFLNRO	Minister of Environment		Assess compliance with condition during on-site compliance inspection.	
16	Fish Habitat Compensation Plan - Aquatics - fish	PC/CON	The Proponent must complete, prior to applying for <i>Mines Act/Environmental Management Act</i> permits, a baseline fish tissue sampling program in a reference lake with non-anadromous fish (Tochka Lake or another lake approved by MoE) and another lake with anadromous fish. The program must be developed and implemented to the satisfaction of MoE and	L	Subject to an EMA permit.		MFLNRO to review the plan upon its completion and have C&E staff conduct site inspections to ensure that the program is being implemented accordingly.	MFLNRO C&E Branch	MFLNRO	Minister of Environment		Assess compliance with condition during on-site compliance inspection.	

EA Certificate Compliance Management Table

Item	Topic	Project Phase PC = pre-construction CON = Construction COM = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Score (L = low, M = medium, H = high)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
			MFLNRO and in consultation with the Gitksan and Gitanyow Nations, the Lake Babine Nation and DFO.										
1 7	Fish Habitat Compensation Plan - Aquatics – spatial extent of spawning habitat	PC/CON	<p>The Proponent must complete spawning surveys along the east shore of Morrison Lake from the confluence of Morrison Lake and Olympic Creek to the outflow of Morrison River from Morrison Lake, including dive surveys, to identify areas of shoreline and deep water spawning habitat.</p> <p>The Proponent must complete spawning habitat survey and mapping along the full length of Morrison River, including the low flow channels which may be affected during low flow periods, to support the development of the Instream Flow Requirement referenced in condition 15. The Proponent must prepare a plan for the spawning survey for EAO's approval. The activities in the approved plan must be completed prior to the Proponent applying for <i>Mines Act/Environmental Management Act</i> permits.</p> <p>The Proponent must also develop a plan to reassess the spawning areas identified during the spawning surveys to determine if spawning areas are being negatively impacted by the Project.</p>	M	Key accommodation for First Nations and to support ISR		EAO and MFLNR to review the plan upon its completion.	EAO/MFLNR O/MEM	EAO	Minister of Environment, Ministry of Energy and Mines		Plan will be assessed by EAO and various permitting agencies.	
1 8	Fish Habitat Compensation Plan	PC/CON	The Proponent must prepare and	H	Key accommodati		EAO and DFO to review the plan	EAO	EAO	Minister of			

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction CON = Construction COM = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Score (L = Low, H = High)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency ¹	Inspection Report	Comments	Status
	- Aquatics – Fish presence in Morrison Lake		implement a plan, in consultation with the Lake Babine Nation and the Gibsan and Gitanyow Nations, to measure annual sockeye salmon escapement in Morrison River and enumerate juvenile sockeye salmon in Morrison Lake in order to advance the knowledge of fish populations, behaviour and distribution in Morrison Lake. The plan must be developed for the approval of the Department of Fisheries and Oceans and EAO.		on for First Nations and to understand long term potential effects on fish.		upon its completion.			Environment			
19	Monitoring - EMPs	PC/CON	The Proponent must develop the following Environmental Management Plans: <ul style="list-style-type: none"> Fish and Fish Habitat Management Plan (Fisheries and Oceans Canada and Ministry of Forests, Lands and Natural Resource Operations); Vegetation and Ecosystems Management Plan (MFLNRO); Wildlife Management Plan (MFLNRO); Green House Gas and Fugitive Dust (MoE and FLNRO); Transportation and concentrate haulage management plan (MFLNRO and MOTI); and Social Management Plan (EAO). EMPs must be approved by the agency listed next to them prior to the Proponent applying for <i>Mines Act/Environmental Management Act</i>	H	Many of the subjects in the plans are not covered by permit or regulation and are important to addressing FN and local community issues.		Multi-agency review of Plans to be conducted by EAO, MFLNRO, DFO and MOTI. Site inspections will be completed by MFLNRO C&E staff to ensure compliance.	EAO, MFLNRO, MOTI, DFO	EAO/ MFLNRO (once field work has begun.)	EAO		Assess compliance with plans in this condition during on-site compliance inspection.	

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction CON = Construction COM = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Score (L = low, M = medium, H = high)	Rationale for the Aggregate Score	Permit Containing Specific Conditions (to be completed if permitting issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
			permits. The Proponent must consult with Lake Babine Nation on the development of these EMPs and provide copies of the completed plans to Lake Babine Nation. The Proponent must consult with Gibsan and Gitanyow Nations on the development of the Fish and Fish Habitat EMP. All plans must be implemented.										
20	Monitoring – environmental monitor	PC/CON/COM/OP/D	During Project construction, the Proponent must retain an independent Environmental Monitor. The monitor must: (a) provide a report on his or her observations made during site inspections; (b) identify corrective measures that the Proponent must undertake, if any, and report on those measures; and, (c) report on the measures undertaken by the Proponent. The Proponent must implement all corrective measures identified by the monitor, unless the measures would be contrary to law, the conditions of this Certificate, or direction from Fisheries and Oceans Canada or the Ministry of Forests, Lands and Natural Resource Operations. The Proponent must provide the reports referred to in paragraphs (a), (b) and (c).	H	Critical to ensuring on the ground work is completed.		Independent Environmental Monitor reports.	EAO, MFLNRO C&E Branch	EAO	Minister of Environment	Reporting information on any review / inspection activity will be reported here		

EA Certificate Compliance Management Table

Number	Type	Project Phase	Environmental Assessment Certificate Condition	Score (L = Low, M = Medium, H = High)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
			above, to Fisheries and Oceans Canada and the Ministry of Forests, Lands and Natural Resource Operations in a format and frequency acceptable to those departments. The Proponent must ensure that the monitor reports to Fisheries and Oceans Canada and the Ministry of Forests, Lands and Natural Resource Operations throughout the Project construction period.										
2 1	Monitoring – wildlife monitoring	PC / CON / COM / OP / D	The Proponent must develop, in consultation with the Lake Babine Nation and MoE, and for the purposes of monitoring the potential for uptake of metals in tissue, a plan to sample bear, deer, and moose tissues within the Local Study Area as described in the Proponent's original Application for an Environmental Assessment Certificate. The Proponent must provide the plan to EAO for its approval. The plan must be implemented.	M	Key accommodation for First Nations and to understand long term potential effects on wildlife		EAO and MFLNRO to review the plan upon its completion and have C&E staff conduct site inspections to ensure that the program is being implemented accordingly.	MFLNRO C&E Branch	EAO	Minister of Environment		Assess compliance with condition during on-site compliance inspection.	
2 2	Monitoring – fish monitoring	PC/CON/COM/OP/D	The Proponent must develop a plan, in consultation with Lake Babine Nation and Gibsan and Gitanyow Nations and MoE, for the purposes of monitoring metal concentrations in the tissues of resident and anadromous fish in Morrison Lake. The Proponent must provide the plan to EAO for its approval. Once approved, sampling under the program must	H	Key accommodation for First Nations and to understand long term potential effects on fish.		EAO and MFLNRO to review the plan upon its completion and have C&E staff conduct site inspections to ensure that the program is being	MFLNRO C&E Branch	EAO	Minister of Environment		Assess compliance with condition during on-site compliance inspection.	

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction CON = Construction COM = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Score (1 = low, 10 = maximum, N = N/A)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Mitig	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
			commence prior to the Proponent applying for a <i>Mines Act</i> or <i>Environmental Management Act</i> permit and must continue until mine closure. The plan must be implemented, and may be revised under EMA permit requirement beyond the first year of implementation.				implemented accordingly.						
2	Monitoring - Adequate compensation for Trap-line T049	PC/CON	The Proponent must compensate Lake Babine Nation, as requested in the July 16, 2010 letter from Lake Babine Nation, for the impact of the Project on Trap-line T049. The Proponent must provide one year notification to the trap-line holder of the commencement of construction.	M	Key accommodation for First Nations		EAO to follow up with Proponent one year prior to construction.	EAO	EAO	Minister of Environment		Copies of correspondence to trap-line holder would validate Proponent's claim.	
2	Socio-economic – Ookpik Wilderness Lodge	PC/CON/COM/OP	The Proponent must implement the following measures to address the effects on the operations and business of Ookpik Lodge: <ul style="list-style-type: none"> Limit the speed of all mine traffic, including haul trucks, supply trucks and maintenance trucks and transport buses to 30km/hr along km 24-29 on the Hagen Forest Service Road (FSR) near Ookpik Wilderness Lodge; Upgrade road materials along Hagen FSR from km 24-29; Prohibit use of engine brakes by mine traffic along Hagen FSR near Ookpik Wilderness Lodge from km 24-34; 	M	Key accommodation for neighbouring business.		FLNRO compliance staff to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	MFLNRO C&E Branch, EAO	MFLNRO C&E Branch	Minister of Environment		Assess compliance with condition during on-site compliance inspection.	

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction CON = Construction COM = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Score (L = Low, M = Medium, H = High)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Mitig	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
			<ul style="list-style-type: none"> Prohibit the use of personal vehicles for employees travelling from Nose Bay to the mine and prohibit the use of boats to commute to mine via Morrison Arm of Babine Lake; and Use shortest pole heights allowed by BC Hydro for the transmission line to reduce the visual impact. 										
2	Socio-economic – 5 Cookpik Wilderness Lodge	PC/CON/COM/OP	The Proponent must negotiate and attempt to reach an agreement with Cookpik Wilderness Lodge to compensate it for negative impacts to their wilderness tourism business.	M	Key accommodation for neighbouring business.		EAO can contact the Proponent and Cookpik Lodge to ensure compliance.	EAO, MFLNRO C&E Branch	EAO	Minister of Environment			
2	Socio-economic – 6 Tukii Hunting Camp	PC/CON/COM/OP	The Proponent must meet its obligations under the DCJ Holdings Ltd. Settlement Agreement dated August 19, 2011 which has been filed with the EAO.	M	Key accommodation for neighbouring business. Relatively easy to determine if this is completed.		EAO can contact the Proponent to ensure compliance.	EAO, MFLNRO C&E Branch	EAO	Minister of Environment			
2	Socio-economic - 8 employment	PC/CON	The Proponent must complete, in collaboration with the Village of Granisle and the Lake Babine Nation, within one year prior to the commencement of construction, a skill inventory and needs analysis.	L	Proponent has signed MOU with Village and has high likelihood of implementation.		EAO can contact the Proponent to ensure compliance.	EAO, MFLNRO C&E Branch	EAO	Minister of Environment			
2	Socio-economic – 9 Community	PC/CON/COM	The Proponent must establish a Community Sustainability Advisory	L	Proponent has signed		Request consultation	EAO, MFLNRO C&E	EAO	Minister of			

EA Certificate Compliance Management Table

Number	Topic	Project Phase	Environmental Assessment Certificate Condition	Score (L = Low, M = medium, H = High)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
	Committee		Committee (CSAC) comprising representatives from the Village of Granisle and the Lake Babine Nation. The purpose of the CSAC is to identify, resolve, and monitor any issues raised by the community with respect to the Project. The CSAC must be established within one year of the commencement of the Project's construction.		MOU with Village and has high likelihood of implementation.		records.	Branch		Environment			
30	Socio-economic – Community Liaison	PC/CON/COM/OP/D	The Proponent must hire a Community Liaison to act as the Proponent's primary point of contact for public and local organizations on community issues. This position must also oversee the CSAC and facilitate implementing elected programs and initiatives.	L	Proponent has signed MOU with Village and has high likelihood of implementation.		EAO can contact the Proponent to ensure compliance.	EAO, MFLNRO C&E Branch	EAO	Minister of Environment	-		
31	Traffic – Mill Bay Road Upgrade	PC	The Proponent must upgrade, or provide resources to ensure the Ministry of Transportation and Infrastructure is able to upgrade the Mill Bay Road, including the intersection of Mill Bay Road and Hwy 118, and the access to Mill Bay Road from the proposed staging area to 100% legal axle weight loading 365 days a year or another standard to the satisfaction of the Ministry of Transportation and Infrastructure, prior to the commencement of construction. The Proponent must retain a Professional Engineer to design any new road alignments and those alignments must be	H	Key safety concern.		FLNRO/ MOTI compliance staff to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	MFLNRO C&E Branch, MOTI	MFLNRO C&E Branch	Minister of Environment		Assess compliance with condition during on-site compliance inspection.	

EA Certificate Compliance Management Table

Number	Topic	Project Phase	Environmental Assessment Certificate Condition	Score (L = Low, M = medium, H = High)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
			approved by the Ministry of Transportation and Infrastructure. The Proponent must provide the Ministry of Transportation and Highways with "as built" drawings and the completed and stamped Engineer of Record forms at the end of construction.										
3 2	Traffic Safety	PC/CON	The Proponent must use signage and public safety advisories to make the public aware of any construction activities and temporary alternate traffic routes.	L	Provision is not too technically difficult and is easily achieved by the Proponent.		FLNRO compliance staff to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting	MFLNRO C&E Branch, EAO	MFLNRO C&E Branch	Minister of Environment		Assess compliance with condition during on-site compliance inspection.	
1	ML/ARD - Management of potentially acid generating rock	CON/COM/OP/ID	All waste rock must be segregated into High potentially acid generating, Low potentially acid generating and Non-potentially acid generating. Each of those categories of waste rock must be kept separate from each other in the waste rock dump.	H	Subject to a Mines Act Permit – separation of POTENTIALLY ACID GENERATING critical to long term closure plan.		MEM to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting	MEM, EAO	EAO, (MEM will take over once a permit has been authorized)	Minister of Environment, Ministry of Energy and Mines	insert date permit was issued. Reporting information on any review / inspection activity will be reported here	Assess compliance with condition during on-site compliance inspection.	
3	ML/ARD – Potential acid rock drainage from Cleaner Tailings	CON/COM/OP	Cleaner tailings must be transported to the TSF in a separate pipeline from rougher tailings and immediately and permanently saturated in the TSF.	L	Subject to a Mines Act Permit and part of initial project construction.		MEM to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up	MEM, EAO	EAO, (MEM will take over once a permit has been authorized)	Minister of Environment, Ministry of Energy and Mines	Insert date permit was issued. Reporting information on any review /	Assess compliance with condition during on-site compliance inspection.	

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction CCR = Construction CDE = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Score (L = low, M = medium, H = high)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
							on what is not covered in Permitting.				inspection activity will be reported here		
2	Socio-economic - employment	CON/COM	The Proponent must hold at least one job/business fair in both Granisle and a second community (e.g. Burns Lake or Smithers), within one year of the commencement of the Project's construction to inform local residents and businesses of upcoming opportunities for employment and contracts as well as the requirements for obtaining these positions, including skills and certifications.	L	Proponent has signed MOU with Village and has high likelihood of implementation.		EAO can contact the Proponent to ensure compliance.	EAO, MFLNRO C&E Branch	EAO	Minister of Environment			
1	Water management - water balance and water treatment plant and discharge to Morrison Lake	COM/OP/D	<p>a) The Proponent must prepare an annual calculation of site water balance.</p> <p>b) If surplus water accumulates for more than two years and requires treatment according to the requirements of an EMA permit, the Proponent must:</p> <ol style="list-style-type: none"> construct a water treatment plant and, collect, treat and discharge any excess contact water to Morrison Lake via a pipeline and diffuser. <p>Any water discharged to Morrison Lake must meet - outside a mixing zone established by MoE - either British Columbia Water Quality Guidelines, Site Specific Water Quality Objectives, or an alternative requirement defined by the</p>	H	Subject to a EMA permit - critical to mitigating adverse effects		FLNRO compliance staff to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	MFLNRO C&E Branch, EAO	MFLNRO C&E Branch	Minister of Environment		Assess compliance with condition during on-site compliance inspection.	

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction COA = Construction COM = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Risk (L = low, M = medium, H = high)	Reasons for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Mitig	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
			requirements of an EMA Permit.										
5	ML/ARD - Cleaner tailings deposited near the final surface of the Tailing storage facility	OP/D	Cleaner tailings must be placed in the open pit during the processing of low-grade ore; at the end of open pit mining. The final Tailings Storage Facility configuration must ensure that cleaner tailings are covered with rougher tailings and that they remain permanently saturated.	H	Subject to a Mines Act Permit – separation of POTENTIALLY ACID GENERATING critical to long term closure plan.		MEM to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	MEM, EAO	EAO, (MEM will take over once a permit has been authorized)	Minister of Environment, Ministry of Energy and Mines	Insert date permit was issued. Reporting information on any review / inspection activity will be reported here	Assess compliance with condition during on-site compliance inspection.	
7	ML/ARD - Insufficient volume in open pit to store Potentially Acid Generating rock and unmilled low grade ore on closure	OP/D	If on an annual basis, the projected total volume of potentially acid generating waste rock and low grade ore in any year of operation will surpass the available flooded backfill storage in the open pit for that year, then the surplus volume of potentially acid generating material must be placed in the Tailings Storage Facility that year and flooded	H	Subject to a Mines Act Permit – placing POTENTIALLY ACID GENERATING waste rock in pit critical to long term closure plan.		MEM to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	MEM, EAO	EAO, (MEM will take over once a permit has been authorized)	Minister of Environment, Ministry of Energy and Mines	Insert date permit was issued. Reporting information on any review / inspection activity will be reported here	Assess compliance with condition during on-site compliance inspection.	
6	ML/ARD – Potentially Acid Generating materials on closure	D	On closure, all potentially acid generating waste rock and any unmilled low grade ore must be fully flooded at final closure. High potentially acid generating rock and unmilled low-grade ore must be placed in the bottom of the open pit. All potentially acid generating waste rock and low grade ore must be placed into the open pit and capped with non- potentially acid generating rock and glacial till.	H	Subject to a Mines Act Permit – separation of potentially acid generating critical to long term closure plan.		MEM to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	MEM, EAO	EAO, (MEM will take over once a permit has been authorized)	Minister of Environment, Ministry of Energy and Mines	Insert date permit was issued. Reporting information on any review / inspection activity will be reported here	Assess compliance with condition during on-site compliance inspection.	
8	ML/ARD - Potentially acid generating rock	D	The pH of the potentially acid generating pore water and the residual water in the open pit during placement of potentially	L	Subject to a Mines Act Permit		MEM to conduct inspections, compile reports	MEM, EAO	EAO, (MEM will take over once a permit	Minister of Environment, Ministry of	Insert date permit was issued.	Assess compliance with condition	

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction CON = Construction COM = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Score (L = Low, M = medium, H = High)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
	porewater effects		acid generating rock and any other unmined low grade ore must be maintained at a pH of 8, or at a number which, in the opinion of MEM, is sufficient to limit the mobilization of metals.				and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.		has been authorized)	Energy and Mines	Reporting information on any review / inspection activity will be reported here	during on-site compliance inspection.	
10	ML/ARD - Seepage of Potentially Acid Generating porewater from open pit into Morrison Lake	D	Following closure, the Proponent must maintain the elevation of the pit lake below the elevation of Morrison Lake to ensure no seepage discharge to Morrison Lake. Groundwater monitoring wells must be installed between the open pit and Morrison Lake to monitor potential seepage of contaminated water from the open pit to Morrison Lake. Morrison Lake water quality must be monitored at least twice each year (summer and winter) to ensure changes to water quality in the lake are detected.	H	Subject to a Mines Act and EMA permit – critical to mitigating adverse effects		FLNRO compliance staff to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	MFLNRO C&E Branch, EAO	MFLNRO C&E Branch	Minister of Environment, Ministry of Energy and Mines		Assess compliance with condition during on-site compliance inspection.	
12	Water management – open pit water system after closure	D	Once the pit is filled with PAG rock on closure, the Proponent must collect and treat, when necessary according to the requirement of an EMA permit, all water from the open pit and then discharge it into Morrison Lake via a pipeline and diffuser.	H	Subject to a EMA permit – critical to mitigating adverse effects		FLNRO compliance staff to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	MFLNRO C&E Branch, EAO	MFLNRO C&E Branch	Minister of Environment		Assess compliance with condition during on-site compliance inspection.	
13	Water management – TSF water on	D	The Proponent must manage and/or treat	H	Subject to a EMA permit –		FLNRO compliance staff	MFLNRO C&E Branch,	MFLNRO C&E Branch	Minister of		Assess compliance	

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction CON = Construction DOM = Decommissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Score (L = low, M = medium, H = high)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issue & permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
	closure		the TSF water pond beyond closure until such time as a direct discharge without management or treatment is authorized under the Environmental Management Act.		critical to mitigating adverse effects		to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	EAO		Environment		with condition during on-site compliance inspection.	
2	See Potentially Acid Generating from low grade ore stockpile		The Low Grade Ore stockpile (LGO) must be placed on a low permeability, glacial tile base.				MEM to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on what is not covered in Permitting.	MEM, EAO	EAO, (MEM will take over once a permit has been authorized)	Minister of Environment, Ministry of Energy and Mines	Reporting information on any review / inspection activity will be reported here		
9	Tailings Storage Facility seepage affects receiving streams and Morrison Lake		<p>a) The Proponent must design and install a geomembrane liner in the TSF Tailings Storage Facility area sufficient to ensure that the seepage rate from the TSF Tailings Storage Facility does not exceed 10m³/hr.</p> <p>b) Without restricting paragraph (a), if any seepage from the TSF Tailings Storage Facility to Morrison Lake or any streams occurs which exceeds any limits for seepage specified by the Ministry of Environment, the Proponent must:</p> <p>i. prepare a plan of measures to</p>				FLNRO compliance staff to conduct inspections, compile reports and forward issues of non-compliance to EAO to follow up on.	MFLNRO C&E Branch, EAO	MFLNRO C&E Branch	Minister of Environment, Ministry of Energy and Mines		Assess compliance with condition during on-site compliance inspection. Review annual reports submitted by the Proponent.	

EA Certificate Compliance Management Table

Number	Topic	Project Phase PC = pre-construction CON = Construction COM = Commissioning OP = operations D = decommissioning	Environmental Assessment Certificate Condition	Priority (L = Low, M = Medium, H = High)	Rationale for the Aggregate Score	Permit Containing Specified Conditions (to be completed if permitting agency issues permits that reflect EAC conditions)	Proposed Compliance Activities to Manage Risks and Timing	Compliance Agencies	Lead Inspection Agency	Enforcement Authority or Agency	Inspection Report	Comments	Status
			control the seepage in order to meet the limits ii. obtain approval of MoE for the plan, and, iii. implement the plan. Annual reports on updated groundwater seepage must be prepared by the Proponent and shared with EAO, MOE and MEM										

Appendix 1
Risk Assessment Factors and Scales

Potential for Non-compliance – Factors to Consider

Type of Project	Proponent Compliance Behaviour	Prevalence of Government Oversight
<p><i>This criterion considers the technical complexity of the project or condition, geographic coverage, and intensity.</i></p> <p>Technical Complexity and Risk</p> <ul style="list-style-type: none"> • Are technologies new or unproven? • Are interactions with identified resources or values (five pillars) unclear or are models not yet proven? <p>Geographic Coverage and Intensity</p> <ul style="list-style-type: none"> • Does the project cover a large geographic area or have an intensity that is unusual? • Does the condition relate to a large geographic area? <p><i>Note: This criterion may be considered in relation to key types of adverse impacts (environment, health, other)</i></p>	<p><i>This criterion considered proponent behaviour (documented ideally) pre and post certificate. This includes performance during the EA review, the timeliness, accuracy and completeness of required monitoring reports, observations and evidence suggesting potential non-compliance, actual instances of non-compliance and the nature of the enforcement actions taken. This criterion also takes into account relevant certification schemes and other industry-led standards that a proponent has adopted and its performance in relation to them.</i></p> <p>Proponent behaviour during the EIA process.</p> <ul style="list-style-type: none"> • Did the Proponent demonstrate a high level of competence and ability to identify and develop meaningful/effective mitigation measures? • Did the Proponent demonstrate a commitment to the mitigation measures? <p>Proponent Capacity and Commitment after the Certificate was issued.</p> <ul style="list-style-type: none"> • Has the company changed ownership or has there been a change in personnel that is sufficient to cause EAO to have concern over the level of understanding and commitment to certificate requirements and the rationale for each of them? • General track record and capacity based on EAO professional judgement. <p>Compliance Record.</p> <ul style="list-style-type: none"> • Are there documented incidences of non-compliance? Were these voluntarily disclosed and addressed? • Have EAO or partner inspections and audits found non-compliance (in the case of partner activities would these documented instances of non-compliance also suggest non-compliance with Certificate conditions)? <p>Industry Certification</p> <ul style="list-style-type: none"> • Are industry certification schemes in place that support compliance with key certificate requirements or behaviours that promote compliance? • Has the Proponent received demerits resulting from audits or other verification activities associated with industry/sector-led certification schemes? <p>Monitoring Results and Public Complaints.</p> <ul style="list-style-type: none"> • Are there documented public complaints? • Does the Proponent submit monitoring reports on time and to an acceptable standard? • Has EAO or partner review of Proponent monitoring or other monitoring revealed potential non-compliance? <p><i>Note: This criterion may be considered in relation to key types of adverse impacts (environmental, social, economic, health, heritage)</i></p>	<p><i>This criterion considers the legislative and regulatory environment for the particular project or condition and the extent to which government compliance management to promote compliance or ensure that instances of non-compliance will be detected and addressed in a timely fashion.</i></p> <p>Regulatory Framework</p> <ul style="list-style-type: none"> • Is the regulatory (federal and provincial) framework mature and proven? • Are there gaps in coverage or areas where compliance with requirements is not as well supported? <p>Certificate Requirements</p> <ul style="list-style-type: none"> • Are certificate requirements measurable and enforceable? • Does the condition relate to another agency's mandate and is that agency able to verify and enforce compliance? • Is the condition reflected in a permit? Does the permitting agency have the ability to verify and enforce? What is the frequency of inspections for that agency? <p>Monitoring</p> <ul style="list-style-type: none"> • Is the level of monitoring in place adequate to detect major instances of non-compliance in a timely way? <p><i>Note: This criterion may be considered in relation to key types of adverse impacts (environment, health, other)</i></p>

Impacts of Non-compliance – Factors to Consider

Adverse Effects (that may in turn impact public interests or aboriginal interests)				
Public Interests	Aboriginal Interests	Environmental Impacts	Health Impacts	Other
<p><i>This criterion considers the level of public interest in the project or specific condition (due to benefits provided to the community or concerns about adverse effects). This criterion considers both broad provincial interest as articulated through formal policy statements or strategies and community level interests as articulated through formal statements or the as the media and public comments.</i></p> <ul style="list-style-type: none"> • Would citizen rights and freedoms be affected by proponent non-compliance (exclusive of health and safety impacts)? • Are there community interests that could be comprised due to project non-compliance? • Is there a high profile government policy objective that would be at risk in the event of non-compliance? 	<p><i>This criterion considers adverse effects in relation to formally stated aboriginal interests. The interests may have been articulated through a range of mechanisms from local benefits sharing agreements with the Proponent to MOUs and other agreements with the province to formally recognized or proven rights through the courts.</i></p> <ul style="list-style-type: none"> • Are there formal accommodation measures supported by certificate requirements? • What would the implications be of infringements caused by non-compliance? 	<p><i>This criterion addresses the possible adverse effects on the biophysical environment that would be likely in the event of non-compliance. Adverse effects should be considered in relation to the key values relevant to the project. For example, these may be specific to water volume, quality, air quality, vegetation, aquatic species and habitat or terrestrial species and habit. Impacts should be considered in terms of the intensity and duration of the impact, the extent to which the impact would be minor or lethal in relation to resource values and how persistent the effects would be. The costs and potential for rehabilitation and mitigation should also be considered.</i></p> <ul style="list-style-type: none"> • Are the impacts short or mid-term, localized and amenable to full remediation or rehabilitation? • How high are the costs to address the impact? • Are the impacts widespread, difficult or impossible to remediate or rehabilitate or lethal in effect? How high are the costs to address the impact? 	<p><i>This criterion deals with the possible impacts from project non-compliance on human health and safety, including whether such impacts are: short to longer term in timeframe; localized or more widespread geographically; and severe in terms of harm. The costs and potential for rehabilitation, mitigation or compensation should also be considered.</i></p> <ul style="list-style-type: none"> • Would non-compliance create an unacceptable risk to human health or safety? Would exposure have little effect on human health or would it be severe (hospitalization, lethal)? • Would non-compliance create a short-term and contained risk of exposure or would it be long-term and more widely spread? • How significant would the costs to remediate, rehabilitate or compensate for the impacts? 	<p><i>This criterion provides an allowance to consider other specific impacts of non-compliance.</i></p>

Risk Rating Scales

Potential for Non-compliance					Impacts of Non-Compliance						
1	2	3	4	5	1	2	3	4	5		
Low					High						
<p>The project or condition is considered to be of relatively low complexity and does not affect a large geographic area, and/or the level of associated activity is relatively low.</p> <p>Proponents have demonstrated positive compliance behaviours.</p> <p>There are effective options readily available to government to promote compliance and to take meaningful action to bring a project proponent into compliance.</p>			<p>The project is complex, employing new technologies and affects a large geographic area and the level of emissions or industrial activity is relatively high.</p> <p>There have been instances of non-compliance and poor proponent performance.</p> <p>There are few options available to government to effectively promote compliance, and to take meaningful action to bring a project proponent into compliance.</p>			<p>The impacts of non-compliance as it relates to public interests, aboriginal interests, the biophysical environment and/or human health and are considered to be low or of no consequence.</p>			<p>In the event of non-compliance, the impacts of the project on public interests, aboriginal interests, the biophysical environment, and/or human health and safety are likely to be severe.</p>		

Note: Using the five-point scale for each the criteria in relation to these two factors, an overall rating for the Project is summarized by averaging ratings then representing the risk rating on a "heat map" equivalent. Projects that fall within the red coloured zone will be considered a high priority for compliance verification purposes. The yellow coloured zone denotes a moderate priority, and the green zone indicates a low priority for compliance verification.



File: 30200-20/MORR-05-06

Reference: 101850

August 9, 2012

Erik Tornquist
Executive VP & COO
Pacific Booker Minerals Inc.
1702-1166 Alberni St
Vancouver BC V6E 3Z3

Dear Mr. Tornquist:

As you are aware, we have recently received comments from a number of reviewers on Environmental Assessment Office's (EAO) draft Assessment Report, draft Certified Project Description and draft Table of Conditions for the proposed Morrison Copper Gold Mine Project (Project), and we will be moving to finalize these documents in preparation for a referral to Ministers.

I have provided you with comments we have received from Environment Canada, Health Canada, Department of Fisheries and Oceans, the Lake Babine Nation, the Gitksan Nation and the Gitanyow Nation. I have also recently received comments from the British Columbia Ministry of Environment (MOE) and the Ministry of Energy and Mines (MEM). I am enclosing the MOE and MEM memorandums.

Comments made by reviewers focus on a number of key areas of concern, including:

- The location of the proposed Project directly adjacent to a genetically unique population of sockeye salmon at the headwaters of the Skeena River and the importance of that sockeye salmon population to First Nations;
- The long-term environmental liability of the proposed Project, in particular as the proposed Project relates to the joint MOE and MEM *Policy for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia*;
- Uncertainties with water treatment, and in particular the "in-perpetuity" nature of that water treatment and the use of an effluent diffuser in Morrison Lake;

.../2

Environmental
Assessment
Office

Mailing Address:
PO Box 9426 Stn Prov Govt
Victoria BC V8W 9V1

Location:
1st & 2nd Fl – 836 Yates Street
Victoria BC V8W 1L8

- 2 -

- The use of the assimilative capacity of Morrison Lake as the primary long term means of mitigation;
- The long term change in water quality in Morrison Lake, and in particular, the predicted approach of a number of metals to British Columbia Water Quality Guideline concentrations; and,
- The limited existing knowledge of Morrison Lake limnology (e.g. currents, flushing rates etc).

While these issues have all been identified in EAO's draft Assessment Report, you should be aware that referral documents may also highlight these issues for the Ministers when they are considering whether to issue an environmental assessment certificate for the proposed Project. Prior to our referral, I would like to provide you a final opportunity to comment on any of these issues. Your perspectives will also be brought to the attention of Ministers.

Please feel free to contact me at 250-387-1032 or at Chris.Hamilton@gov.bc.ca should you wish to discuss any further issues. Please provide me with any written comments by close of day on August 14, 2012.

Yours truly,



Chris Hamilton
Executive Project Director

Enclosures: Letter regarding Morrison Copper Gold Project - Skeena Region EPD
Final Review
Memorandum regarding Morrison Copper Gold Project - Skeena Region
EPD Final Review

cc: Robyn McLean, Project Manager
Canadian Environmental Assessment Agency



PACIFIC BOOKER MINERALS INC. 365

#1702 - 1166 Alberni Street Vancouver, BC V6E 3Z3

Telephone: (604) 681-8556

Toll Free: 1-800-747-9911

Fax: (604) 687-5995

mail: info@pacificbooker.com Symbols: bkm-tsx venture / pbm-NYSE Amex Website: pacificbooker.com

Environmental Assessment Office
2nd Floor - 836 Yates St
Victoria BC, V8W 1L8

Attention: Chris Hamilton, Executive Project Director

August 13, 2012

RE: Morrison Copper/Gold Project Environmental Assessment Certification

Dear Chris,

This letter summarizes the final response from Pacific Booker Minerals Inc. (PBM) with respect to the Environmental Assessment Application for the Morrison Copper/Gold Project. PBM has been working on the development of the Morrison Copper/Gold Project since 1998. Baseline data to support the Application for an Environmental Assessment Certificate (EAC) has been collected since 2002.

PBM entered the Pre-Application stage of the Environmental Assessment Process on September 30, 2003 when the British Columbia Environmental Assessment Office (EAO) issued a Section 10 Order under the BC Environmental Assessment Act that declared that the project was a reviewable project pursuant to the BC Reviewable Projects Regulation. On July 12, 2010 PBM entered the Application Review stage of the Environmental Assessment process when EAO accepted the Company's Application for an EAC. The Project is now in day 763 of the 180-day Review period.

The EAC Application was originally submitted on September 28, 2009. Over the ensuing three years the EA process has gone through a series of starts and stops, primarily related to difficulty in Regulatory clarification of "acceptable" environmental design criteria for the protection of Morrison Lake and uncertainties related to groundwater.

To reduce the risk to the lowest extent possible, PBM has made two major environmental design changes, which are unprecedented in the copper mining industry in Canada, or the world, and these include: 1) lining of the 500 ha tailings impoundment; and 2) placement of 150 million tonnes of mine waste rock back into the open pit on closure.

The challenge facing the mining industry in British Columbia is that MEM and MOE are moving towards a concept that any change in baseline water quality or any change in water quality that "approaches" the BC Water Quality Guidelines (BCWQG) are being considered as a "significant adverse effect". This approach is not consistent with the setting of water quality guidelines, which BC have selected to be protective of aquatic habitat and which typically include a factor of safety of 10.

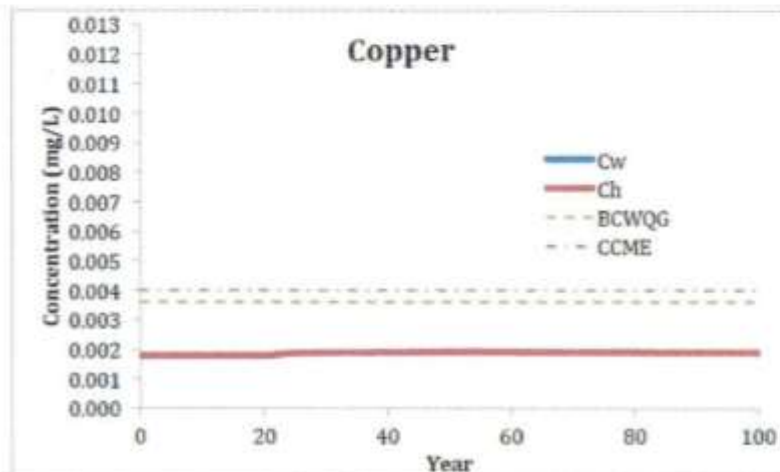
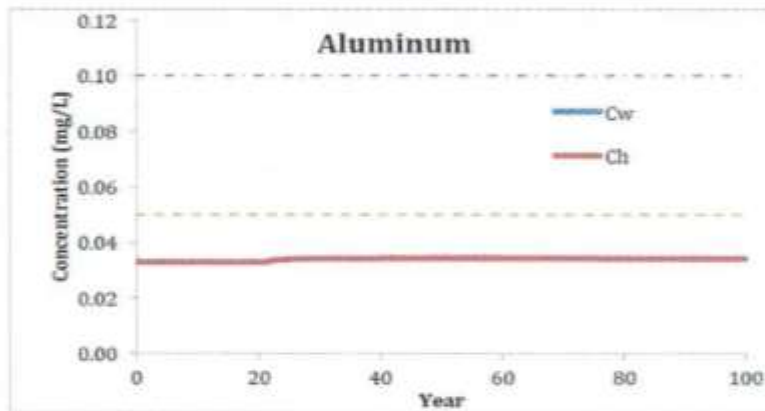
MEM final comments on the EA review indicate: 1) a preference to place mine rock into the tailing pond during operations, as opposed to into the open pit on closure; and 2) a concern that treatment of water from the open pit lake on closure will be required "in perpetuity" and treatment technology has "substantial uncertainty". PBM's economic assessment indicates that the bonding cost for placement of mine rock back into the open pit is similar to the mining cost of placement of mine rock in the tailings

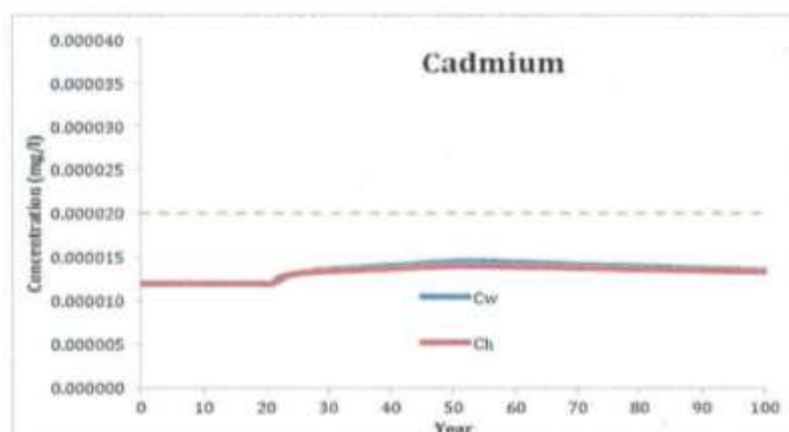
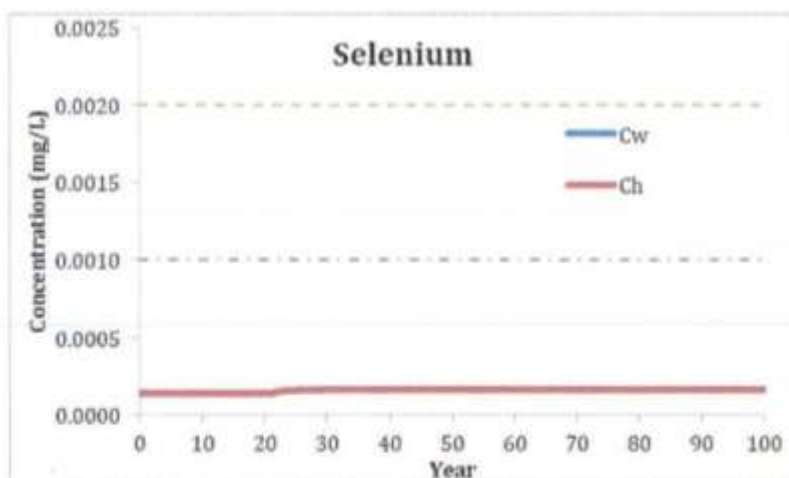


continues on next page...

impoundment during operations. However, placement of mine rock back into the open pit by PBM will result in a return of approximately \$100 million of the bond to PBM (mining costs are much less than 3rd party Contractor costs). Considering the very large environmental design changes that are part of the project, PBM does not believe it is realistic to impose additional costs that would also increase the complexity of the tailings management facility. Water treatment of runoff from residual open pit slopes is an inevitable consequence of open pit mining, and while acid rock drainage will theoretically continue for a long time, the geochemical load from the pit slopes will decrease with time.

MOE final comments on the EA review indicates that Morrison Lake is “at risk to significant adverse effect” and indicates a concern that “aluminum, copper, selenium and cadmium are predicted to approach BCWQG’s”. As the following charts indicate, the changes in predicted lake metal concentrations, using upper bound loadings, due to the project are below guidelines and nominally above baseline ((BCWQG’s are in green and Canadian Council of Ministers of the Environment (CCME) guidelines are in purple – water quality changes may commence in year 21 when mining is completed and the water treatment plant is operational)). Peaks in concentration will occur at the end of winter (Cw), before spring freshet starts to flush Morrison Lake, and in the hypolimnion (Ch) at the end of summer. PBM believes that the risk of a significant adverse effect is, therefore, negligible and that the design is protective of the aquatic environment.





In the fall of 2011 the EAO commissioned an independent 3rd Party review of all aspects related to water quality effects on Morrison Lake, which led to a reduction in the risk of potential effects. The independent 3rd Party review also supported PBM's assessment of no significant adverse effects.

PBM believe that they have accommodated all of the concerns of MEM, MOE and First Nations and propose a project that uses unprecedented measures to be protective of the environment. PBM will construct and operate the Morrison mine in compliance with industry best practices, using proven technology and in full compliance with all permit requirements.

Yours very truly,

Erik Tornquist
Executive VP & COO
Pacific Booker Minerals Inc.



cc:

Robyn McLean
Project Manager
Canadian Environmental Assessment Agency

Ministry of
Energy and MinesMines and Mineral
Resources Division

MEMORANDUM

August 8, 2012

To: Chris Hamilton, EAO Project Assessment Director

Re: **MEM Final Comments on EA Review of Morrison Copper Gold Project**

The Ministry of Energy and Mines (MEM) has reviewed the Environmental Assessment Office's (EAO) draft Assessment Report, draft Certified Project Description and draft Certificate Conditions for the Morrison Gold Copper Project. This memorandum provides a summary of MEM's final comments and conclusions on the project that should be considered in certificate decision making.

This Ministry agrees with EAO's conclusions that development of the proposed project would lead to residual adverse effects to water quality in Morrison Lake (i.e. permanently change the baseline condition). We defer to the Ministry of Environment (MOE) to comment on the significance of these water quality changes to aquatic receptors.

MEM recognizes that Pacific Booker Minerals (PBM) committed to some substantive project design changes during the review process to address agency concerns regarding adverse effects and to reduce environmental risks associated with the project. The largest of these commitments included the lining of the tailings impoundment with a geomembrane, the backfilling of potentially ARD generating (PAG) waste rock into the open pit at closure and to annually place surplus PAG material in the tailings impoundment. However, despite these modifications to the project, MEM believes that the Morrison Copper Gold project still presents significant risks for the following reasons:

1. **Large-Scale Environmental Liabilities** – MEM's preliminary analysis of the reclamation, closure and environmental liabilities for the proposed project is in excess of \$300 million. Reclamation liabilities of this scale are currently unprecedented in the province of BC. Approximately 2/3 of this liability is directly attributable to the costs to backfill, lime and flood PAG waste rock in the open pit at the end of mining operations. If this mine waste were flooded earlier in the mine life, environmental liabilities would be significantly reduced.

The magnitude of this liability would represent a serious risk to the Province if the project proceeds to development. If the mine were not able to fully carry out the reclamation and closure plan and meet its obligations, the Provincial Government would have to implement the work to protect the environment. To ensure that taxpayers would not have to pay for the costs of the reclamation, closure and long-term environmental protection activities, the full costs of these liabilities would have to be covered by bonding requirements under the Mines Act. Financing liabilities of this scale would be a significant challenge for any industry client.

2. **Inconsistency with Provincial Policy** – There are several aspects of the project that are inconsistent with the joint MEM/MOE "Policy for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia". The policy requires the prevention of ARD wherever possible, and the minimization of environmental liabilities and risk. MEM believes that the current project is inconsistent with the policy, as there appears to be other technically feasible

opportunities to improve the design of the project that have not been fully assessed. These improvements would proactively prevent ARD in waste rock and significantly reduce the liability and risk that are associated with the operational phase of the mine (i.e. prior to full implementation of the closure plan). Flooding PAG waste rock in the tailings impoundment earlier in the mine life would proactively prevent ARD, reduce environmental liabilities and bonding requirements, as well as significantly reduce the risk to the Province in the case of a default.

The policy also requires that a “proponent must demonstrate the necessary understanding, site capacity, technical capability and intent to operate in a manner which protects the environment”. The difficult history of this EA review with significant concerns raised, reluctant redesign work for the project, and many packages of incomplete information, places some of these attributes into question.

3. **Environmentally Preferable Designs Potentially Feasible** – MEM’s March 2, 2012 review of the 3rd Party Review Response concluded that proactive flooding PAG waste rock in the tailings impoundment to prevent ARD appears to be as economically feasible as backfilling PAG waste into the open pit and flooding at closure. This suggests that an environmentally preferable waste management plan that would reduce environmental liabilities and risk is technically and economically feasible, but has not been proposed or fully assessed.
4. **Potential Future Changes to Project** –PBM intends to reassess mine waste volumes and storage requirements at the permitting stage. MEM believes that in light of PBM’s recent cost estimates and given that alternative waste management plans appear feasible, there is a high likelihood that future modifications will be made to the project that could require changes to EA certificate approvals.
5. **In-Perpetuity Aspects of Liabilities** – Water from the mine facilities will require water treatment prior to discharge to Morrison Lake, likely during operations as well as long after mine closure. At closure, the pit lake will have to be kept at a lower elevation than Morrison Lake to prevent contaminated water from migrating to the lake, and surplus water in the open pit will require water treatment with HDS Lime and secondary treatment technologies. MEM acknowledges that if mining were to proceed, these liabilities could not be prevented.

The EAO assessment report notes the long term nature of these mitigation requirements as 100+ years and also notes the long term nature of the effects to water quality. MEM wishes to emphasize to the EAO, that pit water elevations and water quality will have to be managed and treated “in-perpetuity” to protect water quality and the resources in Morrison Lake. Pit wall rock will continue to erode and oxidize making it likely that ARD processes will continue for hundreds, if not thousands, of years. This also means that water quality effects from the project should be considered permanent and irreversible.

6. **Uncertainty with Water Treatment Proposed** – The protection of aquatic resources in Morrison Lake is reliant on the implementation of effective water treatment and the discharge and thorough mixing of effluent throughout the lake. MEM believes that substantial uncertainty remains regarding the effectiveness of secondary water treatment measures to meet proposed effluent targets, especially for cadmium and aluminum.

In summary, MEM believes these additional factors should be fully considered in the final EA decision making for the Morrison Project.

Sincerely,

A handwritten signature in cursive script that reads "Kim Bellefontaine".

Kim Bellefontaine, M.Sc., P.Geo.
Manager Environmental Geoscience and Permitting

cc: Diane Howe, Victoria
Al Hoffman, Victoria



DATE TYPED: August 2, 2012
FILE NUMBER: 44500-45/Morrison

Chris Hamilton, Project Assessment Director, Morrison Project
Tracy James, Project Assessment Officer, Morrison Project
Ministry of Environment, Environmental Assessment Office
Victoria, B.C. Canada
V6C 3A8

Re: Morrison Copper Gold Project - Skeena Region EPD Final Review

The Environmental Protection Division (EPD) of the Ministry of Environment last commented formally on the Morrison Copper Gold Project in a letter submitted March 29, 2012. Since this date, Pacific Booker Minerals (PBM) has:

- revised its project description,
- made a number of commitments contained in a Table of Conditions to be appended to EAO's Assessment Report, and
- revised its aquatic effects assessment based on a scenario which includes lining the tailings storage facility with a geomembrane liner and treating waste water to lower concentrations than previously proposed.

EPD has considered this information and offers an update to our most recent comments in this letter. We examined the following documents as part of this review:

- Morrison Copper / Gold Project – 3rd Party Review Response Report Addendum 1, April, 2012. (KCB 2012).
- Technical Review of the Morrison Lake Water Quality Model contained in the Pacific Booker Minerals' (the proponent) Application for an Environmental Assessment Certificate for the proposed Morrison Copper/Gold Project. Dr. Bernard Laval. June 19, 2012 (Laval 2012).
- Morrison Copper/Gold Project - Project Description – Appendix 1 Table of Conditions, June, 2012.

Ministry of Environment Environmental Protection
Division
Skeena

Mailing Address:
3726 Alfred Avenue
Bag 5000
Smithers BC V0J 2N0

Location:
3726 Alfred Avenue
Smithers BC V0J 2N0
Telephone: 250 847-7260
Facsimile: 250 847-7591
Website: www.gov.bc.ca/env

Pacific Booker Minerals has made a number of noteworthy commitments in its project description to mitigate potential risks to water quality and the aquatic environment. One of the most significant is to line the proposed tailings storage facility with a geomembrane liner. According to the proponent's revised hydrogeological and surface water models, this liner will significantly reduce seepage from the tailings storage facility into streams MCS-7, 8 and 10 and into Morrison Lake. EPD concurs with the proponent that under such a scenario, the effects on the stream ecosystems will be reduced significantly. Most predicted exceedances of B.C. Water Quality Guidelines are primarily attributed to baseline ground water quality. Our previous concerns related to dense contaminated stream water flowing along the lake bottom, creating "hot spots" appear to have been resolved. The likelihood of "hot spots" of contaminated water in the benthic environment of the lake resulting from emerging seepage has also been reduced significantly.

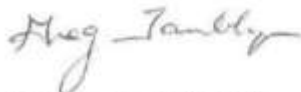
Nonetheless, despite the addition of the liner and the other conditions PBM has committed to, EPD maintains that the Morrison Copper-Gold project presents significant risks to Morrison Lake and Morrison Creek for the following reasons:

- First and foremost, Morrison Lake and Creek are pristine, high-valued ecosystems supporting many important fish species, including genetically distinct sockeye salmon with an irreplaceable gene pool.
- The environmental and economic liabilities associated with very long-term (100+ years?) collection and treatment of contaminated mine water, production and storage of water treatment sludge, uncertainty associated with the feasibility of the proposed treatment, and "in perpetuity" maintenance of site infrastructure adjacent to a lake with a unique sockeye salmon stock.
- In Morrison Lake, aluminum, copper, selenium and cadmium are predicted, under a liner and secondary water treatment scenario, to approach water quality guideline concentrations, which are thresholds above which impacts to aquatic life may occur. In addition, sulphate concentrations are expected to increase substantially. Furthermore, metals will accumulate in the sediments of the lake and, under certain conditions, may re-suspend into the water column increasing the metals loading to the lake's water. EPD is concerned about allocating the assimilative capacity of the lake for these contaminants to one water user.
- Some areas of the lake will likely have higher levels of contaminants than predicted due to incomplete mixing. The highly idealized lake model does not account for the possibility of incomplete mixing within the lake. According to Laval (2012), "the model is designed to provide an outer bound for the maximum lake-wide average concentrations, not the overall maximum in the lake."
- The behaviour of the discharge plume from the diffuser is uncertain, and although engineering solutions may exist, the worst case scenario is that contaminated water will settle to the bottom of the lake for months at a time until the lake "turns over."
- The ongoing risk from the possibility of un-controlled drainage, spillage and erosion, and

- The significant knowledge gaps related to the physical lake limnology (e.g. currents, flushing rate) and the lake ecosystem contribute to the high uncertainty related to predicting the actual impacts to the Morrison Lake ecosystem.

Pacific Booker Minerals has concluded that the project will have “negligible effect on fish and fish habitat (considering both lethal and sub-lethal toxicity effects on sockeye and coho salmon impacts....)” (KCB 2012). The Environmental Protection Division does not concur with this conclusion given the considerable uncertainties associated with the project’s effects assessment. As such, the high ecological values of Morrison Lake and Creek are at risk to significant adverse effect.

Yours truly,



Greg Tamblyn, M.R.M.
Section Head, Environmental Quality
Environmental Protection Division



Lake Babine Nation

225 SUS AVENUE,
P.O. BOX 879
BURNS LAKE, B.C. V0J 1E0

TEL: (250) 692-4700
FAX: (250) 692-4790

July 26, 2012

Mr. Chris Hamilton, Executive Project Director
BC Environmental Office
PO Box 9426 Stn Prov Govt
Victoria, BC V8W 9V1

VIA EMAIL: Chris.Hamilton@gov.bc.ca

Dear Mr. Hamilton;

RE: Morrison Copper/Gold Mine Project Draft Assessment Report

This letter is in response to your letter dated June 22, 2012 regarding the Morrison Copper/Gold Mine Project – Draft Assessment Report in which you have requested a response from Lake Babine Nation (LBN) by July 18, 2012 and have since verbally extended LBN's response date to July 27, 2012.

As the governing body responsible for this territory our government is opposed to this project and having considered the proposal will not be giving our approval for it to proceed.

LBN does not support the proposed project as it would significantly impact our aboriginal fishing and other rights including our aboriginal title. To move forward with the Morrison Copper/Gold Mine Project will result in direct infringement upon LBN's inherent rights. This has left LBN government with no choice but to oppose this project moving forward within our traditional territories and causing environmental harm to our homelands.

Further, the processes that the BC Environmental Assessment Office expects LBN to follow on this issue including giving our Nation a month to respond to the Draft Assessment Report is not appropriate and in direct contravention of our government-to-government relationship with the province. It also is not consistent with the 'New Relationship' that the province espouses to have with First Nations.

The duty to consult with LBN on this proposed project has not been met and falls short of what is required.

Should the province proceed further we will take whatever action necessary to enforce our decision not to approve the project.

Sincerely,



Chief Wilf Adam

cc Honourable Christy Clark, Premier
Honourable Mary Polak, Minister of Aboriginal Relations and Reconciliation
Honourable Rich Coleman, Minister of Energy and Mines
Honourable Terry Lake, Minister of Environment
Honourable Steve Tomson, Minister of Forests, Lands and Natural Resources
Honourable Peter Kent, Minister of Environment
Honourable John Duncan, Minister of Aboriginal Affairs
Robyn McLean, CEAA



GITXSAN CHIEFS' OFFICE

August 3rd, 2012

The Honourable Terry Lake
Minister of the Environment

The Honourable Rich Coleman
Minister of Energy & Mines

Delivered via the Environmental Assessment Office, care of Chris Hamilton at
Chris.Hamilton@gov.bc.ca

Dear Ministers:

Re: Application for an Environmental Assessment Certificate by Pacific Booker Minerals for the Morrison Copper/Gold Project

The Gitxan first wrote to the Minister of the Environment about the Morrison Project on September 20th, 2010. We are very concerned that this mine's impacts will diminish salmon availability not only in Morrison Lake, but also in Lake Babine and the Skeena Watershed. We have constitutionally-protected Aboriginal rights to the Morrison Lake fishery and the clean water habitat that it provides, which rights build on our section 35.1 right to food security and natural resource management. Morrison Lake provides between 3 and 8% of the sockeye salmon upon which the Gitxan and the Gitanyow rely for food.

The Gitxan became formally engaged with the Crown regarding the Morrison Project through an Order made under Section 11 of the Environmental Assessment Act. Section 19.2 of the Order permits us to make a separate submission to you, to be submitted via the Environmental Assessment Office (EAO), if we do not believe that our Aboriginal rights have been adequately accommodated in keeping with the Crown's legal duties.

We write to you today because we disagree with the recommendation of the EAO in its Assessment Report (Report) to you that an Environmental Assessment Certificate (EAC) be granted to the Proponent, Pacific Booker Minerals, for the Morrison Project. In order to adequately accommodate our Aboriginal rights, we do not believe that an EAC should be granted at this time, and in this letter we tell you why.

1. Physical Location

The Morrison Project is named after its physical location on the shore of Morrison Lake. The open pit itself will be only 60 metres from Morrison Lake. Morrison Lake is very productive rearing habitat for sockeye, producing up to a million sockeye fry each year. This makes it one of the most important areas in the Skeena Watershed. Morrison Lake feeds into Lake Babine, which of course is connected to the Skeena River. Adjacent parts of Lake Babine have already been impacted by the Granisle and Bell Mines.

The Morrison Conservation Unit is the second largest sockeye producer in the Skeena Watershed. Morrison Lake is a large and critical part of the Conservation Unit.

In contrast to the EAO, we agree with the views of Environment Canada on the wide-ranging and cumulative impacts of the Morrison Project. While the EAO does not think that the Morrison Project will have impacts beyond Morrison Lake, Environment Canada believes that the Skeena Watershed stands to be impacted. Environment Canada also believes that the impacts of the Morrison Project on Lake Babine will be cumulative with those from the Granisle and Bell Mines. Again, we say that we agree with Environment Canada, and not with the EAO, on these significant issues.

Environment Canada views the proposed mine as a high risk project that has the potential to impact the water quality of the Morrison-Babine watershed, an area with high ecological values that is already being affected by existing closed mines. We therefore highlight the need for a low risk tolerance threshold when considering the potential effects of the Project.

Stephen Sheehan of Environment Canada to Robyn McLean, CEAA, 1 October 2010, page 1.

In recognition of its extreme importance to the sockeye salmon abundance of the Skeena system, upon which so many people Aboriginal and otherwise depend for sustenance, identity, and economics among other things, we are of the opinion that Morrison Lake should be off-limits to industrial development. We have nevertheless worked with the EAO and with CEAA to consider if the environmental assessment process, including mitigation measures, can adequately protect our Aboriginal rights against infringement.

We question the validity of the provincial approach to the environmental assessment process that does not place areas of immeasurable value like Morrison Lake under protection. We are of the opinion that a much more strategic and high level approach to environmental assessment is required.

2. Assessment Report

We have already provided the EAO with our detailed comments on their Draft Assessment Report. We must report to you that we believe there is a lack of scientific substance to the Report such that the conclusions of the EAO cannot be relied upon. There is a lack of credible scientific foundation for the EAO's findings of no significant adverse effects.

In large part, this is because much of the data necessary for a proper environmental assessment has not been gathered. Before you can manage something, you need to understand it. Morrison Lake, particularly with regard to the sockeye salmon to which our Aboriginal rights attach, is poorly understood. For example, the type and abundance of phytoplankton species upon which Morrison Lake juvenile sockeye depend has not been determined by the Proponent. However, the non-fishing bearing ponds of the mine site have been carefully sampled for phytoplankton.

While we recognize that the EAO, in the Table of Conditions, is directing the Proponent to collect further information on matters of importance to us, this is beside the point we are here making. A proper environmental assessment cannot be said to have been completed because basic information about Morrison Lake sockeye and their habitat has not been collected. We believe that the sockeye production capacity of Morrison Lake is the central environmental impact to model, control, and compensate for. How can we, or the EAO, assess whether the fishery resource and its habitat will be impacted when we don't know their current state? This is a bizarre basis upon which to move forward with a recommendation for an EAC.

Statements by the EAO throughout the environmental assessment process have praised the information brought to the process by the Skeena Fisheries Commission. Through SFC, the Gitksan have provided 2 expert reports, one on the importance of the Morrison/Tahlo sockeye and their contribution to the Skeena, and another on the impacts of cadmium and other mixed metal effluent on sockeye. We have given presentations on these reports, and invited further discussion and comment on them from the EAO. The EAO, in contrast, has not invited inquiry from us on the expert reports on which it relies. We have significant questions of a lake modelling expert upon whose report the EAO relied. A face-to-face meeting, or even a telephone conversation with Dr. Laval would have been much appreciated.

In all of our discussions with the EAO about water quality, reference has been made to the BC Water Quality Guidelines (BCWQG). In fact, in the July 16th meeting, the EAO Project Director stated that despite the conclusion of no significant adverse effects to water quality, there might be residual effects, but that changes to Morrison Lake water quality will meet BCWQG and as a consequence aquatic organisms won't be affected. Yet included in the Table of Conditions delivered to us with the other materials on June 22nd was reference to "*site specific water quality objectives established under the Environmental Management Act*". In further questioning about these objectives, the Project Director explained that they may be used when the BCWQG are too stringent.

We are not pleased that the EAO has introduced a potentially lower standard for Morrison Lake water quality at this late stage. We were not consulted on this change. We must be involved in any future permitting decisions involving the establishment of site specific water quality objectives for the Morrison Project.

While the EAO may be comfortable in operating from a working assumption that if the mine infrastructure is managed as required by the Table of Conditions, there should be no problems with Morrison Lake, we most certainly are not. We do not live in a perfect world, and there are any number of scenarios we can envision that would cause the Morrison Project to impact our food supply. We cannot allow this to happen.

Furthermore, how can we have confidence that the Table of Conditions will be adhered to through proper monitoring by the EAO and other provincial agencies? We note that in a report delivered in July of 2011, the provincial Auditor General was harshly critical of the EAO's ability to monitor and enforce conditions placed upon project proponents. This report carries considerable weight with us.

3. Consultation Failures

The EAO has concluded that "...the risk of adverse effects to lands and resources associated with the exercise of Gitksan and Gitanyow Nation's asserted aboriginal rights has been appropriately avoided or mitigated to the extent necessary to maintain the honour of the Crown." We cannot agree, and we say that there have been several significant failures in the consultation process that have failed to uphold the Crown's honour in this process.

Upon hearing further from the Gitksan and our technical advisors at the Skeena Fisheries Commission, the EAO revised its strength of claim assessment for us from low to moderate. We believe we ought to have been consulted at a high level. Nevertheless, for either level of consultation, the way the environmental assessment process unfolded, from our perspective, failed to give due recognition to our Aboriginal rights.

We object to an environmental assessment process that announces numerous tight deadlines to us for review and comment of extremely technical material. We were initially given 14 working days (later extended on our request to 19 working days), to review, understand and comment upon the material delivered to us on June 22nd. This was the typical pattern to most of our interaction with the EAO. While we appreciate that environmental assessment cannot take forever, the normal 180 day statutory timeline for review was wholly inapplicable to this Project, with its numerous suspensions. Given that documents were often provided to us during a time of suspension, we never had a good explanation from the EAO why we couldn't negotiate a more reasonable timeframe for review and comment. Deadlines seem to rule the process, including this final step of the date by which we needed to have this submission to you prepared.

Our representative attended 2 technical working group meetings held between September 2010 and January of 2011, the first on October 4th, 2010, and the second on January 25th and 26th, 2011. No technical working group meeting was held after this time. We rely on the free and transparent exchange of information offered at the Working Group meetings to inform ourselves, through our Skeena Fisheries Commission representative, of developments to the Project design and the views of other experts on these matters. We question why the valuable asset of the Working Group was not convened in the final 18 months of the environmental assessment process, both to assist the EAO and CEAA in their decision-making, as well as to inform Working Group members of ongoing discussions with the Proponent on design changes.

We were caught completely unawares by the EAO's delivery, on June 22nd, of over 700 pages of technical material on the Project, together with delivery of the Draft Assessment Report, and Draft First Nations Consultation Report. The technical material described detailed large design changes, in effect a whole new mine concept. The fact that EAO delivered its Draft Assessment Report to us at the same time that we received the extensive design changes is proof that the EAO didn't want to hear our view on the changes. Without any prior discussion or consultation with us, the EAO had already made up its mind that the design changes took care of our concerns. In fact, in a meeting held on July 16th, the EAO representative was quite reluctant to discuss these changes with us in any detail.

This is not meaningful consultation, and nor is it a meaningful approach to consultation. It is a foretold result in a process dictated by the EAO.

We say that the Working Group ought to have been convened by the EAO and CEAA to present the Proponent's design changes and have them discussed and debated as to their efficacy in mitigating the concerns of the Gitksan and others. Secondly, the EAO ought to have held a consultation session with us, prior to issuing its Draft Assessment Report, to hear our views on the design changes and to explain to us why the EAO has confidence that the changes address our concerns.

We maintain that the EAO process has not discharged the Crown's consultation obligation to us regarding the Morrison Mine Project. The Aboriginal rights here at stake involve our food supply and the quality of its critical habitat. From our perspective, a permanent decline in Morrison Lake water quality and its potential sockeye production is utterly unacceptable. The Morrison Lake fishery is extremely valuable to us, and we cannot allow anything to impact it. We believe the potential impacts of the Morrison Project could be severe, and we are unwilling to accept this infringement of our Aboriginal rights.

For all of these reasons, we urge you to decline issuing an Environmental Assessment Certificate to the Morrison Project at this time.

Yours truly,

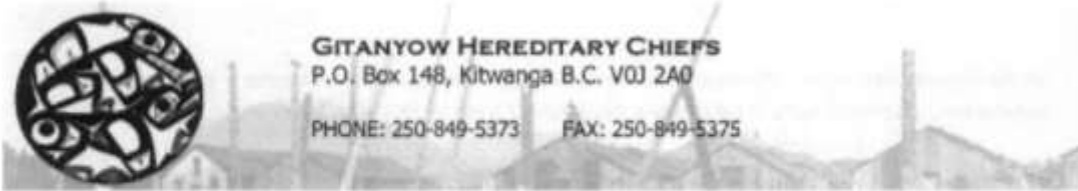


Beverley Clifton Percival, Negotiator
Gitksan Chiefs' Office

cc. Glen William, Chief Negotiator, Gitanyow Hereditary Chiefs' Office, via email only to glenwilliams1@hotmail.com

Daive Latremouille, Skeena Fisheries Commission, via email only to dlatremouille@skeenafisheries.ca

Robyn McLean, Canadian Environmental Assessment Agency, via email only to Robyn.McLean@ceaa-acee.gc.ca



August 2, 2012

The Honourable Terry Lake
Minister of the Environment

The Honourable Rich Coleman
Minister of Energy & Mines

Delivered via the Environmental Assessment Office, care of Chris Hamilton at Chris.Hamilton@gov.bc.ca

Dear Ministers:

Re: Application for an Environmental Assessment Certificate by Pacific Booker Minerals for the Morrison Copper/Gold Project

The Gitanyow first wrote to the Minister of the Environment about the Morrison Project on September 20th, 2010. We are very concerned that this mine's impacts will diminish salmon availability not only in Morrison Lake, but also in Lake Babine and the Skeena Watershed. We have constitutionally-protected Aboriginal rights to the Morrison Lake fishery and the clean water habitat that it provides, which rights build on our section 35.1 rights to food security and natural resource management. Morrison Lake provides between 3 and 8% of the sockeye salmon upon which the Gitanyow and the Gitksan rely for food.

The Gitanyow became formally engaged with the Crown regarding the Morrison Project through an Order made under Section 11 of the Environmental Assessment Act. Section 19.2 of the Order permits us to make a separate submission to you, to be submitted via the Environmental Assessment Office (EAO), if we do not believe that our Aboriginal rights have been adequately accommodated in keeping with the Crown's legal duties.

We write to you today because we disagree with the recommendation of the EAO in its Assessment Report (Report) to you that an Environmental Assessment Certificate (EAC) be granted to the Proponent, Pacific Booker Minerals, for the Morrison Project. In order to adequately accommodate our Aboriginal rights, we do not believe that an EAC should be granted at this time, and in this letter we tell you why.

1. Physical Location

The Morrison Project is named after its physical location on the shore of Morrison Lake. The open pit itself will be only 60 metres from Morrison Lake. Morrison Lake is very productive rearing habitat for sockeye, producing up to a million sockeye fry each year. This makes it one of the most important areas

in the Skeena Watershed. Morrison Lake feeds into Lake Babine, which of course is connected to the Skeena River. Adjacent parts of Lake Babine have already been impacted by the Granisle and Bell Mines.

The Morrison Conservation Unit is the second largest sockeye producer in the Skeena Watershed. Morrison Lake is a large and critical part of the Conservation Unit.

In contrast to the EAO, we agree with the views of Environment Canada on the wide-ranging and cumulative impacts of the Morrison Project. While the EAO does not think that the Morrison Project will have impacts beyond Morrison Lake, Environment Canada believes that the Skeena Watershed stands to be impacted. Environment Canada also believes that the impacts of the Morrison Project on Lake Babine will be cumulative with those from the Granisle and Bell Mines. Again, we say that we agree with Environment Canada, and not with the EAO, on these significant issues.

Environment Canada views the proposed mine as a high risk project that has the potential to impact the water quality of the Morrison-Babine watershed, an area with high ecological values that is already being affected by existing closed mines. We therefore highlight the need for a low risk tolerance threshold when considering the potential effects of the Project.

Stephen Sheehan of Environment Canada to Robyn McLean, CEAA, 1 October 2010, page 1.

In recognition of its extreme importance to the sockeye salmon abundance of the Skeena system, upon which so many people Aboriginal and otherwise depend for sustenance, identity, and economics among other things, we are of the opinion that Morrison Lake should be off-limits to industrial development. We have nevertheless worked with the EAO and with CEAA to consider if the environmental assessment process, including mitigation measures, can adequately protect our Aboriginal rights against infringement.

We question the validity of the provincial approach to the environmental assessment process that does not place areas of immeasurable value like Morrison Lake under protection. We are of the opinion that a much more strategic and high level approach to environmental assessment is required.

2. Assessment Report

We have already provided the EAO with our detailed comments on their Draft Assessment Report. We must report to you that we believe there is a lack of scientific substance to the Report such that the conclusions of the EAO cannot be relied upon. There is a lack of credible scientific foundation for the EAO's findings of no significant adverse effects.

In large part, this is because much of the data necessary for a proper environmental assessment has not been gathered. Before you can manage something, you need to understand it. Morrison Lake, particularly with regard to the sockeye salmon to which our Aboriginal rights attach, is poorly understood. For example, the type and abundance of phytoplankton species upon which Morrison Lake juvenile sockeye depend has not been determined by the Proponent. However, the non-fishing bearing ponds of the mine site have been carefully sampled for phytoplankton.

While we recognize that the EAO, in the Table of Conditions, is directing the Proponent to collect further information on matters of importance to us, this is beside the point we are here making. A proper

environmental assessment cannot be said to have been completed because basic information about Morrison Lake sockeye and their habitat has **not** been collected. **We believe that the sockeye production capacity of Morrison Lake is the central environmental impact to model, control, and compensate for.** How can we, or the EAO, assess whether the fishery resource and its habitat will be impacted when we don't know their current state? This is a bizarre basis upon which to move forward with a recommendation for an EAC.

Statements by the EAO throughout the environmental assessment process have praised the information brought to the process by the Skeena Fisheries Commission. Through SFC, the Gitanyow have provided 2 expert reports, one on the importance of the Morrison/Tahlo sockeye and their contribution to the Skeena, and another on the impacts of cadmium and other mixed metal effluent on sockeye. We have given presentations on these reports, and invited further discussion and comment on them from the EAO. The EAO, in contrast, has not invited inquiry from us on the expert reports on which it relies. We have significant questions of a lake modelling expert upon whose report the EAO relied. A face-to-face meeting, or even a telephone conversation, with Dr. Laval would have been much appreciated.

In all of our discussions with the EAO about water quality, reference has been made to the BC Water Quality Guidelines (BCWQG). In fact, in the July 16th meeting, the EAO Project Director stated that despite the conclusion of no significant adverse effects to water quality, there might be residual effects, but that changes to Morrison Lake water quality will meet BCWQG and as a consequence aquatic organisms won't be affected. Yet included in the Table of Conditions delivered to us with the other materials on June 22nd was reference to "*site specific water quality objectives established under the Environmental Management Act*". In further questioning about these objectives, the Project Director explained that they may be used when the BCWQG are **too stringent**.

We are not pleased that the EAO has introduced a potentially lower standard for Morrison Lake water quality at this late stage. We were not consulted on this change. We must be involved in any future permitting decisions involving the establishment of site specific water quality objectives for the Morrison Project.

While the EAO may be comfortable in operating from a working assumption that if the mine infrastructure is managed as required by the Table of Conditions, there should be no problems with Morrison Lake, we most certainly are not. We do not live in a perfect world, and there are any number of scenarios we can envision that would cause the Morrison Project to impact our food supply. We cannot allow this to happen.

Furthermore, how can we have confidence that the Table of Conditions will be adhered to through proper monitoring by the EAO and other provincial agencies? We note that in a report delivered in July of 2011, the provincial Auditor General was harshly critical of the EAO's ability to monitor and enforce conditions placed upon project proponents. This report carries considerable weight with us.

3. Consultation Failures

The EAO has concluded that "...the risk of adverse effects to lands and resources associated with the exercise of Gitanyow and Gitksan Nation's asserted aboriginal rights has been appropriately avoided or

mitigated to the extent necessary to maintain the honour of the Crown.” We cannot agree, Gitanyow *constitutionally-protected rights* have not been appropriately accommodated and we say that there have been several significant failures in the consultation process that have failed to uphold the Crown’s honour in this process.

Upon hearing further from the Gitanyow and our technical advisors at the Skeena Fisheries Commission, the EAO revised its strength of claim assessment for us from low to moderate. We believe we ought to have been consulted at a high level. Nevertheless, for either level of consultation, the way the environmental assessment process unfolded, from our perspective, failed to give due recognition to our Aboriginal rights.

We object to an environmental assessment process that announces numerous tight deadlines to us for review and comment of extremely technical material. We were initially given 14 working days (later extended on our request to 19 working days), to review, understand and comment upon the material delivered to us on June 22nd. This was the typical pattern to most of our interaction with the EAO. While we appreciate that environmental assessment cannot take forever, the normal 180 day statutory timeline for review was wholly inapplicable to this Project, with its numerous suspensions. Given that documents were often provided to us during a time of suspension, we never had a good explanation from the EAO why we couldn’t negotiate a more reasonable timeframe for review and comment. Deadlines seem to rule the process, including this final step of the date by which we needed to have this submission to you prepared.

We also note that the considerable value that SFC added to the environmental assessment process was not supported by funding from either the EAO or CEAA. While we recognize the payment of \$5000.00 to each of the Gitanyow and the Gitksan in January of this year from the EAO, this amount is a mere token in light of the fact that SFC estimates it has spent in excess of \$100,000.00 to date on the Morrison Project.

Our representative attended 2 technical working group meetings held between September 2010 and January of 2011, the first on October 4th, 2010, and the second on January 25th and 26th, 2011. No technical working group meeting was held after this time. We rely on the free and transparent exchange of information offered at the Working Group meetings to inform ourselves, through our Skeena Fisheries Commission representative, of developments to the Project design and the views of other experts on these matters. We question why the valuable asset of the Working Group was not convened in the final 18 months of the environmental assessment process, both to assist the EAO and CEAA in their decision-making, as well as to inform Working Group members of ongoing discussions with the Proponent on design changes.

We were caught completely unawares by the EAO’s delivery, on June 22nd, of over 700 pages of technical material on the Project, together with delivery of the Draft Assessment Report, and Draft First Nations Consultation Report. The technical material described detailed large design changes, in effect a whole new mine concept. The fact that EAO delivered its Draft Assessment Report to us at the same time that we received the extensive design changes is proof that the EAO didn’t want to hear our view on the changes. Without any prior discussion or consultation with us, the EAO had already made up its mind that the design changes took care of our concerns. In fact, in a meeting held on July 16th, the EAO representative was quite reluctant to discuss these changes with us in any detail.

This is not meaningful consultation, and nor is it a meaningful approach to consultation. It is a foretold result in a process dictated by the EAO.

We say that the Working Group ought to have been convened by the EAO and CEAA to present the Proponent's design changes and have them discussed and debated as to their efficacy in mitigating the concerns of the Gitanyow and others. Secondly, the EAO ought to have held a consultation session with us, prior to issuing its Draft Assessment Report, to hear our views on the design changes and to explain to us why the EAO has confidence that the changes address our concerns.

We maintain that the EAO process has not discharged the Crown's consultation obligation to us regarding the Morrison Mine Project. The Aboriginal rights here at stake involve our food supply and the quality of its critical habitat. From our perspective, a permanent decline in Morrison Lake water quality and its potential sockeye production is utterly unacceptable. The Morrison Lake fishery is extremely valuable to us, and we cannot allow anything to impact it. We believe the potential impacts of the Morrison Project could be **severe**, and we are unwilling to accept this infringement of our Aboriginal rights.

For all of these reasons, but most particularly because of the potentially disastrous impacts to our food supply, the Gitanyow Chiefs cannot support the Morrison Project. We believe further Working Group meetings need to occur so that the EAO's expert reports and the Proponent's latest design changes can be fully explained and considered. Further baseline studies are also required so the current state of Morrison Lake resources is better understood.

In closing, before you make your decision on issuing an Environmental Assessment Certificate, we would like to meet with you to explain our views on the Project and on the environmental assessment process.

Yours truly,



Glen Williams, Chief Negotiator
Gitanyow Hereditary Chiefs

cc. Beverley Clifton Percival, Negotiator, Gitksan Chiefs' Office, via email only to gwaans@gitksan.com

Davide Latremouille, Skeena Fisheries Commission, via email only to dlatremouille@skeenafisheries.ca

Robyn McLean, Canadian Environmental Assessment Agency, via email only to Robyn.McLean@ceaa-acee.gc.ca

Doug Donaldson, MLA Stikine, via email only to doug.donaldson.mla@leg.bc.ca

Nathan Cullen, MP Skeena Bulkley Valley, via email only to cullen@parl.gc.ca

In the matter of the
ENVIRONMENTAL ASSESSMENT ACT
S.B.C. 2002, c. 43
(Act)

and

in the matter of an
APPLICATION
for an
Environmental Assessment Certificate
(Application)

by

PACIFIC BOOKER MINERALS INC.
(Proponent)

for the

MORRISON COPPER/GOLD MINE PROJECT
(Proposed Project)

August 21, 2012

Ministerial Decision Record

In accordance with the provisions of section 17(3) of the *Environmental Assessment Act*, the Minister of Environment and the Minister of Energy and Mines and the Minister Responsible for Housing have considered the Assessment Report and the Recommendations of the Executive Director together with other specified matters or materials that they considered relevant to the public interest for the purpose of making a decision on the Application.

The Ministers hereby decide to issue ~~refuse to~~ issue an Environmental Assessment Certificate to the Proponent in response to the Application.



Minister of Environment



Minister of Energy and Mines and
Minister Responsible for Housing

Signed this 24 day of Sept., 2012.

In the matter of the
ENVIRONMENTAL ASSESSMENT ACT
S.B.C. 2002, c. 43
(Act)

and

in the matter of an
Application
for an
Environmental Assessment Certificate
(Application)

by

PACIFIC BOOKER MINERALS INC.
(Proponent)

for the

MORRISON COPPER/GOLD MINE PROJECT

ENVIRONMENTAL ASSESSMENT CERTIFICATE #M12-01

Whereas:

- A. The Proponent proposes to develop the project described in Schedule A to this Certificate (the "Project");
- B. On September 30, 2003, a Project Lead of Environmental Assessment Office issued an Order under section 10(1)(c) of the Act stating that an environmental assessment certificate was required for the Project and that the Proponent could not proceed with the Project in the absence of an assessment;
- C. The assessment of the Project was conducted from July 12, 2010 to August 20, 2012, and included consultations with First Nations and the public respecting the Application;
- D. Compliance with this Certificate, including its conditions, will be monitored by the staff of Environmental Assessment Office, and others who have been appointed as inspectors under the Act;
- E. Compliance activities will also be conducted in cooperation with other agencies of the Government of British Columbia in accordance with the Morrison Copper/Gold Mine Project Compliance Management Plan;
- F. On August 20, 2012, pursuant to section 17 of the Act, the Executive Director referred the Application, the assessment report and his recommendations to the undersigned; and,
- G. The undersigned have considered the Application, the Assessment Report and the recommendations of the Executive Director.

Now Therefore,

We issue this Environmental Assessment Certificate to the Proponent for the Project, subject to the following conditions and to the conditions set out in Schedule B.

Conditions

1. The Proponent must cause the Project to be designed, located, constructed, operated and decommissioned in accordance with the Conditions of this Certificate, Schedule A, and the Proponent's conditions in Schedule B, and must comply with all of the Conditions of this Certificate to the reasonable satisfaction of the Minister.
2. Where, in the reasonable opinion of the Minister, there is a conflict or inconsistency between Schedule A and the conditions in Schedule B, Condition 1 must be interpreted so that Schedule B will vary, repeal, rescind or supersede, as the case may be, the contents of Schedule A.
3. The Proponent must submit a report to the Executive Director on the status of compliance with the Conditions of this Certificate, and the conditions in Schedule B, at the following times:
 - (a) one month prior to substantially starting construction of any of the Project facilities;
 - (b) one month prior to operations;
 - (c) on or before December 31 in each year during which the Project is being constructed or operated;
 - (d) One month prior to the start of decommissioning; and,
 - (e) One month after the completion of decommissioning.
4. Where the Proponent, except in connection with the granting of security to project lenders or other financing entities or financing facilities, intends to sell, assign, transfer or grant an interest in this Certificate or the Project or change the holder's name on the Certificate, the Proponent must first apply for and obtain an amendment under section 19 of the Act.

Duration of Certificate

5. For the purpose of section 18(1) of the Act, the deadline is 5 years from the date set out below.

Honourable Terry Lake
Minister of Environment

Honourable Rich Coleman
Minister of Energy and Mines and Minister
Responsible for Housing

Issued this _____ day of _____, 2012

Certified Project Description

Here is the link for the full e-Pic version:

<https://projects.eao.gov.bc.ca/api/document/5886a781a4acd4014b81f935/fetch>

Version from the Affidavit of Derek Sturko

391

Schedule A

Certified Project Description

Table of Contents

1. INTRODUCTION.....	3
2. MORRISON PROPERTY	5
2.1 LOCATION	5
2.2 MINE PLAN	5
2.3 OPEN PIT	8
2.4 MINING METHODS.....	8
2.5 METALLURGY/PROCESSING.....	8
3. PROJECT FACILITIES.....	9
3.1 ON-SITE COMPONENTS	10
3.2 OFF-SITE INFRASTRUCTURE	26
4. PROJECT CONSTRUCTION	29
4.1 OVERVIEW OF CONSTRUCTION	29
4.2 CONSTRUCTION SEQUENCE FOR KEY FACILITIES.....	31
4.3 CONSTRUCTION MONITORING AND CONTROL.....	34
4.4 WATER MANAGEMENT	35
5. PROJECT OPERATIONS.....	36
5.1 OVERVIEW OF OPERATIONS.....	36
5.2 WATER MANAGEMENT	38
5.3 PRE-CLOSURE PHASE	39
5.4 SEDIMENT MANAGEMENT.....	40
5.5 TAILINGS MANAGEMENT	40
5.6 OPEN PIT	41
5.7 WASTE ROCK AND LOW GRADE ORE MANAGEMENT	41
5.8 ORE PROCESSING AND CONCENTRATE PRODUCTION	42
6. PROJECT CLOSURE & RECLAMATION.....	42
6.1 CLOSURE AND RECLAMATION OBJECTIVES.....	42
6.2 CLOSURE OF KEY FACILITIES.....	44
6.3 WATER TREATMENT PLANT AND DIFFUSER.....	47
7. ENVIRONMENTAL MANAGEMENT PLANS.....	50
7.1 GENERAL.....	50
7.2 ENVIRONMENTAL MANAGEMENT PLAN COMPONENTS.....	51

Table of Figures

FIGURE 1: PROJECT LOCATION	4
FIGURE 2: PROJECT LOCATION MAP	5
FIGURE 3: PROJECT ON-SITE COMPONENTS	7
FIGURE 4: PROJECT FOOTPRINT	9
FIGURE 5: FRESHWATER PUMP STATION AND PIPELINE	13
FIGURE 6: RELOCATED OVERBURDEN STOCKPILE PLAN AND PROFILE	15
FIGURE 7: WASTE ROCK STORAGE	17
FIGURE 8: OPERATION PHASE WASTE DUMP AND OPEN PIT CROSS-SECTION	18
FIGURE 9: TAILINGS STORAGE FACILITY PLAN AND SECTION	21
FIGURE 10: WATER MANAGEMENT CATCHMENTS, DIVERSIONS AND SEEPAGE COLLECTION PONDS	23
FIGURE 11: ROAD DRAINAGE	25
FIGURE 12: ROUTE VIA FOREST SERVICE ROAD FROM MORRISON MINE SITE TO BABINE BARGE	27
FIGURE 13: CONCENTRATE TRANSPORTATION ROUTE	28
FIGURE 14: CONSTRUCTION PHASE GENERAL ARRANGEMENT	30
FIGURE 15: CONSTRUCTION PHASE TAILINGS STORAGE FACILITY –PLAN	33
FIGURE 16: WATER MANAGEMENT SCHEMATIC – CONSTRUCTION PHASE	36
FIGURE 17: OPERATION PHASE GENERAL ARRANGEMENT	37
FIGURE 18: WATER MANAGEMENT SCHEMATIC - OPERATION PHASE	39
FIGURE 19: WATER MANAGEMENT SCHEMATIC - PRE-CLOSURE PHASE	40
FIGURE 20: CLOSURE PHASE GENERAL ARRANGEMENT	43
FIGURE 21: WATER MANAGEMENT SCHEMATIC – CLOSURE PHASE	44
FIGURE 22: CLOSURE PHASE PIT AREA PLAN AND SECTION	46
FIGURE 23: POST-CLOSURE - DISCHARGE PIPELINE AND DIFFUSER PLAN	49

1. INTRODUCTION

Pacific Booker Minerals Inc. (Proponent) proposes to develop the Morrison Copper/Gold Project (Project) in north-central British Columbia; latitude 55°11'24" N and longitude 126° 19'7" W. The Project site is on Crown land east of Morrison Lake (Figure 1: Project Location).

Schedule A

Certified Project Description

Table of Contents

1.	INTRODUCTION	4
2.	MORRISON PROPERTY	5
2.1	LOCATION	5
2.2	GEOLOGY OF THE MORRISON DEPOSIT	ERROR! BOOKMARK NOT DEFINED.
2.3	MINERALIZATION AND MINERAL RESOURCE	ERROR! BOOKMARK NOT DEFINED.
2.4	MINING LEASE	ERROR! BOOKMARK NOT DEFINED.
3.	MORRISON PROJECT	ERROR! BOOKMARK NOT DEFINED.
3.1	MINEABLE RESERVE	ERROR! BOOKMARK NOT DEFINED.
3.2	MINE PLAN	6
3.3	OPEN PIT	8
3.4	MINING METHODS	8
3.5	METALLURGY/PROCESSING	8
4.	PROJECT FACILITIES	9
4.1	ON-SITE COMPONENTS	10
4.2	OFF-SITE INFRASTRUCTURE	26
5.	PROJECT CONSTRUCTION	29
5.1	OVERVIEW OF CONSTRUCTION	29
5.2	CONSTRUCTION SEQUENCE FOR KEY FACILITIES	31
5.3	CONSTRUCTION MONITORING AND CONTROL	34
5.4	WATER MANAGEMENT	35
6.	PROJECT OPERATIONS	36
6.1	OVERVIEW OF OPERATIONS	36
6.2	WATER MANAGEMENT	38
6.3	PRE-CLOSURE PHASE	39
6.4	SEDIMENT MANAGEMENT	40
6.5	TAILINGS MANAGEMENT	40
6.6	OPEN PIT	41
6.7	WASTE ROCK AND LOW GRADE ORE MANAGEMENT	41
6.8	ORE PROCESSING AND CONCENTRATE PRODUCTION	42
7.	PROJECT CLOSURE & RECLAMATION	43
7.1	CLOSURE AND RECLAMATION OBJECTIVES	43
7.2	CLOSURE OF KEY FACILITIES	45
7.3	WATER TREATMENT PLANT AND DIFFUSER	49
8.	ENVIRONMENTAL MANAGEMENT PLANS	52
8.1	GENERAL	52
8.2	ENVIRONMENTAL MANAGEMENT PLAN COMPONENTS	53
9.	APPENDIX I - TABLE OF CONDITIONS	ERROR! BOOKMARK NOT DEFINED.

Table of Figures

FIGURE 1-1 _ MORRISON PROJECT LOCATION	4
FIGURE 2-1 _ AERIAL VIEW OF PROJECT SITE.....	ERROR! BOOKMARK NOT DEFINED.
FIGURE 2-2 _ PROPOSED MINERAL LEASE BOUNDARY	ERROR! BOOKMARK NOT DEFINED.
FIGURE 3-1 _ MORRISON PROJECT ON-SITE COMPONENTS OPERATION PHASE YEAR 18 7	
FIGURE 4-1 _ MORRISON PROJECT FOOTPRINT	9
FIGURE 4-2 _ FRESHWATER PUMP STATION AND PIPELINE	13
FIGURE 4-3 _ RELOCATED OVERBURDEN STOCKPILE PLAN AND PROFILE	15
FIGURE 4-4 _ WASTE ROCK STORAGE	17
FIGURE 4-5 _ OPERATION PHASE WASTE DUMP AND OPEN PIT CROSS SECTION	18
FIGURE 4-6 _ TAILINGS STORAGE FACILITY PLAN AND SECTION.....	21
FIGURE 4-7 _ WATER MANAGEMENT CATCHMENTS, DIVERSIONS AND SEEPAGE COLLECTION PONDS.....	23
FIGURE 4-8 _ OFF-LAKE CHANNEL LOCATIONS.....	ERROR! BOOKMARK NOT DEFINED.
FIGURE 4-9 _ OLYMPIC CREEK FISH ACCESS ENHANCEMENT MAP.....	ERROR! BOOKMARK NOT DEFINED.
FIGURE 4-10 _ ROAD DRAINAGE.....	25
FIGURE 4-11 _ ROUTE VIA FOREST SERVICE ROAD FROM MORRISON MINE SITE TO BABINE BARGE	27
FIGURE 4-12 _ CONCENTRATE TRANSPORTATION ROUTE	28
FIGURE 5-1 _ CONSTRUCTION PHASE GENERAL ARRANGEMENT.....	30
FIGURE 5-2 _ CONSTRUCTION PHASE TAILINGS STORAGE FACILITY – PLAN	33
FIGURE 5-3 _ WATER MANAGEMENT SCHEMATIC – CONSTRUCTION PHASE	36
FIGURE 6-1 _ OPERATION PHASE GENERAL ARRANGEMENT.....	37
FIGURE 6-2 _ WATER MANAGEMENT SCHEMATIC - OPERATION PHASE.....	39
FIGURE 6-3 _ WATER MANAGEMENT SCHEMATIC - PRE-CLOSURE PHASE.....	40
FIGURE 7-1 _ MORRISON MINE CLOSURE AND RECLAMATION.....	ERROR! BOOKMARK NOT DEFINED.
FIGURE 7-2 _ CLOSURE PHASE GENERAL ARRANGEMENT.....	44
FIGURE 7-3 _ WATER MANAGEMENT SCHEMATIC – CLOSURE PHASE	45
FIGURE 7-4 _ CLOSURE PHASE PIT AREA PLAN AND SECTION	48
FIGURE 7-5 _ POST – CLOSURE - DISCHARGE PIPELINE AND DIFFUSER PLAN	51

Table of Tables

TABLE 3-1 _ MINEABLE RESERVES..... ERROR! BOOKMARK NOT DEFINED.

TABLE 4-1 _ HABITAT BALANCE FOR MORRISON CREEK COPPER/GOLD PROJECT
ERROR! BOOKMARK NOT DEFINED.

1. INTRODUCTION

Pacific Booker Minerals Inc. (Proponent) proposes to develop the Morrison Copper/Gold Project (Project) in north-central British Columbia; latitude 55°11'24" N and longitude 126° 19'7" W. The Project site is on Crown land east of Morrison Lake (Figure 1: Project Location).



Figure 1: Project Location

The open pit mine will utilize conventional truck and shovel equipment. The ore production rate will be 30,000 tonnes per day or approximately 11 million tonnes of ore per year. The proposed treatment process will be a conventional crushing, grinding and flotation system resulting in the production of approximately 120,000 tonnes of concentrate per year containing copper and gold. A separate molybdenum concentrate will be produced.

Table of Conditions

<https://projects.eao.gov.bc.ca/api/document/5886a782a4acd4014b81f936/fetch>

3D computer simulation of proposed project

This video was created in 2009.
It does not reflect changes made in the plan in 2010.
It was included as part of the referral documents given to the Ministers in 2012.

Link to video: <https://vimeo.com/62265837>

In February 2017, we posted an up-to-date video that shows the Morrison Project location, the mine site plan, the processing plant and a tour of the main waterways between the project site and the Pacific Ocean.

The mine site plan shows the proposed open pit and tailings management facilities and shows the changes in those items over the anticipated life of the mine. The mine site plan as shown is based on technical information from the final reports submitted to the EAO.

Link to video at: <https://www.youtube.com/watch?v=2d7CIydPTd0>

FILE COPY



Environmental
Assessment Office

MEMORANDUM

file: 30200-20/MORR-10

Ref: 102073

September 20, 2012

Honourable Terry Lake
Minister of Environment

Re: Proposed Morrison Copper/Gold Mine Project

I am writing further to our September 18, 2012 meeting regarding the environmental assessment of the proposed Morrison Copper/Gold Mine Project. As you requested during the meeting, I have revised the document entitled *Recommendations of the Executive Director* in order to undertake the following:

1. provide clarification on pages 32 and 33 of 33 regarding the additional factors that I recommended you consider in addition to the Assessment Report; and,
2. provide clarification on page 4 of 32 that the \$50 million that would be contributed to the Provincial Gross Domestic Product during the 21 years of Project operations represents annual, and not total, revenue.

Attached for consideration is the updated *Recommendations of the Executive Director* with the above revisions incorporated. If you require any additional clarification, I would be pleased to provide it.

A handwritten signature in black ink, appearing to read "DSturko".

Derek Sturko
Associate Deputy Minister and Executive Director

Enclosures

cc: Honourable Rich Coleman
Minister of Energy and Mines and Natural Gas and Minister Responsible for
Housing and Deputy Premier

Steve Carr
Deputy Minister
Ministry of Energy and Mines and Natural Gas and Responsible for Housing

Cairine MacDonald
Deputy Minister
Ministry of Environment

Updated Recommendations of the Executive Director dated September 20, 2012

Here is the link to the document:

<https://projects.eao.gov.bc.ca/api/document/5886a78ca4acd4014b81f939/fetch>

CEA Agency in July 2011 on the new proposed Project information provided by the Proponent.

D. CONCLUSIONS

EAO is satisfied that:

- the Assessment process has adequately identified and addressed the potential adverse environmental, economic, social, heritage and health effects of the proposed Project, having regard to the successful implementation of the conditions and the mitigation measures set out in Schedule B to the draft EA Certificate;
- public consultation, and the distribution of information about the proposed Project, has been adequately carried out by the Proponent; and,
- the Crown has fulfilled its obligations for consultation and accommodation to Lake Babine Nation, Yekooche First Nation and Gitksan and Gitanyow Nations relating to a decision on whether to issue an EA Certificate for the proposed Project.

RECOMMENDATION:

I recommend Ministers consider the Assessment Report prepared by my delegate, which was an analysis of the technical aspects of the Project as proposed by the Proponent.

The Assessment Report indicates that, with the successful implementation of mitigation measures and conditions:

- the proposed Project does not have the potential for significant adverse effects; and,
- First Nations have been consulted and accommodated appropriately.

As set out in section 17(3)(b) of the Environmental Assessment Act, "[...] ministers may consider any other matters that they consider relevant to the public interest in making their decision on the Application [...]". Therefore, in addition to the technical conclusions presented in the Assessment Report, which assumes successful implementation of all mitigation strategies, I recommend Ministers consider a number of additional factors which were raised during the assessment of the proposed Project. In particular, I recommend that Ministers adopt a risk/benefit approach that considers the following factors in making a decision on whether to issue an environmental assessment certificate:

- the location of the proposed Project directly adjacent to Morrison Lake, which has a genetically unique population of sockeye salmon at the headwaters of the Skeena River that could be impacted if the Proponent's mitigation measures are unsuccessful;
- the long-term environmental liability and risk from the proposed Project to the environment, as well as financial risk and liability to the Province, particularly if:
 - the Proponent's operations and closure plans are unsuccessful; or,
 - the Proponent is unable to resource long term closure plans;

- the use of the dilution capacity of Morrison Lake as the primary means of mitigation for mine effluent, and in particular the "in-perpetuity" nature of water treatment and discharge into Morrison Lake;
- the anticipated long-term decline in water quality in Morrison Lake;
- the Proponent's currently limited knowledge about the physical limnology, behaviour and ecosystem of Morrison Lake, recognizing their mitigations depend upon certain assumptions regarding lake behaviour (e.g. lake turnover, flushing rates, etc).;
- input from the Ministry of Energy and Mines which highlights concerns such as:
 - the "in-perpetuity" environmental liabilities of the proposed Project;
 - the unprecedented scale of the bond that would be required;
 - inconsistency with provincial Metal Leaching/Acid Rock Drainage policy; and,
 - uncertainties related to the Proponent's proposed water treatment;
- input from the Ministry of Environment which highlights concerns with the following:
 - the "in-perpetuity" nature of water treatment;
 - the long-term maintenance of water treatment infrastructure; and,
 - the potential risks to fish populations and water quality if the Proponent's mitigations are unsuccessful or do not perform as predicted;
- opposition from Gitksan and Gitanyow Nations and Lake Babine Nation;
- the strength of claim of Lake Babine Nation, in particular their moderate to strong *prima facie* case for aboriginal title;
- the economic effects on the Province, including tax revenue and job creation; and,
- the Proponent's views regarding these additional factors.

I recommend that an Environmental Assessment Certificate not be issued to Pacific Booker Minerals Inc. in connection with its application for the Morrison Copper/Gold Mine Project.

Submitted by:

Derek Sturko
Associate Deputy Minister and Executive Director
Environmental Assessment Office

Email from Chris Hamilton to Kim Bellefontaine & Tania Demchuk

Metcalfe, Megan MEM:EX

From: Bellefontaine, Kim MEM:EX
Sent: Friday, January 24, 2014 1:14 PM
To: Demchuk, Tania MEM:EX
Subject: RE: lined tailings ponds

Thanks for finding. It would have taken me a lot longer I'm sure.

From: Demchuk, Tania MEM:EX
Sent: Friday, January 24, 2014 1:11 PM
To: Bellefontaine, Kim MEM:EX
Subject: FW: lined tailings ponds

From: Bellefontaine, Kim MEM:EX
Sent: Monday, September 17, 2012 10:32 AM
To: Hamilton, Chris EAO:EX
Cc: Demchuk, Tania MEM:EX
Subject: Re: lined tailings ponds

Hi Chris,

There are quite a few mines that have back filled reactive waste into mine workings during operations and at closure, but most of these are addressed progressively during operations. None are total backfill at closure Some examples:

- Kemess, Huckleberry, QR has placed PAG wastes in the tailings impoundment and into the open pit
- Mt. Polley, Willow Creek, Sullivan, Island Copper have/or will back fill some waste to their flooded pits
- Snip put some waste in the tailings impoundment
- Myra Falls has put tailings in an open pit and also has some underground backfill
- Quinsam has/will backfill reactive waste rock and tailings in open pits and underground
- extensive waste backfill is occurring or will occur at the 5 Elk Valley coal mines, and northwest mines (Quintette, Trend, Roman, Wolverine, Brule etc) principally to reduce contaminant release to the environment as well as reduce footprint.
- there are other examples as well; let me know if you need more.

In terms of the tailings pond lining question here's some information about sites. Most of these are newer or are planned.

- the Tulsequah mine plans to line the entire facility. It has not been permitted yet, but was part of the EA design.
- the new Quinsam coarse coal reject facility will be fully lined and is permitted and is in construction
- Kitcho and Silvertip are planning on completely lining their tailings facilities
- Craigmont has been permitted and will be lining the Treasure Mtn tailings
- Some facilities have partial liners or enhanced till blankets to reduce seepage through tailings dams for environmental reasons or for process use (Huckleberry's new facility, Red Chris for water reuse).

Let me know if you need anything else.

Cheers,
Kim

Kim Bellefontaine, M.Sc., P.Geo.

Manager Environmental Geoscience and Permitting
BC Ministry of Energy, Mines & Natural Gas
250-952-0489
Kim.Bellefontaine@gov.bc.ca

On 2012-09-17, at 9:46 AM, "Hamilton, Chris EAO:EX" <Chris.Hamilton@gov.bc.ca> wrote:

Hi Tania and Kim. Do either of you know if 1) any other mines in BC have every put waste rock back into open pit on closure and 2) any other mines with lined tailings ponds.

Thanks! We have a pre-brief with Minister Lkae on Morrison tomorrow in prep for the joint briefing next week.

Chris Hamilton

Executive Project Director
British Columbia Environmental Assessment Office
phone 250.387.1032 fax 250.387.2208 cel 250-213-9032

CEAA Commitment Letter



PACIFIC BOOKER MINERALS INC.

#1702 - 1166 Alberni Street Vancouver, BC V6E 3Z3

Telephone: (604) 681-8556

Toll Free: 1-800-747-9911

Fax: (604) 687-5995

mail: info@pacificbooker.com

Symbols: ~~bkm~~-tsx venture / ~~pbm~~-NYSE MKT

Website: pacificbooker.com

September 20, 2012

Robyn McLean
Project Manager
Canadian Environmental Assessment Agency
410-701 West Georgia St
Vancouver BC V7Y 1C6

**Re: Morrison Copper-Gold Mine Project, Pacific Booker Minerals Compliance with
Table of Commitments and Follow-up Program Requirements under CEAA**

This letter is intended to respond to the request made by the Canadian Environmental Assessment Agency to state categorically that Pacific Booker Minerals Inc. will comply with the environment related commitments summarized in the Table of Commitments [Comprehensive Study Report, Appendix E]. The Table of Commitments summarizes commitments made by Pacific Booker Minerals, through various environmental assessment and consultation activities to date related to the Morrison Copper-Gold Mine Project.

This letter is also intended to state categorically that Pacific Booker Minerals will undertake the Follow-up Program under the *Canadian Environmental Assessment Act* as specified in Section 9 of the Comprehensive Study Report prepared for the Morrison Copper-Gold Mine Project.

Sincerely,

for
William G. Deeks
Chairman

