From: Vidito,Lyndsay [CEAA]
Sent: June 29, 2016 3:06 PM
To: 'Didillon, Loic'
Cc: 'Mariana Trindade'; Howse Mine / Mine Howse (CEAA/ACEE); 'Mackenzie, Armand'; Atkinson,Mike [CEAA]; Kirstein,Friederike [CEAA]
Subject: Howse Project Information Requests (Part 2)

Hi Loic,

The Canadian Environmental Assessment Agency (Agency) has conducted a technical review of the Environmental Impact Statement (EIS) and associated EIS Summary for the proposed Howse Property Iron Mine Project and determined that addition information is required. As indicated in the Agency's correspondence of June 3, 2016, please find attached Part 2 of the Agency's Information Requests. The Information Requests have been compiled with consideration of comments from provincial and federal expert departments, as well as from the public and Indigenous groups. The timeline for the environmental assessment remains paused while information described in the attached document is being collected.

Please prepare responses to the attached Information Requests, in addition to those of June 3, 2016. Once you have submitted complete responses to all Information Requests, the Agency will take a period of up to 15 days to form an opinion on whether the requested information has been provided. If, at that time, the Agency determines the responses to be complete, it will commence a technical review of the additional information and the timeline for the environmental assessment will resume the following day. If the responses are determined to be incomplete, you will be notified at that time.

You are encouraged to discuss attached Information Requests with the Agency, and with government experts as applicable, prior to submission of your responses. We have a face-to-face meeting scheduled next Thursday, July 7, 2016, any questions or clarifications can be discussed at that time, or feel free to contact me in the interim.

Kind regards,

Lyndsay

# Howse Property Project EIS Technical Review: Part 2 June 29, 2016

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guideinies		General	
CEAA 1	CEAA	5(1) and 5(2)	6.5	7, 8	<ul> <li>Some criteria for significance were not defined in accordance with the Agency's OPS Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under CEAA 2012.</li> <li>Examples include: <ul> <li>The definition of the frequency criterion refers to timing considerations as opposed to frequency of an effect.</li> <li>The likelihood criterion should be defined in relation to whether or not an effect (not a project) would occur.</li> <li>In relation to subsistence and traditional activities, partially reversible is defined as an effect that would persist after decommissioning, but is expected to largely return to pre-Howse status (p. 8-28). The EIS states that effects on subsistence and traditional pursuits are partially reversible (p. 8-29), although the temporal</li> </ul> </li> </ul>	<ul> <li>Consider criteria for significance throughout the EIS and re-define the significance of the effects where required in accordance with the Agency's OPS <i>Determining Whether a Designated Project is Likely to Cause Significant Adverse Environmental Effects under CEAA</i> 2012.</li> <li>Explain during what timeframe effects must "reverse" in order to be considered fully or <i>partially reversible</i>?</li> <li>Provide rationale on how effects could be considered <i>reversible</i> when effects (e.g. loss of the land) persist past the temporal boundaries of 2024.</li> </ul>
CEAA 2	CEAA	All			Changes to the EIS effects analysis and significance determinations may occur as a result of addressing	<ul> <li>Review the EIS and revise the analysis based on information that has changed through the course of</li> </ul>
					the information requests. It is important to review	responding to information request.
					the EIS, in its entirety, to ensure that all analyses that	
					was based on the changed information is also	

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					revised, including effects assessments for other valued components, cumulative effects, accidents and malfunctions, etc.	
CEAA 3	CEAA IN-IR-1	5(1)(c) Aboriginal Peoples – Overall comment	6.3.4	Section 4, 7, 8	The EIS (Table 4-7) has a description of the concerns, questions and comments received from the Indigenous groups. However, there is no concordance of these comments with the proponent's response. Innu Nation noted that the concordance table included in the EIS (just following the table of contents) did not include many of the requirements listed in section 5 of the EIS Guidelines, in particular references to aboriginal engagement and concerns (p. 16-17).	<ul> <li>Describe how concerns from Indigenous groups were considered and potentially addressed, including mitigation measures.</li> <li>State where in the EIS of the analysis required in section 5 of the EIS Guidelines (aboriginal engagement and concerns) can be located. Provide missing information related to the requirements, if applicable.</li> </ul>
CEAA 4	NNK-1	5(1)(c) Aboriginal Peoples – Overall comment	6.3.4	7-14, 26 9-31	The Howse Mini-Plant is not clearly described in the EIS. Crushing, screening, drying and wet plant capabilities are described in the EIS and are assumed to be taking place in the Mini-Plant. However, it is not clear if all those activities will take place there.	<ul> <li>Describe the components and activities that would occur at the Howse Mini-Plant.</li> <li>If crushing, screening, drying and wet plant capabilities are not proposed at the Howse Mini-Plant, clearly describe the location where these activities would be taking place and the related potential for environmental effects in the area, and associated mitigation.</li> </ul>
					Air Quality	·
CEAA 5	CEAA IN-IR-26a	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	7.3.1.1, page 7- 13 9.1.1	The EIS states that the proponent expects to produce an action plan to reduce its greenhouse gas (GHG) emissions in spring 2016.	• Identify and describe what specific measures would be taken as part of the action plan to reduce GHGs, including the use of standard practices for reducing GHGs.
					Ine EIS states that the proponent would finalize an action plan for the reduction of GHGs following the acquisition of data on emissions from the Howse Project once the Howse plant is fully operational (dryer and wet plant).	<ul> <li>Indicate by how much is it anticipated that emissions of GHGs would be lowered as a result of implementing the measures?</li> </ul>
CEAA 6	NNK-10	All	6.6.2	7-13	The EIS states that climate change is affecting the ice- free period in the northern part of Nunavik but this is not the case around Schefferville, according to the	<ul> <li>Provide an analysis of whether climate change is now affecting the ice-free period around Schefferville.</li> <li>Update the effects analysis and determination of</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					Kawawachikamach Naskapi community (Tremblay 2006). Given that this reference is 10 years old, a more recent analysis should be provided.	significance, as applicable.
CEAA 7	NL – PPD -01 IN-IR 26d	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	Section 7.3.1.1, Table 7-3, Document Page 7-12	For the Howse mini-plant, 2 diesel burners for ore dryer are listed as 3719 L/hr operating 5110 hr/yr. The fuel usage is listed as 9 502 624 L/yr. However 3719 L/hr x 5110 hr/yr is 19 004 090 L/yr.	<ul> <li>Clarify calculations and how much total fuel would be used per year.</li> <li>Include how the revised calculation would affect the predictions of GHG emissions and potential effects analysis.</li> </ul>
CEAA 8	NL – PPD-02 IN-IR- 26d	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	Section 7.3.1.1, Table 7-4, Document Page 7-13	There are a number of calculation and summation errors in Table 7-4. For example, the total L/yr should not equal 348 million litres; the mini-plant CO <sub>2</sub> should be greater than 5601 Kt/yr.	<ul> <li>Review Table 7-4 for calculation and summation errors and correct, as appropriate.</li> <li>Present an updated table, with revised totals.</li> <li>Revise the analysis and conclusions, as appropriate taking into consideration updated calculations.</li> </ul>
CEAA 9	NL – PPD-04	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	Section 7.3.2.2.1, Document Page 7-26	The report states "considering the inputs to the air modelling study were conservative (e.g. worse-case), the noted exceedance for the single parameter NO <sub>2</sub> (24-hr) is highly unlikely to occur in reality."	<ul> <li>Provide information to justify the statement that exceedances are highly unlikely to occur in reality.</li> <li>Describe under which circumstances the worse-case scenario used for the modelling could occur.</li> </ul>
CEAA 10	NL – PPD-06	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	Appendix E1, Section 3.4, Page 3-7	Exceedances of the air quality standards are predicted; however there are no details on how the proponent plans to mitigate the exceedances; merely possibilities suggested.	<ul> <li>Describe the specific measures that would be implemented to mitigate exceedances of air quality standards, including adaptive management measures (i.e. what, when, change in effect) and air quality monitoring stations that would be located in the communities.</li> </ul>
CEAA 11	NL – PPD-08	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	Appendix E1, Appendix A	Emission rates for the diesel generators were calculated using the engine ekW (electrical kilowatt) rating. As emission rates are cited as g/hp-hr (grams per horsepower hour), the proponent applied a kW to hp conversion to obtain the emission rates. ekW, however, is based on generator output while hp is based on engine output, the difference being thermal efficiency. For a typical 1000 ekW unit for example, it can be shown that the engine would need to produce approximately 2650 kW (3550 hp). The thermal efficiency would be approximately 38%.	<ul> <li>Validate emission calculations and provide updated data.</li> <li>Update effects assessment, if required.</li> </ul>

IR	Dept	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guidelines			
					It appears that the emissions from the generators	
					may have been underestimated as electrical output	
					was used in the calculations as opposed to engine	
					output.	
CEAA 12	IN-IR-33	5(1)(c)(i) Aboriginal Peoples'	6.1.1	7-53	The proponent indicated that ISMC's plan for the	Provide a PDF copy of a mitigation plan developed
		Health/socio-economic			prevention and management of blast generated NOx	under the Code of Good Practice prepared by the
		conditions			would be prepared based on DSO project site-specific	Australian Explosive Industry and Safety Group Inc. to
					particularities and the Australian Code guidelines –	the Agency and Innu Nation.
					nowever, the web link with the reference material	
054440			6.2.4		provided to the innu Nation did not work.	
CEAA 13	HC-IR-24	5(1)(b) Transboundary	6.2.1	Appendix E-1-	In the noise assessment (Table 1), the Young Naskapi	• Explain why the location(s) of the various receptor
		5(1)(C)(I) Aboriginal Peoples	6.3.5	Air Dispersion	Camp 7 (R9) was evaluated as being 950 m from the	locations varied between the noise and air quality
		Health/socio-economic	6.3.4	Nodelling	Howse Site; the Young Naskapi Camp 3 (R10) site was	assessments.
		conditions		Report and	approximately 1000 m from the Howse mine site; the	Provide the revised distance of receptor locations for
				Area are alive E. 1	Naskapi-Dashat People's Camp (R13) was	air quality and noise assessment as appropriate.
				Appendix F-1 -	approximately 950 m from the Howse Mine Site; and	Update air quality and/or noise modelling results for
				Noise and	Kautelinat (R24) was approximately 2.1 km from the	specific receptors, as appropriate.
				Vibration	Howse Mine Site.	
				Report	In the sin quality assessment Table 2.14 identifies	
					In the air quality assessment, Table 2-14 identifies	
					distances then the pairs access at report. For	
					distances than the noise assessment report. For	
					example, R9 was considered to be 1.86 km from the	
					from the site and B24 was 1.48 km from the site	
					nom the site and K24 was 1.46 km nom the site.	
					Given that mining operations are expected to occur in	
					one central area which would create both dust and	
					noise it is unclear why these recentor locations	
					varied substantially between the air quality	
					assessment and the noise assessment	
<b>CFAA 14</b>	HC-IR-20	5(1)(b) Transboundary	621	Appendix F-1-	Several of the contour plots appear to be cut off	<ul> <li>Provide mans/isonleths that are of an appropriate scale</li> </ul>
	110 111 20	5(1)(c)(i) Aboriginal Peoples'	635	Air Dispersion	before concentrations dissinate to background levels	to visualize contaminant concentrations at the relevant
		Health/socio-economic	6.3.4	Modelling	(e.g. Figures 3.3, 3.4, 3.5, 3.9, 3.11, 3.12, and 3.15)	human recentor locations
		conditions		Report Figures	and as such, it is unclear what contaminant	<ul> <li>If modeling indicates that changes are required to the</li> </ul>

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CEAA 15	HC-IR-33 CEAA	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	3.3-3.15 EIS Section 3.2.7 and Appendix XVI – Air Quality	concentrations are predicted beyond the LSA. Additional information is required to evaluate the potential for elevated contaminant concentrations to be present outside the LSA and in the vicinity of human receptors (e.g. Schefferville and Matimekush). Information is required as the terrain is complex and isolated points do not give a complete visual picture. Additionally, local users of the land are not stationary so users could be more or less affected by emissions depending on the movement of the emissions. There appears to be an existing wash bay in the wash plant building. No commitment has been made to wash vehicles as they exit the project site to reduce the potential for off-site transport of iron-ore dust and/or soil from the project site. If vehicles may present a source of dust in the nearby communities, washing prior to departure from the mine site may be an appropriate mitigation measure, particularly during times of elevated dust generation at the site (e.g. summer, dry weather conditions, etc.). Alternatively, to minimize the potential for on-site vehicles to transport dust to these communities, specific vehicles could be dedicated to off-site transportate mitigation approach a source for the source off-site	<ul> <li>analysis and significance determination for any valued component, provide updated assessment, including rationale and revised mitigation measures.</li> <li>State whether the following mitigation measures would be implemented: <ul> <li>a. washing vehicles that have been used at the mine site and are covered with iron-ore dust before their departure to the nearby communities in order to reduce dust levels in these communities;</li> <li>b. using dedicated vehicles that are only driven between the mine site and the communities (i.e. not used for transportation at the mine site).</li> </ul> </li> <li>Comment on the need for installing any additional wash bays at the mine site or elsewhere.</li> </ul>
CEAA 16	ECCC-IR-	5(1)(b) Transboundary	6.1.1, 6.6.3	Air Dispersion	the active mine site. While the background values provided for particulate	Provide information on the frequency and nature     (provalent times, locations) of dust events (recognizing)
		Health/socio-economic conditions		Report, Sec. 2.3.5, P. 2-13; Appendix G, P. 254, Table 1 Sec. 8.3, p 8-1 to 8-4	have raised the fact that they are occasionally adversely affected by dust from current and legacy operations in the area. Based on the information provided by the communities, it is probable that these dust events would result in ambient concentrations above the background levels	<ul> <li>we are not asking for them to be quantified and modelled).</li> <li>Discuss how those events could be either prevented, limited or mitigated.</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale		Specific Question/ Request for Information
					presented in the EIS.		
CEAA 17	ECCC-IR- 16	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1	Air Dispersion Modelling Report – Sec. 2.4, pp 2-16 to 2-17 Appendix A, starting on P. 107 CEA 8.3, p 8-1 to 8-4	The air emissions section is generally well-done and well-referenced. However, emission factors related to wind-blown sources and operations, such as loading and conveying, tend to have much higher degrees of uncertainty than the fuel and transportation-based factors. As these sources tend to dominate the overall particulate matter emissions, it is important to understand these uncertainties and how they are addressed to fully understand the modelling results.	•	Comment on the inherent uncertainties of the emission factors for non-fuel and non-transportation based emission sources and the effect they would have on the model output.
CEAA 18	ECCC-IR- 17	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1	Air Dispersion Modelling Report – Table 2.4, p 2-15	The dustfall data was taken from the Voisey's Bay Mining site, which, unlike the Howse pit region does not have any unmanaged, legacy pits which would contribute to overall dust deposition. A good estimate of the dust deposition is important to understand any potential cumulative effects.	•	Comment on the rationale for choosing data from the Voisey's Bay site and provide a discussion on the potential for underestimating the dust deposition due to differences between the two project areas. If applicable, provide an analysis of the adverse effects that may be unique to this Project due to legacy operations, including cumulative effects. If additional adverse effects are possible, as compared to Voisey's Bay, describe mitigation measures that would be implemented to address these effects, and indicate if additional analysis results in changes in the determination of significance.
					Noise		
CEAA 19	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(b) Federal Lands /Transboundary 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions	6.3.5 6.3.1 6.3.2	7.3.3.1, 7-57 7.3.3.4, page 7- 72 7.4.3.4, Page 7- 212	It is unclear whether predicted noise levels reflected noise from blasting, in particular future scenario noise level (dBa) and impact (dBa). For example, a noise impact of 5 dBa was predicted at Receptor R13.	•	State whether or not noise from blasting was considered in each of the significance criteria. If the noise of blasting was not included in the assessment, provide information for each receptor to include blasting and associated analyses relating to the likelihood of significant effects.
CEAA 20	HC-IR-26	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds	6.3.5 6.3.1 6.3.2	Appendix F-1 - AECOM Noise and Vibration	Table 1 identifies all of the receptor locations evaluated in the noise and vibration assessment.	•	Provide additional justification that the acceptable regulatory noise criteria are appropriate for ceremonial/sacred sites where a higher level of peace

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
		5(1)(b) Federal Lands /Transboundary 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions		Report Table 1	Although it is stated that the noise levels at Kauteitnat would meet regulatory criteria during operation, given that it is a sacred site, there may be a higher expectation of peace and quiet at that location than what is required in the regulatory guidelines. Additional justification is needed to validate the appropriateness of using NL and QC Guidelines and Health Canada's % change in highly annoyed (HA) to evaluate the acceptability of noise levels at ceremonial sites.	<ul> <li>and quiet may be warranted.</li> <li>Describe the timing, frequency and duration of visits to Kauteitnat, including the types of activities that are expected to occur at the site (e.g. prayers, other ceremonies where loud noises would be disruptive to traditional practices, etc.).</li> <li>Determine whether or not additional noise mitigation measures may be required when traditional activities are carried out at these more noise-sensitive locations and justify your response.</li> </ul>
CEAA 21	HC-IR-27	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(b) Federal Lands /Transboundary 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions	6.3.5 6.3.1 6.3.2	Appendix F-1 - AECOM Noise and Vibration Report, page 4	The equation presented to calculate day-night sound level ( $L_{dn}$ ) appears to be incorrect. Instead of 90 in the equation, it should be 9 to represent 9 hours of night-time in the calculation of day-night sound levels.	<ul> <li>Confirm that the correct equation and values were used to calculate L<sub>dn</sub> (e.g. that 9 was used instead of 90 when calculating the actual L<sub>dn</sub> values). If incorrect values were used, re-calculate L<sub>dn</sub> and update the analysis and significance predictions, as appropriate.</li> </ul>
CEAA 22	HC-IR-28	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(b) Federal Lands /Transboundary 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions	6.3.5 6.3.1 6.3.2	Appendix F-1 - AECOM Noise and Vibration Report Section 4.1.4	The report recommends that additional mitigation measures be implemented in the event of public complaints about drill noise.	<ul> <li>Explain the specific circumstances under which the proponent commits to implementing additional mitigation measures relating to drill noise complaints.</li> <li>Would actions depend on the number of complaints or based on receiving any complaint?</li> <li>Would actions implemented as a result of a complaint be permanent or temporary in nature?</li> <li>What actions will be taken so that the public and Indigenous groups will know where and how raise concerns?</li> <li>Will complaints be documented?</li> <li>Describe the additional mitigation measures and the anticipated reduction in environmental effects.</li> </ul>
CEAA 23	HC-IR-29	5(1)(a)(i) Fish and Fish Habitat	6.3.5 6.3.1	Appendix F-1 - AECOM Noise	With respect to construction noise, additional construction noise mitigation measures, such as	<ul> <li>Review the New South Wales document and state whether any specific measures would be implemented</li> </ul>

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Number	Number		guidelines			
		5(1)(a)(iii) Migratory Birds	6.3.2	and Vibration	those presented in the Department of Environment &	to reduce noise levels and how they would contribute
		5(1)(b) Federal Lands		Report	Climate Change, New South Wales. July 2009. Interim	In mitigating hoise levels.
		/ Iransboundary			Construction Noise Guideline, available at:	
		5(1)(c)(i) Aboriginal Peoples			http://www.epa.nsw.gov.au/resources/noise/09265c	
		Health/ socio-economic			ng.pdf, may also be appropriate to reduce noise	
		conditions			levels to acceptable levels.	
		1	T	Acci	dents/Effects of the Environment	
CEAA 24	ECCC-IR-	5(1)(a)(i) Fish and Fish	6.2.2.	Appendix IV -	Infrastructure Design Criteria:	<ul> <li>Confirm that surface drainage facilities would be</li> </ul>
	11	Habitat	6.3.1	Technical Note,	Water management infrastructure is reported to be	designed to handle peak conditions equivalent to at
				Water	sized for a design flood with a return period of 100	least a 100-year flood event.
				Management	years for the conveyance capacity of ditches (Section	<ul> <li>If not, how would the effects from exceeding</li> </ul>
				Plan-	7.1.2), but of 25 years for the treatment capacity of	the capacity of the facilities during peak
				Conceptual	sedimentation ponds (Section 7.3.2). The 2009	conditions be mitigated?
				Engineering for	Environmental Code of Practice for Metal Mines (the	
				Howse Water	Code) recommends that surface drainage facilities be	
				Management	designed to handle peak conditions at least	
				Plan.	equivalent to a 100-year flood event (refer to Code	
				Section 7.	R304).	
					Environment and Climate Change Canada	
					understands that the proposed design would allow	
					for the removal of sediments in mine-drainage water	
					for runoff events with return periods of up to 25	
					years, and that part of the runoff generated by larger	
					events would exit via the spillway without any	
					treatment.	
CEAA 25	CEAA	5(1)(a)(i) Fish and Fish	6.2.1	6.5.4.1 and	The EIS states that "the worse-case scenario for	Clarify whether or not the explosions discussed in
		Habitat	6.6.1	6.5.4.2	explosives is considered to be the detonation of a full	6.5.4.2 is, in fact, the full magazine as discussed in
		5(1)(a)(iii) Migratory Birds,			Operation phase explosives magazine". Then, in	6.5.4.1.
		5(1)(b) Federal Lands /			6.5.4.2, it states that "an unplanned explosion is not	<ul> <li>If not, please provide additional information,</li> </ul>
		Transboundary			expected to emit more elements into the air than a	such as quantities of explosives (planned vs
		5(1)(c)(i) Aboriginal Peoples			planned explosion. As such, it is expected to have the	whole magazine) and estimates of the fly-rock
		Health / socio-economic			same adverse environmental effects as for a planned	radius and emissions, to substantiate the
		conditions			explosion" On its face, the assertion that the effects	statement that "an unplanned explosion is not
					of the explosives magazine blowing up would be no	expected to emit more elements into the air

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			guacines		<ul> <li>different than a planned blast does not seem credible, if that is in fact what is being claimed.</li> <li>6.5.4.2 further states, with regard to possible adverse effects of vibrations on fish and fish egg mortality, that "unplanned explosion is not expected to cause adverse effects on fish since it is not expected to occur outside of the pit."</li> </ul>	<ul> <li>than a planned explosion."</li> <li>Revise the analysis and effects assessment, as appropriate.</li> <li>Provide information and rationale as whether an explosion of the full magazine would cause more energy to be transmitted to fish-bearing waters through the ground than a planned explosion.</li> <li>Update the assessment of associated effects, proposed mitigation measures, and determination of significance, as appropriate.</li> </ul>
CEAA 26	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds, 5(1)(c)(i) Aboriginal Peoples Health / socio-economic conditions	6.6.1	6.5.7.1.2 and 6.5.7.3.2.	Both sections 6.5.7.1.2 and 6.5.7.3.2 refer to section 6-14 (presumably meaning page 6-14) to see discussion of effects of road accidents on valued components, However, there is almost no discussion of the topic on page 6-14.	<ul> <li>Provide an analysis of the effects of road accidents on valued components, including spills, collisions with wildlife, air quality, and collisions with other vehicles.</li> <li>Propose mitigation measures and predict the significance of road accidents, as appropriate.</li> </ul>
					Alternatives	
CEAA 27	HC-IR-23 IN-IR-4d	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	Appendix E-1 - Air Dispersion Modelling Report Section 3.4 and EIS - Section 2.5	The conclusion Appendix E-1 indicates that to reduce air contamination at the worker camp, one solution would be to find an alternative to the presence of diesel generators. No more information was provided about the alternatives that may be considered and the effectiveness of these alternatives in reducing air impacts at the worker camp. Section 2.5 of the EIS states that <i>"there are no technically feasible alternatives to the following</i> <i>Activities power supply</i> ". Thus, it is unclear how an alternative to diesel generators would be identified given that the proponent indicates that there is no alternative to diesel generators for supplying power to the project site.	<ul> <li>Provide information and rationale on whether or not technically and economically feasible alternative power sources are being considered in order to reduce air contaminant emissions.</li> <li>If there are technically and economically feasible alternative power sources (including supplemental power sources), evaluate the environmental impacts of the alternative on valued components, in particular with respect to air quality and human health and greenhouse gases.</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					economic perspective to operate the proposed Project (and the DSO complex) exclusively with diesel power. Innu Nation noted that supplementing diesel power with lower emitting alternatives (e.g. wind) is not uncommon practice for remote mines in Canada. Examples include the Raglan Mine, and the Diavik Diamond Mine.	
CEAA 28	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	2.2	Section 2.5.7, page 2-18	Additional information is required to support and substantiate statements related to the two possible routes for trucks that would carry explosives to the project site from the DSO3 site.	<ul> <li>Comment on whether there are any potential environmental effects in addition to effects on air quality from the transport of explosives, such as those from accidents (e.g. leaks). If so, include these in the assessment of environmental effects from accidents and malfunctions, including identifying how these effects would be mitigated.</li> <li>Explain the connection of how the rate of accidents along route E1 or E2 could impact Indigenous groups and how the reduction of that rate would reduce effects on Indigenous groups (as noted in the EIS). Clarify if these impacts are connected to effects on indigenous health, current use of the lands for traditional purposes, or other effects under CEAA 2012. If so, include these effects as part of the assessment of accidents and malfunctions and other applicable valued components, including identifying how these effects would be mitigated.</li> </ul>
CEAA 29	IN-IR-5d	5(1)(a)(iii) Migratory Birds, 5(1)(a)(i) Fish and Fish Habitat 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.2.3	2.5.2	In the proponent's response to Innu Nation it was stated that an optimized Project design already greatly reduces the Project footprint within wetlands by avoidance, particularly areas at lower elevation, where most wetlands are located. Other potential waste dump locations were not retained by the proponent because of their much greater distance from the Howse pit. Beside obvious economic reasons not to retain waste dump sites located further away also came into consideration	<ul> <li>Comment on the new information raised by Innu Nation and provide additional analysis of the environmental costs and benefits of alternative waste rock disposal sites.</li> </ul>

IR	Dept	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guidelines		environmental reasons such as increase of diesel consumption by heavy machinery (greenhouse gas emission, air quality decrease, noise increase) and increase of dust emission from haul road (air quality decrease). The Timmins 4 open pit would not be considered for waste disposal because it is habitat for the bank swallow. The Innu Nation advised that the Timmins 4 pit is located directly adjacent to the proposed waste rock stockpile in Figure 2-1. The suggestion that this location is "located further away" appears to have little merit, and disposal in the existing pit would also lower long-term maintenance and rehabilitation costs. The wetland overlain by the proposed waste rock stockpile (i.e. wetland 10) would likely provide far more valuable habitat for a wide variety of species than any habitat recently provided to bank swallows by the Timmins 4 pit	
CEAA 30	IN-IR-7	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes 5(1)(c)(i) Aboriginal Peoples Health/ Alternative means	2.2	2.5.8, 2.5, figure 2.2	Section 2.5.8 of the EIS indicates that the proponent would not blast in winter. Section 2.5 and Figure 2.2 appear to suggest that a dryer is essential to the project for the purpose of drying ore in winter.	• Clarify whether blasting and shipping would occur in winter, whether a dryer is required, and if there are additional environmental effects associated with winter operations. Describe the mitigation for addressing any additional environmental effects.
CEAA 31	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes 5(1)(a)(iii) Migratory Birds	2.2	2.5.3, page 2-13 Chapter 7	Where the proponent has not made final decisions concerning the placement of project infrastructure, the technologies to be used, or that several options may exist for various project components, it should conduct an environmental effects analysis at the same level of detail for the various options under consideration. Because the proponent has not identified a preferred bypass road alternative, the effects of each road	<ul> <li>Describe the environmental effects of the construction, operation and maintenance of each bypass road alternative in relation to valued components. This analysis should include consideration of associated noise, light, and air emissions; extent and type of habitat lost; and associated impacts on species (e.g. migratory birds, species used by Indigenous peoples). In addition, the assessment must consider potential effects on Indigenous peoples (e.g. effects on archeological sites from road clearing).</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
			guiveninco		alternative require an assessment. As it stands, the information in the EIS does not meet this requirement. For example, the analysis of effects on wetlands (in the EIS) omits consideration of clearing required for road alternative 2.	<ul> <li>Explain whether assessment of the bypass road alternatives affects the delineation of study areas.</li> <li>Describe proposed mitigation measures in relation to potential effects of road alternatives.</li> <li>Update determinations of the significance of associated effects, as appropriate.</li> </ul>
CEAA 32	CEAA	5(1)(a)(i) Fish and Fish Habitat	2.2	Section 2.5.6, page 2-18	The EIS is missing an assessment of effects of coagulant.	<ul> <li>Explain under what conditions the proponent would use chemical treatment for total suspended solids, and under what conditions such treatment would be stopped?</li> <li>Assess the environmental effects of using coagulant.</li> </ul>
CEAA 33	CEAA	5(1)(b) Federal Lands /Transboundary (GHGs) 5(1)(c)(i) Aboriginal Peoples Health/ Alternative means	2.2	Appendix VI, Standard Mitigation Measures, Table 1.1	TM16 indicates the proponent would determine the most suitable method of disposing of logging and commercial wood waste (e.g. in swaths, chipping, burning, elimination at an authorized disposal site). To understand the effects of each of the wood waste disposal options on the environment, the options need to be evaluated and considered in the Alternatives assessment.	<ul> <li>Present an analysis of the environmental effects, and any associated mitigation measures, of wood waste disposal alternatives as part of the alternatives assessment.</li> <li>Indicate which alternative is preferred and provide the associated rationale.</li> </ul>
				li	ndigenous - Impacts on Health	
CEAA 34	HC-IR-19	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	Appendix E-1- Air Dispersion Modelling Report Figure 2.2 and Section 2.4.1.3	According to Figure 2.2 and Section 2.4.1.3, emissions (vehicle engine and road dust) from personnel vehicles were evaluated only at the Project site (which includes the Howse deposit, DSO3, and ore being hauled from DSO4 to the Main Plant). No personnel or other Project-related vehicle emissions were evaluated for commuting on other roads outside of this perimeter. For example, project- related vehicles driving through the nearby communities such as Schefferville and Matimekush- Lac John were not considered in the air quality evaluation. Given the public concern associated with dust generated by mining in communities (e.g. by vehicles transporting iron-ore dust), it is important to assess this potential effect.	<ul> <li>Conduct an assessment of the effects of Project-related emissions on human receptors, outside of the Project area. This assessment must include consideration of: the transportation of Project iron-ore dust to off-site locations, including Schefferville and Matimekush-Lac John; dust generated from unpaved roads; and vehicle-related emissions.</li> <li>Update the effects assessment, proposed mitigation measures and determination of significance, as appropriate.</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
CEAA 35	HC-IR-1	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	Appendix D-1 – HHRA – Section 2.5.1 and Section 2.5.3	<ul> <li>Section 2.5.1 presents the substances that were screened in as potential contaminants of concern (PCOCs). Ten metals were screened in. No criteria air contaminants, such as NO<sub>2</sub>, SO<sub>2</sub>, or fine particulate matter were identified as having been screened in. However, in Section 2.5.3, for inhalation exposure, PM<sub>10</sub> is identified as being evaluated.</li> <li>NO<sub>2</sub> is an acute respiratory irritant and scientific studies have found no evidence for a threshold for population-level health effects associated with NO<sub>2</sub> exposure (meaning that health effects may occur at any level of exposure).</li> <li>Fine particulate matter is also considered to have no threshold. The International Agency on Cancer Research (IARC, 2013) has recently classified particulate matter as being carcinogenic to humans (Group 1).</li> <li>Health Canada (2016) has recently released a human health risk assessment (HHRA) for SO<sub>2</sub> which presents a proposed 10 minute reference concentration of 67 parts per billion (or 175 µg/m<sup>3</sup>) in air which is expected to be protective of human health.</li> <li><b>References:</b> <ol> <li>International Agency for Research on Cancer (IARC). 2013. IARC: Outdoor air pollution a leading environmental cause of cancer deaths. Press Release No. 221, dated October 17. http://www.iarc.fr/en/media-centre/pr/2013/pdfs/pr221_E.pdf</li> <li>Health Canada. 2016. Human Health Risk Assessment for Sulphur Dioxide (CAS RN: 7446-09-5).</li> </ol> </li> </ul>	<ul> <li>Explain why no criteria air contaminants (CACs) other than PM<sub>10</sub> (such as NO<sub>2</sub>, SO<sub>2</sub> and PM<sub>2.5</sub>) were screened in and evaluated in the HHRA, given that some of them are acute respiratory irritants, have no threshold (e.g. NO<sub>2</sub> and PM<sub>2.5</sub>), and were identified as exceeding regulatory criteria in the Air Dispersion Modelling Report (Appendix E-1), and as such, even short-term (acute) exposure can result in adverse health effects.</li> <li>In relation to the selection of air quality standards/objectives, Review <i>Health Canada, 2016</i>, and any other relevant literature sources, to compare to current and predicted future contaminant concentrations, revise the analysis with respect to air quality standards/ objectives, as applicable.</li> <li>Evaluate potential health effects in the HHRA of any substances exceeding applicable criteria. Present results in association with analysis, mitigation measures and conclusions.</li> <li>With respect to effects on the health of Indigenous Peoples, describe how the existing health of the population twas considered as part of the analysis. For example, if there are increased rates of respiratory problems, or other health issues, than general population they may be more susceptible to effects from the Project or from cumulative effects. How was this vulnerability considered with respect to air quality? If this was not addressed as part of the analysis, indicate what additional effects may be present that were previously unaccounted for, if any, and what is the approach to manage these effects.</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					Analysis of Ambient Exposure to and Health Effects of Sulphur Dioxide in the Canadian Population. Water and Air Quality Bureau, Safe Environment Directorate, Healthy Environments and Consumer Safety Branch, Health Canada. January.	
CEAA 36	HC-IR-4	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Appendix D-1 – HHRA – Section 2.6.1.1	The report states that "Incremental Lifetime Cancer Risks (ILCR) were calculated assuming an exposure regime of 16 weeks per year at 90 <sup>th</sup> percentile of blast (1 day per week) and no blast (6 days per week) annual daily maximum values for PM <sub>10</sub> . The remaining 36 weeks were assumed to be at baseline dose rates. The time-weighted dose rate (16/52 + 36/52) is not amortized over the lifetime and an ILCR is calculated (i.e. an individual is conservatively assumed to spend 16 weeks per year at the site for all 80 years of their life)". This approach may be applicable for substances that do not have acute health effects at the concentrations predicted. However, for substances that may have acute effects or for which no threshold exists, any elevated exposure may result in adverse health effects. Additional explanation about this approach to evaluating carcinogens is needed to determine whether the approach taken is conservative in the assessment of human health risks. Additional explanation about which substances were evaluated as carcinogens is needed	<ul> <li>Explain whether the assessment conservatively evaluated human health risks to substances with acute effects and for where no threshold exists (i.e. where any elevated exposure may result in adverse health effects). If the assessment is not adequately conservative, the HHRA should be re-evaluated for those specific substances.</li> <li>Provide additional explanation about how short-term exposure to carcinogens which have acute effects were evaluated.</li> <li><b>Reference:</b> International Agency for Research on Cancer (IARC). 2013. IARC: Outdoor air pollution a leading environmental cause of cancer deaths. Press Release No. 221, dated October 17. <u>http://www.iarc.fr/en/media- centre/pr/2013/pdfs/pr221_E.pdf</u></li> </ul>
CEAA 37	HC-IR-22	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.2.1 6.3.5 6.3.4	Appendix E-1- Air Dispersion Modelling Report Table 3- 1	Table 3-1 presents receptor locations where applicable ambient air quality criteria may be exceeded for total suspended particulate, PM10, NO2.Below the table, the report states that "at some grid receptors, the following averaging periods and air pollutants could exceed air quality assessment:	• Provide a discussion about the location(s) and numbers of exceedances for PM <sub>2.5</sub> , SO <sub>2</sub> , and CO in order to determine whether adverse health effects may be possible at the predicted concentrations at the various grid receptor locations.

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					<ul> <li>"With blasts" scenario: 24-hr (TPM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>), 1-hr (NO<sub>2</sub>, SO<sub>2</sub>, CO);</li> <li>"Without Blasts" Scenario: 24-hr (TPM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>), 1-hr (NO<sub>2</sub>)"</li> <li>Although PM<sub>2.5</sub>, SO<sub>2</sub> and CO are mentioned in the text, the predicted concentrations were not presented in either Table 3-1 or in Table 3-2 which describes the frequency of exceedances at sensitive receptors.</li> </ul>	
CEAA 38	HC-IR-32	5(1)(b) Transboundary 5(1)(c)(i) Aboriginal Peoples' Health/socio-economic conditions	6.3.4	Appendix VI – Table 7.1 #CE15	CE15 states that for dust control, "the dust-control liquid used must comply with GNL regulations." No additional information about the specific products that are being considered or the MSDS sheets associated with these products, including human toxicological information, was presented.	<ul> <li>Provide chemical information, including specific product names, active ingredients and toxicity information (such as can be found on an MSDS sheet) about the products that are being considered for dust control.</li> <li>Confirm that the type of product to be used will respect relevant regulations.</li> <li>If chemicals were not included in the effects assessment, provide analysis to indicate potential human and environmental effects related to the use of the chemicals.</li> </ul>
CEAA 39	HC-IR-2	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Appendix D-1 – HHRA – Table 2.2	<ul> <li>Table 2.2 indicates that the selected human receptors would spend 1.5 hours/day outside. This is a value that is intended to represent the arithmetic mean for the general Canadian population (Richardson, 1997) and may not be representative of the amount of time local people spend outside. In particular, if people are hunting or collecting edible vegetation, it is likely they would spend more time outside than 1.5 hours in any given day.</li> <li><b>Reference:</b> Richardson, M.G. 1997. Compendium of Canadian Human Exposure Factors for Risk Assessment. O'Connor Associates Environmental Inc. and G. Mark Bichardson</li> </ul>	<ul> <li>Re-calculate exposure duration using a value that more accurately reflects actual time spent outside by local people who may be conducting recreational and/or subsistence hunting and gathering in the vicinity of the project. Update the analysis, mitigation measures and significance conclusions, as appropriate.</li> </ul>
CEAA 40	HC-IR-3	5(1)(c)(i) Aboriginal Peoples	6.3.4	Appendix D-1 –	Table 2.2 presents country food ingestion rates as	• Evaluate consumption of country foods (including fish,

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
		Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes		HHRA – Table 2.2	kg/day based on number of meals per month which were then converted to a daily ingestion rate assuming daily consumption of these species (with the exception of partridge berries which were assumed to be consumed for only 4 months per year). The calculations do not take into account the likelihood that these foods may only be consumed a few times per month but that the meal size would be much larger than if equal portions were consumed on a daily basis throughout the month. In addition, the approach does not take into consideration the potential for large volumes of country foods that could be consumed in one sitting such as a weekend fishing trip or berry picking excursion. For example, the daily intake value for berries of 2 g/day for adults equates to approximately 2-3 berries per day assuming each berry weighs approximately 0.7 grams (which is based on the average weight of a blueberry). This consumption rate may not be representative of the amount consumed on any particular day. According to Health Canada (2010), <i>"exposure amortization may not be appropriate for some exposure scenarios, such as repeated acute or sub- chronic exposurein these circumstances, it would be more conservative to estimate the typical daily dose rate that occurs during the month(s) of greatest exposure each year. This exposure should then be compared to both a TRV based on chronic toxic effects". Section 4.6 of Health Canada's Part V: Guidance on</i>	trapped and hunted species, and berries) based on 2010 Health Canada guidance (below) to ensure that human health risk from consumption of country foods is not underestimated. Update the analysis, mitigation measures and determinations of significance, as appropriate. <b>Reference:</b> Health Canada. 2010. Part V: Guidance on Human Health Detailed Quantitative Risk Assessment for Chemicals (DQRA <sub>chem</sub> ). Federal Contaminated Site Risk Assessment in Canada. Prepared by the Contaminated Sites Division, Safe Environments Directorate. September. September.
					Human Health Detailed Quantitative Risk Assessment	

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					for Chemicals (DQRA <sub>chem</sub> ). Federal Contaminated Site Risk Assessment in Canada provides guidance on dose averaging considerations. Reference: Health Canada. 2010. Part V: Guidance on Human Health Detailed Quantitative Risk Assessment for Chemicals (DQRAchem). Federal Contaminated Site Risk Assessment in Canada. Prepared by the Contaminated Sites Division, Safe Environments	
CEAA 41	HC-IR-5	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Appendix D-1 – HHRA – Table 2.4	Directorate. September.In Table 2.4, the toxicity reference value (TRV)presented for chromium is a total chromium valueand not representative of the most toxic form ofchromium to humans (i.e. hexavalent chromium or[Cr VI] which is a carcinogen via inhalation). Theassumption that any increases in chromium are "totalCr" instead of Cr VI may underestimate potentialhealth risks associated with exposure to Cr VI (ifpresent).In addition, the mercury value presented is forinorganic mercury and not representative of the mosttoxic form of mercury to humans (i.e. methylmercury).If a specific contaminant species is not known, the	Discuss whether the contaminants evaluated represent those that would be present on-site. If this is not the case, provide a revised evaluation of potential health risks using the most toxic form of each contaminant that would be present.
					most conservative approach is to assume that the substance is in its most toxic form and to evaluate the potential health risks associated with the most toxic form.	
CEAA 42	HC-IR-6	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of	6.3.4	Appendix D-1 – HHRA – Section 3.2.3	For mercury, it appears that total mercury was evaluated for both fish and caribou. The fish species were not identified, and this is	<ul> <li>Since hazard quotients exceeded Health Canada's acceptable values of 1.0 (2.0 for adults and 4.4 for toddlers)</li> <li>provide additional discussion about the</li> </ul>

Information request	s directed to	o the proponent
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IR	Dept	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guidelines			
		Lands and Resources for			important information to have because different fish	speciation of mercury in both fish and caribou
		traditional purposes			accumulate mercury differently (e.g. larger,	and
					piscivorous, longer-lived fish tend to accumulate	o identify the species of fish evaluated.
					more mercury). In addition, the majority of the	Where mercury concentrations may exceed acceptable
					mercury found in fish is the more toxic	risk levels, identify additional measures to reduce
					methymercury (Health Canada, 2007). The approach	numan health risk associated with mercury exposure.
					bealth associated with consumption of fish with	
					elevated levels of methylmercury	
					The report should confirm the form of mercury	
					anticipated in caribou tissue and whether there are	
					any tissues that are consumed by the local population	
					that may contain elevated levels of contaminants,	
					such as liver and kidney tissue (not just muscle	
					tissue).	
					The report identified hazard quotients of 2.0 for	
					adults and 4.4 for toddlers associated with	
					consumption of mercury in country foods, which	
					suggests a potential for health impacts that should be	
					more closely assessed.	
					Reference:	
					Health Canada, 2007. Human Health Risk Assessment	
					of Mercury in Fish and Health Benefits of Fish	
					Consumption. Available from: http://www.hc-	
					sc.gc.ca/fn-an/alt_formats/hpfb-	
					dgpsa/pdf/nutrition/merc fish poisson-eng.pdf	
CEAA 43	HC-IR-7	5(1)(c)(i) Aboriginal Peoples	6.3.4	Appendix D-1 –	Section 2.8.1 states that "Health Canada	Confirm whether a composite lifetime receptor was
		Health/ socio-economic		HHRA – Section	recommends that Incremental Lifetime Cancer Risks	used to evaluate risk from exposure to carcinogens as
		conditions		2.8.1	only be calculated for adult exposures".	this takes into consideration all life stages (see Health
		5(1)(c)(iii) Current Use of				Canada, 2010; 2013). If it was not used, re-evaluate risk
		Lands and Resources for			This is incorrect; Health Canada provides guidance on	from exposure to carcinogens using a composite
		traditional purposes			the use of a composite lifetime receptor which	lifetime receptor and update the effects analysis,

IR	Dept	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guidelines			
					includes all life stages and a life expectancy of 80 years, 60 of which are as an adult (Health Canada, 2010 and 2013).	mitigation measures and determinations of significance accordingly.
					<b>References:</b> 1. Health Canada. 2010. Part V: Guidance on Human Health Detailed Quantitative Risk Assessment for Chemicals (DQRAchem). Federal Contaminated Site Risk Assessment in Canada. Prepared by the Contaminated Sites Division, Safe Environments Directorate. September.	
					2. Health Canada. 2013. Interim Guidance on Human Health Risk Assessment for Short-Term Exposure to Carcinogens at Contaminated Sites. Prepared by the Contaminated Sites Division, Safe Environments Directorate. <u>http://www.hc-sc.gc.ca/ewh-semt/contamsite/index-eng.php</u>	
CEAA 44	HC-IR-8	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Appendix D-1 – HHRA – Section 2.8.3	Section 2.8.3 presents the proposed magnitude (i.e. acceptability) of risk for both non-carcinogens and carcinogens. However, the proposed 'acceptable' risks are not consistent with Health Canada guidance. The report identifies that for non-carcinogens, a low and likely to be negligible risk is defined as being a hazard quotient of 1.0 to $\leq 10$ and a potentially elevated risk is defined as a hazard quotient >10. The report identifies that for carcinogens, a low and likely to be negligible risk is defined as an incremental lifetime cancer risk (ILCR) of $1 \times 10^{-5}$ to $\leq 1 \times 10^{-4}$ , and a potentially elevated risk is an ILCR > $1 \times 10^{-4}$ . These values are higher than Health Canada's acceptable target hazard quotient of <1 and Health Canada's acceptable ILCR of $\leq 1 \times 10^{-5}$ . No rationale was	<ul> <li>Justify the acceptability of using risks that exceed Health Canada's proposed acceptable hazard quotient of 1.0 for non-carcinogens (including non-site-related exposure) or 0.2 (for site-specific exposures), and/or an ILCR greater than 1 x 10<sup>-5</sup> for carcinogens as per Health Canada, 2012. Update the assessment, proposed mitigation measures and determination of significance, as appropriate.</li> <li>Reference: Health Canada. 2012. Federal Contaminated Site Risk Assessment in Canada, Part I: Guidance on Human Health Preliminary Quantitative Risk Assessment (PQRA), Version 2.0. Ottawa, Ontario: Environmental Health Assessment Services, Safe Environments Program. http://www.hc-sc.gc.ca/ewh- semt/pubs/contamsite/index-eng.php</li> </ul>

IR Number	Dept	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guidennes		provided by the consultant to identify how levels above the targets identified by Health Canada would be protective of health	
CEAA 45	HC-IR-10	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Appendix D-1 – HHRA – Tables 3.10 and 3.11	Based on Tables 3.10 and 3.11, there are several hazard quotients that exceed the target hazard quotient of 1.0 (i.e. mercury for the adult receptor and arsenic, lead and mercury for the toddler). As such, there may be unacceptable health risks from exposure to mercury, arsenic and/or lead. Health Canada recommends that monitoring for these substances in the relevant environmental media during Project operations should be undertaken in order to ensure that existing levels do not increase as a result of Project activities. If the contaminants do increase over baseline, Health Canada has advised that additional monitoring and/or mitigation measures may be necessary.	<ul> <li>Present a strategy for monitoring contaminants and explain how resulting information would be used to determine potential effects on health. Include a discussion of the following considerations:         <ul> <li>a. whether contaminants in relevant environmental media would be monitored during project operations to ensure that existing levels do not increase as a result of Project activities;</li> <li>b. whether additional monitoring and/or mitigation measures would be implemented, if contaminants were to increase over baseline; and</li> <li>c. whether a community health monitoring program would be implemented, that would include monitoring the consumption of country foods and any increase in respiratory complaints or conditions.</li> </ul> </li> </ul>
CEAA 46	HC-IR-11	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Appendix D-1 – HHRA – Table 3.12	Based on Table 3.12, it appears that oral cancer risks from exposure to arsenic exceed the target ILCR of 1x10 <sup>-5</sup> (4.65 x10 <sup>-4</sup> ). As such, there may be unacceptable health risks from exposure to arsenic. Health Canada recommends that monitoring for arsenic in the relevant environmental media during project operations should be undertaken in order to ensure that existing levels do not increase as a result of project activities. If arsenic levels do increase over baseline, additional monitoring and/or mitigation measures may be necessary.	<ul> <li>Discuss whether the proponent intends to monitor for arsenic in relevant environmental media during project operations to ensure that existing levels of arsenic do not increase as a result of the Project.</li> <li>Discuss whether additional monitoring and/or mitigation measures would be implemented if arsenic increases over baseline.</li> </ul>
CEAA 47	HC-IR-12	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of	6.3.4	EIS Section 9.1.3	The EIS has no discussion about monitoring country foods during Project operations. In the event that air quality monitoring identifies exceedances of applicable guideline values and/or people who collect	<ul> <li>Discuss whether country foods would be monitored during project operations in the event that air quality parameters exceed applicable guideline values and/or public concerns are raised about potential changes in</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
		Lands and Resources for traditional purposes			country foods in the vicinity of the site express concerns that the quality and/or taste of these foods has changed, additional sampling of these foods should be undertaken to verify that contaminant concentrations have not increased over baseline conditions. This should take into account that country foods are not necessarily consumed at an even rate over the course of a year, but sometimes in larger quantities over a shorter period of time.	the quality and/or taste of country foods collected in the vicinity of the project site.
CEAA 48	HC-IR-13	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Appendix D-1 – HHRA - Section 3.1.3	The report indicates that for certain metals (such as barium, manganese, and molybdenum), for the baseline case scenario, for toddlers, the dose is primarily influenced by the consumption of Labrador tea. It is unclear whether or not toddlers are likely to consume Labrador tea. If not, this assumption may have an impact on the predicted baseline risk scenario.	<ul> <li>Provide a discussion about whether toddlers are likely to drink Labrador tea, and if not, what influence this may have on the overall baseline exposure by toddlers to the specific metals identified (i.e. barium, manganese and molybdenum). Update the analysis, as appropriate.</li> </ul>
CEAA 49	HC-IR-14	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Appendix D-1 – HHRA – Section 3.2.3	For several substances, it is stated that the Project incremental risks are negligible because the marginal change in Project risk relative to baseline is <10%. The use of a change of less than 10% is not appropriate and is arbitrary. This approach is not protective of human health and no rationale was provided in the report as to how this might impact human health. It is recommended that this assumption be clarified and a rationale on a chemical specific basis be provided to identify whether there may be adverse health impacts associated with an increase of <10% relative to baseline.	<ul> <li>Provide information to justify screening substances based on a predicted change of less than 10% from baseline conditions. Specifically, information about the toxicity of the individual substances is required to ensure that an increase of less than 10% would not result in adverse human health effects based on the human toxicity of the individual substances. Any substances that are predicted to exceed applicable guideline values (irrespective of whether they are predicted to increase by more or less than 10%) should be carried forward in the HHRA for further assessment. Update the effects analysis, proposed mitigation measures and determination of significance, as applicable.</li> </ul>
CEAA 50	HC-IR-15	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of	6.3.4	EIS Section 7.5.2.2 (page 7- 353) and Appendix D-1	The EIS and the HHRA state that for activities potentially affecting country foods quality, the "accumulation of ore-based chemical constituents in vegetation (e.g. berries, plants) from soil after	• Evaluate both root uptake of contaminants in soil and direct deposition on plants in order to provide a more accurate prediction of potential risk to humans from consumption of contaminated vegetation.

Information request	s directed to	o the proponent
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IR	Dept	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guidelines			
		Lands and Resources for		(Human	prolonged particulate air deposition" was evaluated.	Update the assessment, proposed mitigation measures
		traditional purposes		Health Risk	There was no evaluation of the actual deposition of	and determination of significance accordingly.
				Assessment)	dust on vegetation and subsequent human	
					consumption of that vegetation. Not evaluating this	
					exposure pathway may underestimate human health	
					risk from ingestion of contaminated vegetation	
		F(1)(c)(i) Aboriginal Decales	624	Appendix D 1	(surface deposition and root uptake).	Ciucan the pressibility of collebourting with local burgton
CEAA 51	HC-IK-10	5(1)(C)(I) Aboriginal Peoples	0.3.4	Appendix D-1-	of small mammals at the site during the summar of	Given the possibility of collaborating with local nunters,
		sonditions			of small mammals were not collected for chamical	alloct small mammal (game bird tissues for baseling
		E(1)(c)(iii) Current Lice of		1.7	2013, Sinui maninuis were not conected for chemical	collect small manmal/game bird tissues for baseline
		Lands and Posourcos for				Inclus analysis.
		traditional purposes			If local hunters would be willing to provide samples	In the event of future public complaints about the change in quality and/or tasts of these country foods
		traditional purposes			for analysis (and identify the location where they	discuss whether samples would be collected to
					were harvested) tissue samples could be collected	avaluate metals concentrations during operations
					and analyzed for baseline metals concentrations	(which could also he done in collaboration with local
						(which could also be done in collaboration with local
					In addition to mammals given that game hirds are	huntersj.
					hunted in the vicinity of the Project site, it may also	
					be useful to collaborate with local hunters to supply	
					tissue samples of other bird species that could be	
					analyzed for baseline metals and future metals	
					concentrations.	
CEAA 52	HC-IR-17	5(1)(c)(i) Aboriginal Peoples	6.3.4	EIS Section	No carcinogenic risks are presented in the	Provide analysis of impacts on human health with
		Health/ socio-economic		7.5.2.2 (page 7-	assessment of Human Health in the EIS. Given that	respect to carcinogens taking into consideration results
		conditions		354)	potential carcinogens have been evaluated in the risk	of the HHRA (Appendix D-1).
		5(1)(c)(iii) Current Use of			assessment it is unclear why the results have not	
		Lands and Resources for			been presented in this section of the EIS.	
		traditional purposes				
CEAA 53	HC-IR-18	5(1)(c)(i) Aboriginal Peoples	6.3.4	Appendix D-1 –	Ingestion of surface water was considered to be an	• Explain why ingestion of surface water was considered
		Health/ socio-economic		HHRA – Figure 5	operative exposure pathway; however, dermal	an operable exposure pathway whereas dermal contact
		conditions			exposure to surface water was not. No discussion was	with surface water was not. If dermal contact with
		5(1)(c)(iii) Current Use of			provided as to why dermal contact with surface	surface water is possible, it should be evaluated as an
		Lands and Resources for			water was not considered to be a relevant exposure	exposure pathway in the HHRA.
		traditional purposes			pathway.	Update the effects analysis, proposed mitigation

IR Number	Dept	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guideimes			measures and determination of significance, as
					Current Use	
CEAA 54	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.5	As an example of analysis text in the current use section, the EIS states that "the activities associated with the Construction phase would cause disturbances (noise, loss of habitat, pollution, light emissions, vibrations) that may disturb wildlife resources. Fish and fish habitat would probably be affected during the Construction phase but fish would remain fit for consumption. Plants and berries may be affected by dust, but would remain fit for consumption if given a thorough wash. The perception of the environmental disturbances by the local population may affect their confidence in the quality of the resources harvested in the vicinity of the Project site. Hence, as it is already the case for a few land-users, the population would likely refrain from harvesting resources near mining sites. Statements such as these are broad and do not provide sufficient detail to assess effects to current use for traditional purposes. For example: regarding plants and berries being affected by dust, is this the only effect that plants and berries may experience or would other effects such as habitat loss also be a factor? Would the mitigation measures for dust result in residual effects on the current gathering of plants and berries? In conducting current use effects analyses, it is important to remember that effects on a small proportion of a population used by Indigenous peoples, could hypothetically have a profound effect	<ul> <li>Provide an analysis of impacts of the Project (real and perceived) on each species or selected indicator species used (i.e. fished, hunted, trapped, gathered) by Indigenous communities and associated effects on current use of these resources by Indigenous peoples. The analysis should describe the specific effects (e.g. of noise, loss of habitat, pollution, light emissions, vibrations) of the Project on key species, then relate potential effects on the species to corresponding effects on current use of that species by Indigenous peoples. The analysis should also take into consideration the potential for avoidance and changes in access as a result of the Project on key species used by Indigenous peoples?</li> <li>Are key species that are used by Indigenous people and would be affected by the Project present in the surrounding areas where they would be available for use? If so, how accessible are these alternative areas for Indigenous communities? Are alternate areas already being used for gathering or other activities that may conflict or in a way that resources could not sustain additional use?</li> <li>If gathering occurs around the perimeter of Kauteitnat, would access for gathering be affected?</li> </ul>
					on current use for a local community. As an example,	

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					if a Project impacts fish or birds in a specific lake currently used by Indigenous peoples, who then need to move to another area further away, impacts on the species may be minimal, while impacts on current use of the species by a specific community could be substantial.	
CEAA 55	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Table 4-4	The EIS states that Goodwood Road and the bypass road are to be completed by July 2015.	<ul> <li>Describe effects on the current use of lands and resources by Indigenous peoples that could occur as a result of the Project, specifically from longer drives to access lands via the bypass road and from species displacement as a result of the Project (i.e. habitat loss, habitat disruption from noise, light, etc). Update the assessment of effects on current use accordingly.</li> </ul>
CEAA 56	IN-IR- 25b	5(1)(c) Aboriginal Peoples – Overall comment	6.3.4	7-186	In its comments on the EIS, the Innu Nation stated that based on a response by the proponent, the regional study area for terrestrial species may have been delineated based on data availability.	<ul> <li>Explain how the regional study area for terrestrial species was delineated and justify proposed boundaries based on potential effects. If the regional study area for terrestrial species was determined based on data availability, provide an explanation for how this is appropriate for the effects analysis, addressing specific gaps that may be present as a result and how these gaps and are being addressed.</li> </ul>
CEAA 57	IN-IR- 25d	5(1)(c) Aboriginal Peoples – Overall comment	6.3.4	7.4.3	The Innu Nation has advised that "selecting an RSA that is inclusive of the entire range of the George River Caribou Herd, which is larger than the RSA for the current use of lands and resources for traditional purposes (i.e. the proposed socio-economic RSA), suggests that the extirpation of the herd from the traditional hunting territory of the local Aboriginal populations is acceptable so long as the Herd persists somewhere throughout the Quebec-Labrador peninsula." It proposed that the regional study area for the use of lands and resources for caribou harvesting be comprised of that portion of the George River Caribou Herd range that overlaps the range of harvesting areas of the affected First	• Describe how adjusting the regional study area for the current use of lands for caribou harvesting to the portion of the caribou's range that overlaps the range of harvesting areas of the affected First Nations would affect impact predictions (e.g. additional mitigation, significance assessment, as applicable)

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
			U U		Nations.	
CEAA 58	IN-IR 10	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.5.2	The Innu Nation indicated that short of conducting a modern study of Innu Nation land use, which was not undertaken for the environmental assessment, the nature and degree of historic or current Innu Nation land use in the region surrounding the proposed Project cannot be determined with confidence.	<ul> <li>Comment on the gaps or uncertainties in information, as raised by Innu Nation with respect to their use of lands. Describe how potential gaps/uncertainties were addressed in the assessment, or provide additional analysis, including mitigation measures, to strengthen the assessment of potential effects of the Project on Innu Nation's land use.</li> </ul>
CEAA 59	CEAA	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Section 4.2	The EIS indicates that an IBA negotiated by LIM is being used by the proponent to mitigate or accommodate impacts of the project on potential or asserted Aboriginal or Treaty Rights.	• Where an IBA is listed as a mitigation measure, describe the impact and the specific actions that would be applied to mitigate (e.g. reduce, avoid) environmental impacts.
CEAA 60	CEAA	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Section 4.3	Many concerns about project effects on traditional resources and use were expressed by Indigenous groups, including effects on resources in Howells River area. The EIS predicted minimal effects, however it is important that the effect prediction verified given the importance of the area to Indigenous groups.	<ul> <li>Describe the elements of a follow-up program that would be implemented to monitor effects of the Project on lands and resources used by Indigenous communities, including the Howells River area.</li> <li>Describe which elements would be monitored, what would be the established environmental effects limits and proponent's response.</li> </ul>
CEAA 61	NL – Arch -01	5(1)(c)(iv) any Structure, Site or Thing of Historical, Archaeological, Paleontological or Architectural Significance	6.3.4	7.5.1.2	Arkeos recorded a spot archaeological find (i.e. pre- contact artifacts on the surface in different areas, and two ethnographic sites close to the northern terminus of road alternative #2). However, the EIS does not include an assessment of this road alternative on archaeological resources despite potential for effects on Indigenous Peoples (5(1)(c)).	<ul> <li>Conduct and present an analysis of potential effects on structures, sites, or things that are of archeological significance as a result of the construction and use of road alternative #2. Update the proposed mitigation measures, follow-up program, and determinations of significance with respect to effects on Indigenous Peoples' archeological resources, as applicable.</li> </ul>
CEAA 62	CEAA	All	6.3.4	7, 8	In its response to IN-8, the proponent advised the Innu Nation that it would restore the project site to existing vegetated conditions following mine closure and conduct a study on restoration methods. Given technical challenges of working in northern climates, additional discussion of the potential restoration approach is required to understand its feasibility	<ul> <li>Provide additional detail and clarity with respect to the contents of a restoration plan taking into account general timelines for restoration goals.</li> <li>Discuss potential challenges of restoring the mine site to existing vegetated conditions following mine closure given the northern climate. Describe proposed measures that would be implemented to address these</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
						<ul> <li>challenges.</li> <li>State whether the proposed restoration methods study would be conducted in consultation with Indigenous groups.</li> </ul>
CEAA 63	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.5.2.1, 7-329	The map of known harvesting sites does not include activities on Kauteitnat, yet text indicates that alpine cranberry is the main harvest in the fall on Kauteitnat.	• Describe the effects on current use of Kauteitnat by Indigenous Peoples and the mitigation measures to address these effects. Update the analysis and determination of significance, as appropriate.
CEAA 64	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes 5(1)(c)(ii) Aboriginal Physical and Cultural Heritage 5(1)(c)(iv) any Structure, Site or Thing of Historical, Archaeological, Paleontological or Architectural Significance	6.3.4	7.5.2.1.4.1, 7- 343	Indigenous groups have expressed concerns regarding the visual impacts of the Project on the adjacent and culturally important Kauteitnat. The proponent is proposing to mitigate this impact through a 500 meter buffer between the mountain and the Project. However, it is challenging to visualize the impact and proposed mitigation without some type of modelling/virtual representation.	<ul> <li>Provide a model or virtual representation of the Project area (before construction, during operation, abandonment and post reclamation) from and toward Kauteitnat to better understand the visual impact of the Project on Kauteitnat.</li> <li>Estimate the area of land (i.e. hectares) that would be permanently affected as a result of the Project (e.g. as a result of roads or any other features that would remain post-Project)?</li> </ul>
CEAA 65	CEAA	5(1)(c) Aboriginal Peoples – Overall Comments	3.2.3. Decommissioning , Reclamation and Abandonment.	4, 10	There is little information on the reclamation plan. Indigenous groups expressed concern regarding the reclamation of the project site. For instance, they would like to see the pit returned to its original state instead of being filled in with water. This is relevant to current use of lands and resources by Indigenous groups and on Aboriginal Physical and Cultural Heritage.	• Describe the reclamation activities in greater detail to provide a clear understanding of the environmental conditions during and following reclamation, including: what specific steps would occur and how would effects on Indigenous Peoples, including their use of the land and Kauteitnat, during and following reclamation be addressed.
CEAA 66	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.5.2.1.3	It is unclear whether progressive restoration and revegetation, as proposed by the proponent, are technically feasible given the climate where the Project is proposed. Revegetation must be demonstrated to be achievable in this climate within a reasonable timespan. Otherwise the proponent should take a precautionary approach to the effects assessment	<ul> <li>Provide analysis to demonstrate whether progressive reclamation is technically and economically feasible within a reasonable timespan in the context of the local climate.</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guidennes		and not rely on revegetation in its determination of significance.	
CEAA 67	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	Part 2, Section 4 and Section 6.3	Section 4 and Section 7	The analysis of the effects of the Project on fishing and hunting in proximity to Triangle Lake, Pinette Lake, Rosemary Lake and Goodream creek is insufficient. The EIS indicates that some fishing, hunting and gathering activities, as well as use of Kauteitnat take place but would not be impacted by the Project, despite some of these sites being located less than a kilometer from the proposed Project. For example, the EIS notes that fishing may decrease in Pinette and Triangle Lakes, however, the impact is lessened as much of the fishing takes place at Rosemary Lake.	<ul> <li>Reconsider and describe potential effects of the Project on land uses (i.e. fishing, hunting, gathering) at Triangle Lake, Pinette Lake, Goodream Creek, and Kauteitnat.</li> <li>Provide an analysis of whether Rosemary Lake has the capacity to sustain increased fishing activities that could occur if Indigenous fishers are displaced as a result of the Project.</li> </ul>
CEAA 68	IN-IR-14	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7, 8	The proponent indicated in a response to the Innu Nation that it hired Innu experts and collected data/information on wildlife. The Innu Nation has requested that ATK and lands use information be continually updated in consultation with indigenous peoples.	<ul> <li>Describe whether and how ATK and land use information would inform the follow-up and monitoring programs on an ongoing basis to ensure environmental effects, including effects on Indigenous Peoples, are accurately captured.</li> </ul>
CEAA 69	CEAA IN-IR-15	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes 5(1)(c)(ii) Aboriginal Physical and Cultural Heritage 5(1)(c)(iv) any Structure, Site or Thing of Historical, Archaeological, Paleontological or Architectural Significance	6.3.4	7-185	The Innu Nation noted that there was a lack of ATK reflected in the EIS with respect to anthropogenically- altered landscapes. Under the Aboriginal traditional knowledge section for anthropogenically-altered landscapes, the EIS states that aside from land use patterns (discussed in Section 7.5.2.1), no specific information concerning anthropogenically-altered landscapes is available. The EIS did note in another section that concerns were raised by Indigenous Peoples regarding the visual impacts of the Project with respect to Kauteitnat; and, also with respect to mining in general in the area and the impact it had on the land.	<ul> <li>Present local Aboriginal knowledge or experience (based on studies and consultations to-date, and information presented elsewhere in the EIS) about how the regional ecology and land use has been changed as a result of the creation of these "anthropogenically- altered landscapes", and in particular to developments near Kauteitnat. Include this information in a revised effects assessment so that effects in relation Indigenous Peoples (section 5(1)(c)) due to the changing landscape are clear and reflective of traditional knowledge. Revise mitigation measures and effects conclusion as appropriate.</li> </ul>
CEAA 70						

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guideinies		Caribou / Wildlife	
CEAA 71	IN-IR-56	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.5.2.1.2, p.7- 333	The EIS discusses the potential for the George River Caribou Herd to recover and return to the region. The proponent relies on a single personal communication to support its views that the herd is unlikely to recover during the lifetime of the proposed Project.	• Provide additional substantiation, including peer- reviewed reference(s), if available, to support the idea that it is unlikely that the George River Caribou Herd would recover during the life of the proposed Project.
CEAA 72	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.4.3.3, page 7- 221, 7-212	Although the EIS states that there are presently no caribou in the LSA, it also states that seven caribou were observed there in 2009. According to Table 7- 81, 71% of LSA is suitable caribou habitat (p.7-212, Table 7-81). The EIS states that the Innu and Naskapi expect the caribou to return to LSA and fear that Project would modify caribou <u>migrating routes</u> . Figure 7-34 shows caribou movement around the Project site in both spring and fall. Page 7-212 states that 1.2 km <sup>2</sup> of caribou <u>feeding habitat</u> would be affected by the Project.	<ul> <li>Provide an additional background analysis on the use of the LSA by the George River Caribou Herd historically and in the recent past, recognizing limitations on existing data. Clarify the type of habitat that the LSA provided for caribou (i.e. was the LSA historically a migratory route? Did it serve as a feeding habitat or did it support the types of vegetation or protection typically preferred by caribou? Based on Aboriginal Knowledge, during what time of the year were caribou likely to be present?).</li> </ul>
CEAA 73	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	Analysis p. 7-212 to 7- 220	The EIS states that migratory tundra caribou can avoid mining infrastructure up to 14 km and that their perception abilities reach 15 km (p. 7-212). Although the LSA is a 15 km radius around the Project, the EIS concludes that only 1.2 km <sup>2</sup> of caribou feeding habitat would be destroyed or severely disturbed (p. 7-219, 7-220). It is not clear on what basis the 1.2 km <sup>2</sup> figure was derived from, but it is presumed to be the area of direct habitat loss from the Project footprint.	<ul> <li>Provide a rationale for determining that 1.2 km<sup>2</sup> of caribou feeding habitat would be destroyed or severely disturbed, including a description of pathways of effects included in this calculation.</li> <li>Provide an analysis of the full extent of caribou habitat that would be (1) directly lost and (2) indirectly affected (e.g. by noise, light, blasting) by the Project, recognizing that caribou can avoid mining infrastructure up to 14 km and that their perception abilities reach 15 km. Include effects of blasting in this discussion.</li> <li>Calculate and present (in hectares) the full extent of caribou habitat that would be (1) directly lost and (2) indirectly affected (e.g. by noise, light, blasting) by the Project.</li> <li>Present results of habitat lost/affected by the Project as a percentage of available caribou habitat in the RSA.</li> </ul>
CEAA 74	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for	6.3.4	7.4.3.3, page 7- 221, 7-212	The EIS states that activities would cease if caribou were to be spotted within 5 km of an active pit or the	• Provide a rationale for selecting 5 km as the distance from the Project that would initiate the cessation of

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
		traditional purposes			processing complex and that this distance is in accordance with the range of disturbance affecting caribou.	<ul> <li>operations if caribou were to be spotted, recognizing that literature states that effects on caribou could extend up to 15 km. Update proposed mitigation measures, if applicable.</li> <li>Describe the specific "activities" that would be ceased if a caribou is spotted within 5 kilometers.</li> <li>Explain how long activities would remain shut-down if caribou were observed in the area?</li> <li>Explain actions that would occur if caribou were to linger in the area (i.e. would activities remain on hold indefinitely)?</li> </ul>
CEAA 75	NL- Wildlife Division	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.4.3.3 page 7-221, Table 7-82	The EIS states that "blasting must be suspended in certain circumstances to avoid excessive disturbance of wildlife."	<ul> <li>Provide a rationale and discussion of the proposed mitigation measure (i.e. suspending blasting in certain circumstances to avoid excessive disturbance of wildlife) including providing clarification of what would be defined as "certain circumstances", "excessive disturbance", and "wildlife".</li> </ul>
CEAA 76	NL- Wildlife Division, CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.4.3.3, page 7- 222, Table 7-82	The EIS states "where possible, operation activities will avoid areas of wildlife concentration, as traffic would disturb wildlife during critical periods." There is insufficient information to understand the circumstances where areas would be avoided and when they would not be avoided. It is not possible to understand the potential for effects without additional information. The Wildlife Division (Newfoundland and Labrador) has also advised that given caribou have not been observed in the area in over 5 years, impacts are not likely to occur. However, if caribou are observed in the area, operations should avoid these areas until caribou have moved away. Activities that may be permitted should be outlined in an EPP approved by the NL Wildlife Division.	<ul> <li>Provide a rationale and discussion of the proposed mitigation measure (i.e. having operations activities avoid areas of wildlife concentration where possible during critical periods) including:         <ol> <li>describe the circumstances where avoiding areas of wildlife concentrations would not be possible and the potential effects that would occur;</li> <li>describe the distance at which Project activities would avoid areas of wildlife concentrations; explain how the distance was established to address effects;</li> <li>describe which Project "activities" are included in the proposed mitigation measure (i.e. how were activities were selected in order to mitigate effects on wildlife?);</li> <li>explain how "wildlife concentrations" are defined; and</li> <li>identify which wildlife species are included in the</li> </ol> </li> </ul>

IR	Dept	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guidelines			
						proposed mitigation measure (i.e. caribou only? other species?).
CEAA 77	NL – Wildlife Division	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.4.3.3,page 7- 222, Table 7-82	The EIS states "Under an agreement with the Ungava project and CARMA, TSMC's Environmental Specialist / Permit Manager will be notified when migratory tundra caribou, which are monitored via satellite collars, come within 100 km of the Howse Project. Upon receipt of such a notice, operations will continue with caution. If data from the radio collars indicate that some of the caribou have moved to within 20 km of the Howse Project, TSMC will institute	<ul> <li>Provide a rationale and discussion of proposed mitigation measures related to caribou including:         <ul> <li>Explain how many collars would be accessed through the agreement with the Ungava project and CARMA.</li> <li>State whether- and under what circumstances existing telemetry information would be augmented (e.g. by purchasing, deploying</li> </ul> </li> </ul>
					surveys within that radius to monitor their movements in greater detail." It is not clear how many collars are accessed through the agreement with the Ungava project and CARMA.	<ul> <li>and/or maintaining additional collars).</li> <li>c. Describe plans for reporting on locational caribou data including: what would be reported on, who the information would be provided to, and how often reporting would occur.</li> </ul>
					In addition, the EIS includes only limited information on the course of action that would be taken should caribou move into the area. The Wildlife Division (Newfoundland and Labrador) has recommended that the proponent provide it with an annual report including caribou locational data	<ul> <li>d. Propose a reporting scheme, in the case that caribou move into the area.</li> <li>e. Provide a description of surveys that would be conducted, if caribou move within 20 km of the Project. Clarify whether surveys would be conducted by TSMC or the proponent.</li> <li>f. Describe the circumstances under which</li> </ul>
					<ul> <li>provided to the company to demonstrate that</li> <li>caribou have not been within the project footprint.</li> <li>If caribou do move into the area (i.e. within 20 km),</li> <li>the Wildlife Division has advised that it should be</li> <li>contacted to determine next steps and reporting</li> <li>mechanisms.</li> <li>If, through the monitoring of telemetry data, it is</li> <li>found that caribou have moved within 20 km of the</li> <li>Howse Project, the Wildlife Division (Newfoundland</li> <li>and Labrador) has recommended that it be contacted</li> </ul>	additional mitigation measures (adaptive management) would be implemented. g. Describe specific adaptive management actions (i.e. mitigation measures) that could be taken to minimize disturbance to caribou and current use.

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					within 24 hours (if caribou move closer to operations, contact the Wildlife division immediately). In addition, if caribou are within 20 km of the Project, the Wildlife Division (Newfoundland and Labrador) recommended that the proponent augment telemetry information by deploying and/or maintaining additional collars to assist monitoring efforts and inform the development of additional mitigation, exact number to be determined by the Wildlife Division.	
CEAA 78	NL – Wildlife Division, CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	9.2.2 Follow-up	The EIS suggests that caribou surveys will include fixed-point observations and ATV-based searches. It states that " <i>if ground-based surveys do not prove to</i> <i>be useful or feasible, HML will initiate aerial surveys.</i> " Ground based caribou surveys are generally not useful to inform mitigation measures or monitoring programs. Rather, aerial surveys conducted in winter provide more useful information.	<ul> <li>Provide information on the caribou monitoring program, including whether aerial surveys would be conducted in winter months and how frequently these surveys would occur.</li> </ul>
CEAA 79	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4	7.4.3.4 p. 7-225	In concluding on the magnitude of effects on caribou, the EIS states that interactions between the Project and caribou could cause behavioral changes and site avoidance, which could in turn lead to delayed effects, such as predator-prey interactions, leading to population-wide effects. It further states that effects are impossible to predict, much less quantify. It concludes that effects of the Howse Project will therefore be at the individual level. This is the first and only time predator-prey interactions are discussed in the caribou section. There is no correlation between the statement that population-wide effects at the individual level.	<ul> <li>Provide an analysis of potential change in predator- prey interactions as a result of the Project, and how this would affect the effects analysis of current use of lands and resources by Indigenous Peoples.</li> <li>Clarify the conclusions related to the <i>magnitude</i> and significance determination based on the information provided.</li> </ul>
CEAA 80		Species At Risk Act, s.79	6.3.3	7.4.6	No effects analysis was provided on the Little Brown	Describe the potential effects of the Project on the

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					Bat, yet it is possible the species is present in the region of the Project and could interact with the Project.	Little Brown Bat (e.g. destruction/modification of hibernacula and roosts, loss of foraging habitat, noise, light, vibration, spread of white-nose syndrome by entering habitat) and associated rationale to support the assertion that general avoidance would be sufficient to mitigate these effects. Explain whether or not there would be residual effects following mitigation measures.
CEAA 81		Species At Risk Act, s.79 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes 5(1)(a)(iii) Migratory Birds	6.3.3	7.4.6	The EIS provides inconsistent or unclear information with respect to wildlife, fish, and plant species, such that it is challenging to understand which species are being referred to in the assessments of wildlife and current use of lands and resources by Indigenous groups, and understanding the listing status of the species. Furthermore, it appears that indicator species were used at times in the EIS effects analysis but without clear rationale for the selection of the species (i.e. most vulnerable, greatest concern to Indigenous peoples, etc.).	<ul> <li>Prepare a table that consists of the following information:</li> <li>Provide a list of species that are likely present in the local and regional study areas based on observed species, species at risk, current use of lands and resources by Indigenous groups and Aboriginal traditional knowledge, that may interact with effects of the Project (i.e. affected by noise, light, air quality, etc.). If referring to groups of species indicate which individual species are included in groups (e.g. waterfowl, songbirds).</li> <li>In the table, indicate: <ul> <li>Whether or not each species was observed (indicate if regional study area or local study area) or if ATK indicates presence of the species (much of this is contained in Appendix XXIII).</li> <li>Provide federal SAR, COSEWIC, and/or MBCA status for each species, as applicable.</li> <li>Indicate which specific species are hunted/trapped, fished, gathered by Indigenous communities within the area where project effects could occur.</li> </ul> </li> <li>Indicate which indicator species, if any, were selected to assess impacts of the Project on migratory birds, species at risk and current use of lands and resources and resources for traditional purposes by Indigenous peoples. Provide rationale for selection.</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
CEAA 82		Species At Risk Act, s.79 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes 5(1)(a)(iii) Migratory Birds	9	7-91	The EIS states by "complying with the Forest Act, a buffer strip 20 m wide along the banks of a peat bog with a pond, of a swamp, of a marsh, of a lake or of a permanent watercourse will be preserved ensuring habitat for several migrating birds including species at risk, Rusty Blackbird." The Newfoundland and Labrador Wildlife Division has advised that the Forestry Act buffer of 20 m is not adequate for the protection of riparian species and habitat. Rather, it generally recommends a minimum 30 m riparian buffer be applied around all waterbodies and wetlands to protect riparian species and habitat. A 50 m buffer is recommended around sensitive areas. Rusty blackbirds prefer to nest within 30 m of wetlands and (Powell <i>et al.</i> , 2010) suggests maintaining a 75 m naturally vegetated buffer around nests to minimize predation pressure.	Describe whether the buffer proposed in the EIS would adequately project migratory birds and federal species at risk from effects of the Project.
					Cumulative Effects	
CEAA 83	NNK-IR- 11	All	8	Table 8-2	The Naskapi Nation of Kawawachikamach raised that the cumulative effects assessment should include information on Commerce Resources' Eldor Project and Quest Rare Minerals Strange Lake Project. The proponent must consider the large range the George River Caribou Herd occupies and the projects to be covered in this section must take this into account. The Naskapi Nation of Kawawachikamach understands that the proponent excluded the Strange Lake Project since it is not within the Labrador Trough, but it is within the caribou calving zone, therefore rendering it extremely important.	<ul> <li>Review the current and future projects included in the cumulative effects assessment and amend, as appropriate, if additional projects are expected to affect valued components. Update the cumulative effects assessment including analysis, mitigation measures, and determination of significance, as appropriate.</li> <li>If there are no cumulative effects anticipated from the additional projects identified by the Naskapi, provide a rationale on this conclusion with supportive information.</li> </ul>
CEAA 84	CEAA	5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.3.4 6.6.3	8.3, 8-1	<u>Cumulative Effects – Caribou</u> <u>Context</u> The EIS states that no caribou have been observed in	<ul> <li>Provide an analysis of cumulative effects on caribou, as it relates to current use of lands and resources by Indigenous peoples, in accordance with the Agency's Operational Policy Statement (OPS), Assessing</li> </ul>

IR Number	Dept Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number	guidelines		the LSA in the past five years, however, a '2006 survey of Naskapi land and resource use in the Howells River Valley showed extensive caribou hunting. The densest concentration of caribou hunting was recorded along the Ridge between the Howells River Valley and the Swampy Bay River basin, between the DSO2 and DSO4 areas, mainly throughout the historic mining road network, which encompasses the Project's LSA" (p. 7-218). Although impacts on caribou are a primary concern for Indigenous communities, the EIS currently has little analysis of cumulative effects. <b>Context and Methods</b> As it stands, the assessment of cumulative effects in the EIS is a qualitative discussion of the effects of light, noise and rail on caribou. In order to be meaningful, the analysis of cumulative effects must consider key effects/stressors on caribou. Consideration of light and noise should be translated into effects to the population (e.g. habitat loss or avoidance or otherwise). In addition, the analysis used to draw conclusions on cumulative effects on caribou is limited. As required by the Agency's Operational Policy Statement (OPS), <i>Assessing</i> <i>Cumulative Effects under CEAA 2012</i> , the "methodologies used to predict cumulative environmental effects must be clearly described. With this information, reviewers of the EIS will be able to examine how the analysis was conducted and what rationale support the conclusions reached. Any assumptions or conclusions based on professional judgement should be clearly identified".	<ul> <li><i>Cumulative Effects under CEAA 2012.</i> One potential approach to this assessment would be to compare past, present and future habitat available for the George River Caribou Herd and accessible to Indigenous peoples taking into consideration the cumulative effects of past, present and future physical activities. Ensure that the assessment includes consideration of key stressors/impacts on the population and that methods are clearly described.</li> <li>b. Based on the above analysis, update proposed measures to mitigate cumulative effects on caribou and on current use of lands and resources, as applicable.</li> <li>c. Conclude on the significance of the cumulative effects of past, present and future activities on caribou and current use of lands and resources (i.e. not on the contribution of the Howse Project in relation to other projects).</li> <li>d. Describe potential commitments in relation to "adaptive management" (i.e. how could operations be modified to reduce future impacts on caribou?). Explain at what point, operations would be adapted (i.e. when, why).</li> <li>e. Where adaptive management is referenced, (1) describe which activities or projects would be adapted and (2) under which circumstances this would occur, and (3) provide specific mitigation measures that could be implemented, and (4) anticipated resulting effect.</li> </ul>

Information	requests	directed	to the	proponent
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IR Number	Dept	Effects Link to CEAA 2012	Link to EIS	EIS Reference	Context and Rationale	Specific Question/ Request for Information
Number	Number		guidelines		As it stands, the cumulative effects analysis and significance determination are focused on the contribution of the Howse Project relative to the effects of other past, present or future development in the area. However, the analysis and determination of significance should consider the combined or cumulative effects of past, present and future physical activities.	
					<ul> <li>Intigation and Follow-up - Attribugh the Ers states that the proponent would practice adaptive management of certain environmental components (e.g. caribou), it does not describe which activities or projects (e.g. Howse or other) would be adapted and under which circumstances this would occur (e.g. exceedance of what criteria)?</li> <li>Follow-up         The EIS states that the proponent will "practice adaptive management of the caribou in the vicinity of the Howse Project" (p. 8-8). It is not clear how activities could be adapted to mitigate cumulative effects on caribou. It is also not clear under what conditions adaptive management would occur.     </li> </ul>	
CEAA 85	CEAA	5(1)(b)(i) federal lands, 5(1)(b)(ii) another province 5(1)(c)(i) health and socio- economic conditions 5(1)(c)(iii) current Use of Lands and Resources for traditional purposes	6.6.3	8.3	Cumulative Effects – Air Scoping – Future Projects - The cumulative effects assessment considers the effects of DSO3 and DSO4. It is not clear why future projects have not been considered in the assessment. Scoping - Air Pollutants – It is not clear which air pollutants have been included in the cumulative effects assessment. For example, although a series of bullets describing predicted concentrations and	<ul> <li>Scoping – Future Projects –</li> <li>Provide a rationale for the inclusion (or exclusion) of past, present, and future projects in the cumulative effects assessment, recognizing that local communities have articulated concerns about dust in the area and that projects within a 50 to 100 km radius of the Howse Project would be of primary interest. Update the analysis of cumulative effects on air quality, as applicable.</li> <li>Scoping - Air Pollutants –Provide a clear explanation and associated rationale for the specific air pollutants</li> </ul>

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					<ul> <li>exceedances (p. 8-1) are provided, it is not always clear which air pollutants are being referred to in the text. While there is no need to re-print tables from Section 7, the cumulative effects assessment should clearly identify (1) which air pollutants were considered in the CEA and (2) which exceedances are predicted.</li> <li>Dust Events – Periodic dust event have been raised as a concern by Indigenous communities and should be included in the assessment of cumulative effects</li> <li>Adaptive Management - The EIS states that the proponent would practice adaptive management of the air quality in the vicinity of the Howse Project and in DSO areas as a whole (p. 8-2). It is not specified how the management of air pollutants could be adapted.</li> </ul>	<ul> <li>that are included in (and excluded from) the cumulative effects assessment, taking into consideration the potential for exceedances and concerns of local communities (e.g. related to dust, health). Clarify which air pollutants are being referred to throughout the five steps of the cumulative effects assessment, as applicable (e.g. scoping, analysis, mitigation, determination of significance, follow-up).</li> <li>Dust Events - Provide information on the frequency and nature (prevalent times, locations) of dust events in the past, present and future (recognizing these do not need to be quantified and modelled). Include the information on dust events in the analysis of cumulative effects.</li> <li>Adaptive management – Describe what is meant by adaptive management of air quality, including: <ul> <li>What measures would be implemented and under what circumstances? (i.e. exceedances, complaint)</li> <li>What is the anticipated change in environmental effect as a result of additional measures?</li> </ul> </li> </ul>
CEAA 86	CEAA	5(1)(c)(i) health and socio- economic conditions	6.6.3	Section 8.8	The scope of the cumulative effects assessment in relation to human health is not clear. <i>Subsection</i> <i>8.8.1: Scoping</i> refers to cumulative effects from air pollutants on human health – Indigenous groups (s.5(1)c)); however, the subsection omits other effects pathways (e.g. country foods, drinking water). <i>Subsection 8.8.2 Analysis</i> refers to a multi-media exposure and risk assessment and includes consideration of various contaminants.	<ul> <li>Clarify the scope of the cumulative effects analysis as it pertains to human health – Indigenous groups (s.5(1)c)) in accordance with the Agency's Operational Policy Statement, Assessing Cumulative Effects under CEAA 2012. Present an associated rationale for the scope of the assessment, including consideration or omission of relevant pathways (air, drinking water, country foods). Once the scope of the cumulative effects assessment has been determined, apply the same scope in conducting the remainder of the cumulative effects assessment (analysis, mitigation measures, determination of significance, follow-up program).</li> </ul>
CEAA 87	CEAA	5(1)(c)(iii) current Use of Lands and Resources for	6.6.3	7, 8	The EIS describes four tenants of subsistence and traditional activities:	As required by the Agency's Operational Policy     Statement, Assessing Cumulative Effects under CEAA

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
		traditional purposes 5(1)(c)(ii) Aboriginal Physical and Cultural Heritage 5(1)(c)(iv) any Structure, Site or Thing of Historical, Archaeological, Paleontological or Architectural Significance			<ul> <li>access</li> <li>caribou hunting</li> <li>subsistence and traditional activities (e.g. hunting, fishing, gathering)</li> <li>preservation of and access to Kauteitnat</li> <li>However, there is little to no analysis to substantiate broad conclusions that residual cumulative effects are unlikely to be significant on Indigenous Peoples per s. 5(1)(c).</li> <li>In addition, the cumulative effects of other past, present or future development in the area. This is important context; however, the analysis misses the point of a cumulative effects assessment, which is to understand the overall combined (i.e. cumulative) effects on the health or state of an environmental component. Even with a comparatively minimal contribution from the Howse Project, effects must be considered in a cumulative or holistic sense.</li> </ul>	<ul> <li>2012, provide an analysis to assess cumulative effects on current use for traditional activities, including effects on country foods. In addition, clearly describe the methodologies used to predict cumulative environmental effects so that reviewers can examine how the analysis was conducted and what rationale supports the conclusions reached. For example, the assessment could consider how wildlife or plant species used by Indigenous peoples are affected by cumulative effects, and how in turn, use of these resources could be affected. Consideration of indicator species to support the analysis is one approach that may be useful.</li> <li>Revise the cumulative effects assessment for Kauteitnat to include effects of past, present and future projects. In addition to access to lands, the assessment should also include effects of noise/vibration, light, and air quality.</li> <li>Determine the significance of cumulative effects on current use of lands and resources used by Indigenous effects, taking into consideration the impacts of the Howse Project in combination with past, present and future projects.</li> </ul>
					Water/Wetlands	inture physical activities.
CEAA 88	ECCC	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) current Use of Lands and Resources for traditional purposes	6.1.4 6.1.5 6.1.8	7.3, 7.4	The Federal Government strives for the goal of No Net Loss of wetland function on federal lands or when federal funding is provided. Environment and Climate Change Canada recommends that the goals of <i>The Federal Policy on Wetland Conservation</i> be considered in wetland areas as a beneficial management practice. A copy of the policy can be found at: http://publications.gc.ca/pub?id=9.686114&sl=0.	<ul> <li>Provide information on how the proponent intends to manage land around impacted wetlands in order to abide by the Federal Policy on Wetland Conservation? If the current assessment's mitigation approach did not reflect recommended actions contained in the Federal Policy, indicate if additional mitigation measures would be implemented in order to abide by the Policy. If so, provide a revised effects analysis.</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					<ul> <li>Best practices include:</li> <li>Developments on wetlands should be avoided.</li> <li>Where development does occur in the vicinity of wetlands, a minimum vegetation buffer zone of 30 meters should be maintained around existing wetland areas.</li> <li>Hydrologic function of the wetland should be maintained.</li> <li>Runoff from development should be directed away from wetlands.</li> <li>For further information concerning buffer zones see: <a href="https://www.ec.gc.ca/paom-itmb/default.asp?lang=En&amp;n=8D910CAC-1#_03_1_1">https://www.ec.gc.ca/paom-itmb/default.asp?lang=En&amp;n=8D910CAC-1#_03_1_1</a>.</li> <li>A 30-meter buffer from the high water mark of any water body (1:100 year flood zone) is recommended in order to maintain movement corridors for migratory birds.</li> </ul>	
CEAA 89		5(1)(c)(iii) current Use of Lands and Resources for traditional purposes Species At Risk Act, s.79	6.1.8	9.2.1	The EIS states that if a rare plant is discovered, the area would be isolated and specific measures to protect the species would be implemented. In addition to mitigating potential effects on any found rare plants, the appropriate government agencies should be notified.	• What are the specific measures that would be taken to mitigate potential environmental effects if a rare plant were to be discovered?
CEAA 90	NL - Wildlife division	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) current Use of Lands and Resources for traditional purposes	6.1, 6.3	Table 7-78	In the EIS, the proponent commits to not "clearing in the riparian strip along watercourses or in wetlands without authorization." In order to assess the effectiveness of this mitigation measure, additional technical detail is needed.	<ul> <li>What was the width of riparian buffer the proponent commits to protecting and that the effects analysis was based upon?</li> <li>Explain under what circumstances the proponent would seek authorization (i.e. anticipated activities) to clear in a riparian strip along watercourses and from who this authorization would be sought.</li> <li>Describe anticipated environmental effects that could result from clearing riparian areas and the significance of those effects on valued components.</li> </ul>
CEAA 91	CEAA	5(1)(a)(i) Fish and Fish Habitat	6.1, 6.3	Table 7–78	In the EIS, the proponent commits to being "particularly careful in wetlands and protected	Review proposed mitigation measures associated with wetlands and provide revised measures that are

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
		5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) current Use of Lands and Resources for traditional purposes			areas". There is insufficient information to understand what is meant by "particularly careful" and what impact this measure might have.	specific, measurable, attainable, relevant, and time- bound along with associated analysis on its effectiveness at reducing environmental effects.
CEAA 92	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) current Use of Lands and Resources for traditional purposes	6.1, 6.3		In the EIS the proponent commits that "no explosive must be used in or near water."	<ul> <li>What is the distance, criteria, or threshold the proponent is measuring to ensure explosives are not used in or near water? Provide a rationale for how this criterion effectively mitigates environmental effects.</li> </ul>
CEAA 93	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) current Use of Lands and Resources for traditional purposes	6.1, 6.3	7-201	The EIS identified loss of wetlands and localized drying-out as potential effects on wetlands.	<ul> <li>In addition to loss of wetland habitat, explain what other effects on wetlands could occur as a result of the Project (e.g. impacts of road use, air emissions), including a description of key wetland functions that could be lost (e.g. bird habitat, flood control)?</li> <li>Predict how much wetland could be lost as a result of drawdown (i.e. in hectares) and provide an associated analysis to support the predictions (e.g. modelling or otherwise).</li> <li>Describe and map the geographic extent of potential draw-down.</li> <li>Explain if any measures are proposed to mitigate the effects of water draw-down (e.g. on fish and fish habitat).</li> </ul>
CEAA 94	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) current Use of Lands and Resources for traditional purposes	6.1, 6.3	Table 7-74	The EIS states that the value of certain wetlands is high or very high.	• Explain why certain wetlands were determined to have a high or very high value.
CEAA 95	CEAA	5(1)(a)(i) Fish and Fish Habitat	6.1, 6.3	7-204	The EIS states that during the first years of mining operation, dewatering would be limited to water from direct precipitations and infiltration through the unsaturated geological unit and that dewatering would be more important when the operation	<ul> <li>Provide additional information to explain and clarify the meaning of this phrase.</li> <li>Are the anticipated environmental effects expected to be consistent throughout the pit development or would one phase have greater</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					reaches the pit's maximum depth (p.7-204).	potential for environmental effects? Provide analysis. If the effects are not consistent throughout the lifetime of the Project, what is the proponent's approach to mitigating the various phases of the dewatering?
CEAA 96	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) current Use of Lands and Resources for traditional purposes	6.1, 6.3	Table 7-79	The EIS proposes to strip "the entire area all at once rather than progressively whenever possible" so as to limit stress on wetlands. It is not clear how this measure would reduce environmental effects.	<ul> <li>Provide substantiating information as to how the proponent quantified that all-at-once clearing poses less stress on wetlands.</li> </ul>
CEAA 97	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) current Use of Lands and Resources for traditional purposes	6.1, 6.3	Table 7 – 78	The EIS commits to maintaining a transition zone around the work site in which trees are removed, but stumps are left intact to preserve the shrub stratum.	<ul> <li>Provide information as to the specific environmental effects that are being mitigated by implementing a transition zone (i.e. leaving stumps).</li> <li>Describe the proposed size of the transition zone, and provide an associated rationale.</li> </ul>
CEAA 98	CEAA	5(1)(a)(i) Fish and Fish Habitat	6.1, 6.3	Table 7 – 78	The EIS commits to "respect(ing) the area's natural drainage and tak(ing) all appropriate measures to permit the normal flow of water". This general mitigation does not provide sufficient information to understand e proposed changes on the environmental effects.	<ul> <li>Provide specific examples of mitigation measures that are considered "appropriate measures" that would respect the areas natural drainage and that would permit normal water flow. Provide information to clearly indicate how these measures reduce the environmental effects.</li> </ul>
CEAA 99	CEAA	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds	6.1, 6.3	7-208	The EIS states that the top layer of stripped organic matter would be deposited in, for example, a disturbed area, far from any watercourse, to promote revegetation of a wetland.	• Provide analysis demonstrating how the deposit of organic matter would promote revegetation of a wetland.
CEAA 100	ECCC	5(1)(a)(i) Fish and Fish Habitat	6.1, 6.3	7.3	According to ECCC, the water effluent may also be subject to the <i>Metal Mining Effluent Regulations</i> , in addition to the provincial certificate of approval. ECCC is of the view that there is a possibility of seepage with an unlined pond, which is proposed in the EIS. The list of required federal approvals should include	<ul> <li>Provide a rationale on why the sedimentation pond would not be lined.</li> <li>Based on current designs, explain how seepage from the sedimentation pond would be monitored (i.e. detected) and describe the potential environmental effects, as well as, the mitigation measures that would be implemented if detected.</li> <li>Review the list of federal authorizations to include the</li> </ul>

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
					the <i>Metal Mining Effluent Regulations</i> and other mandatory permit and licenses, if appropriate.	Metal Mining Effluent Regulations and other mandatory permit and licenses, if appropriate. If any other permits or licenses must be added, outside of the Metal Mining Effluent Regulations, inform the Agency.
CEAA 101	DFO-IR- 08	5(1)(a)(i) Fish and Fish Habitat	6.1, 6.3	Page 7-263 and 267	The Burnetta Lake has an area of about 5 hectares. It has not yet been surveyed and no other information is known about its aquatic fauna. The EIS states that the risk of an effect on aquatic fauna in Burnetta Lake is unlikely given the distance to the mine site but nonetheless possible and an aquatic survey should be conducted in that lake in the summer of 2016 to complete the portrait.	<ul> <li>Provide the characterization of fish and fish habitat (including water quality) in Burnetta Lake to the Agency.</li> <li>Revise the analysis and impact predictions, as applicable, based on new information.</li> </ul>
CEAA 102	IN-IR-58	5(1)(a)(i) Fish and Fish Habitat 5(1)(a)(iii) Migratory Birds 5(1)(c)(iii) Current Use of Lands and Resources for traditional purposes	6.1, 6.3	7.3	The EIS states that a monitoring program during the dewatering of the pit should be carried out to establish that the wetlands closer to the pit are indeed not affected.	<ul> <li>Evaluate benefits of wetland monitoring using control or reference wetland monitoring compared to monitoring wells, as proposed, as potential mitigation measures.</li> </ul>
CEAA 103	NNK-2	5(1)(a)(i) Fish and Fish Habitat 5(1)(c)(i) Aboriginal Peoples Health/ socio-economic conditions	6.1.8	3-14, 15	<ul> <li>With respect to operations, the EIS states that the concentration of total iron, which is not currently regulated by the <i>Metal Mining Effluent Regulations</i>, was tested once and the result was high. This parameter would be closely monitored in the future, but it is assumed that iron is present in the suspended solid form and should settle out in the sedimentation ponds thus lowering the concentration to acceptable levels.</li> <li>With respect to closure, the EIS indicates that iron could be a source of contamination and that, as a treatment strategy, the sedimentation ponds would be covered to avoid any leaching of iron.</li> </ul>	<ul> <li>With respect to operations, provide a rationale for assuming that iron is present as a suspended solid and that it would settle out in the sedimentation ponds at a rate that would permit acceptable concentrations of iron in water. What measures would be taking to monitor iron levels and what mitigation would occur if exceedances are observed? What are the levels of detectable iron that is acceptable?</li> <li>With respect to closure, covering ponds typically reduces evaporation as opposed to leaching, describe in more detail the process and components involved in covering sedimentation ponds and how it would reduce environmental effects from high concentrations of iron.</li> </ul>
CEAA 104	NNK-7	5(1)(c)(i) Aboriginal Peoples Health/ socio-economic	6.1.8	2-19 7-278	<ul><li>The EIS states the following:</li><li>Blasting would occur weekly for seven months</li></ul>	• Describe the effects that spawning and fish eggs may experience from blasting. What mitigation measures

IR Number	Dept Number	Effects Link to CEAA 2012	Link to EIS guidelines	EIS Reference	Context and Rationale	Specific Question/ Request for Information
		conditions 5(1)(a)(i) Fish and Fish Habitat		7-276 7-334, 7-335	<ul> <li>per year.</li> <li>Trout speciesspawn in late summer/fall.</li> <li>Specific mitigation measures for aquatic fauna – limit the maximum chargesto protect fish eggs and fish from vibration and fish from overpressure.</li> <li>During the construction and the operation phase, the fish and fish habitat of the Goodream Creek would be affected, but the fish would stay fit for consumption.</li> </ul>	<ul> <li>would be implemented to address these effects?</li> <li>Clarify if the maximum charges are to be limited year- round or only at specific times of the year.</li> <li>Explain how fish would be monitored at nearby fishing locations to verify they remain safe for consumption. What action would the proponent take to mitigate potential effects to human health?</li> </ul>

Departmental number (e.g. HC-01)	Reference to EIS	Context and Rationale	Advice to the Proponent
TC			Navigation Protection ActThere are no waterways within the project area that are listed in the Schedule 2 of the NavigationProtection Act. However, the proponent may choose to opt-in and have the Act made applicable toits work under Section 4 of the Navigation Protection Act for any work constructed, placed, altered,repaired, rebuilt, removed or decommissioned in, on, over, under, through or across any navigablewater not listed in the Schedule.Please be advised that throwing or depositing (section 21 and 22) as well as dewatering (section 23)apply to all navigable waterways and therefore, should the proponent propose this type of activity itshall make Notice under section 5 to the Navigation Protection Program and have the work assessed.For further information please consult the NPA website at: <a href="http://www.tc.gc.ca/eng/programs-621.html">http://www.tc.gc.ca/eng/programs-621.html</a> .Transportation of Dangerous Goods Act (TDGA)
			The project description indicates the use of explosives that would be supplied and delivered by a third party contractor. Compliance with the TDGA is mandatory when handling and/or transporting any regulated dangerous goods. Additional information on the TDGA is available from: <a href="http://www.tc.gc.ca/eng/tdg/safety-menu.htm">http://www.tc.gc.ca/eng/tdg/safety-menu.htm</a> .

			Transport Canada would like to advise the proponent of CANUTEC. CANUTEC is the Canadian Transport Emergency Centre, operated by Transport Canada, that assists emergency response personnel in handling dangerous goods emergencies. This national bilingual advisory centre is specialized in interpreting technical information, providing advice, and emergency response. CANUTEC offers 24-hour emergency telephone service at 1-613-996-66666 or *666 on a cellular phone.
ECCC-PI-02	Chapter 2, 2.5.6 .1, page 2-17	Not a technically accurate statement.	Alternative 1. The EIS states that the use of a sedimentation pond is not for water treatment. This is not accurate; settling of solids is a form of physical treatment for wastewater.
NL Wildlife Division	Section 7.4.3 – Caribou Migratory Tundra Page 7-211	The EIS states that "the most recent census of this (caribou) population was carried out in 2014, at which time the herd was estimated at 14,200 animals (GNL, 2014b),".	The most recent population is estimated at 10,200 caribou after fall 2015 surveys.
NL Wildlife Division	Section 7.4.3 – Caribou Migratory Tundra	The EIS states that "Special care will be taken at all times not to interfere with the activities of First Nation hunters."	To clarify, all hunting of caribou is currently banned within Labrador.