Technical Advisors' Issues Tracking Table

ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
Provincial Ministries					
EAC - 1 - 1	Initial Project Description	Early Engagement	Other	MCM MMO	MMO understands that the initial project description was developed based on information in a 2020 prefeasibility study. Prefeasibility studies do not always include sufficient level of detail on the mine plan and infrastructure siting and capacity to adequately support environmental assessments. MCM would like to see the DPD include information on the level of study that will be available for the Project and the engineering design levels for key infrastructure components including but not limited the TSF, waste rock dumps and stockpiles, and surface water management infrastructure.
EAC - 1 - 2	Initial Project Description	Early Engagement	Surface Water	MCM MMO	MMO would like to remind Taseko to consider the Health, Safety and Reclamation Code for Mines in BC (Code) Section 6.10.1(7) in the design of dumps and stockpiles.
EAC - 1 - 3	Initial Project Description	Early Engagement	Other	MCM MMO	Given the IPD relies on a 2020 prefeasibility study and site investigation information from 2011 and 2012, MMO would like to remind Taseko of the significant changes to Part 10 of the Code in 2024 related to water management and tailings storage facilities.
EAC - 1 - 4	Initial Project Description	Early Engagement	Surface Water	MCM MMO	MMO would like the DPD to confirm that any water treatment considerd for closure / post-closure will also be designed in consideration of the Technology Readiness Levels guidance.
EAC - 1 - 5	Initial Project Description	Early Engagement	Paleontology	BC FMO	BC Fossil Management Office requests two documents: 1) an updated desktop study called a Paleontological Preliminary Study Report for the current Project site and associated access routes and transmission line to update the paleontological study conducted for the Harper Creek Project application; and 2) assuming the risk to fossil resources is low, a basic Chance Find Protocol for fossil discoveries. Documents should follow the report guidelines for each document found here: https://www2.gov.bc.ca/gov/content/industry/natural-resource-use/fossil-management/industry-and-user-information While previous iterations of this project produced a Preliminary Study, sufficient time has passed, and the project has evolved, to the extent that this study must be conducted again. Please note that in order to produce both the PSR and the CFPs, the proponent will need to hire an authorized paleontological consultant. A list of qualified consultants in BC can be found here: https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/fossil-management/list_of_consultants_-_webpage_pdf.pdf
EAC - 1 - 6	Initial Project Description	Early Engagement	Surface Water	ENV EPD	Under S. 9.1 Project Interactions and Effects, in Table 9.1: Some proposed mining components/activities can still affect Surface/Ground Water in the Closure & Post Closure Phase, depending on the reclamation. These could include TSF, Waste Rock storage, and open pits.
EAC - 1 - 7	Initial Project Description	Early Engagement	Permitting	ENV EPD	Under S. 7 Government and Public Engagement, 7.12 Provincial Government in Table 7.2 pg. 86: ENV is identified as permitting under the Drinking Water Protection Act. This Act is administered by the Ministry of Health, not Ministry of Environment & Parks.
EAC - 1 - 8	Initial Project Description	Early Engagement	Consultation and eng	ENV EPD	Under 7.14 Engagement with Governments, pg. 87: Engagement with ENV is not mentioned here. However, Taseko contacted ENV in the fall of 2020 to share periods and frequency of already collected and proposed baseline for several valued components. ENV provided comments on this baseline information in November 2020.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 9	Initial Project Description	Early Engagement	Additional Topics	ENV EPD	The document provides some information about periods baseline data for aquatic habitat were collected. For the detailed project description it would be useful to also provide methods timelines and high level approaches for baseline collection and proposed assesssment approaches for air quality, water quality, biota, surface flow and groundwater.
EAC - 1 - 10	Initial Project Description	Early Engagement	Surface Water	ENV EPD	This comment provides some information that resulted from the Harper Creek project review, that should be considered in assessment and mitigation planning: Harper Creek prediction models indicated that concentratons of selenium, copper, cadmium, sulphate and zinc could increase in downstream waterbodies (mainly T-Creek and for some parameters (including selenium) in Harper Creek) to the point of exceeding water quality guidelines. These were predicted as a result of project activities and seepage.
EAC - 1 - 11	Initial Project Description	Early Engagement	Additional Topics	ENV EPD	S. 4.2.1.7 indicates that contact water is planned to be treated before discharged using a modular water treatment design. It is also stated that "The selected water treatment technology will meet the appropriate Technology Readiness level under the Technology Readiness Assessment Interim Technical Guidance (EMLI 2022)." Please make sure to include information on how the proposed treatment will meet the appropriate Technology Readiness Level. The application should also include rationale on why the proposed treatment efficiencies can be achieved in the conditions at the Yellowhead project.
EAC - 1 - 12	Initial Project Description	Early Engagement	Roads	MOTT	Birch Island-Lost Creek Road is not currently suited to handle oversize / heavy loads. What upgrades are proposed?
EAC - 1 - 13	Initial Project Description	Early Engagement	Air Quality	MOTT	Additional efforts will be required to minimize dust from use of Birch Island-Lost Creek Road.
EAC - 1 - 14	Initial Project Description	Early Engagement	Noise and Vibrations	MOTT	Re: rail load-out facility - MOTT has received complaints from residents on McCorvie Road regarding industrial traffic volumes and speeds.
EAC - 1 - 15	Initial Project Description	Early Engagement	Roads	MOTT	Impacted MOTT Roads / Infrastructure: Birch Island-Lost Creek Road, Birch Island Bridge, Vavenby Bridge Road, Vavenby Bridge, McCorvie Road. Birch Island-Lost Creek Road is not a municipal road.
EAC - 1 - 16	Initial Project Description	Early Engagement	Transmission Line	MOTT	Proposed transmission line will cross: Dunn Lake Road, Highway 5N, Lemieux Creek Road.
EAC - 1 - 17	Initial Project Description	Early Engagement	Roads	MOTT	Transportation of hazardous chemicals, explosives, large equipment (ultra-class haul trucks) over bridges is a concern.
EAC - 1 - 18	Initial Project Description	Early Engagement	Roads	MOTT	All MOTT roads are subject to seasonal load restrictions ranging from 50% - 100% legal axle loading.
EAC - 1 - 19	Initial Project Description	Early Engagement	Roads	MOTT	24 round trips of 40 tonne B-trains will have considerable impact to roads and infrastructure.
EAC - 1 - 20	Initial Project Description	Early Engagement	Permitting	MOTT	Permit for rail load-out operations would be through Transport Canada and not MOTT?
EAC - 1 - 21	Initial Project Description	Early Engagement	Roads	MOTT	2020 McElhanney traffic impact assessment report. Will this be made available?
EAC - 1 - 22	Initial Project Description	Early Engagement	Transmission line	MOTT	2024 Valard memo regarding transmission line preliminary routing. Will this be made available?
EAC - 1 - 23	Initial Project Description	Early Engagement	Greenhouse Gas Emis	ENV CAS	Section 4.5.2 Greenhouse Gas Emissions: the proponent notes the requirement for projects that will emit over 10,000 tonnes carbon dioxide equivalent (CO_2e) per year are required to develop a net-zero by 2050 plan as part of the Application. A credible net-zero plan will be one of the factors considered by the Ministers during the decision-making phase. Therefore, project proponents are required to include a net-zero plan as part of the Application Information Requirements (AIR). As such, the Climate Action Secretariat (CAS) encourages the proponent to review the AIR requirements as early as possible to explore emissions reduction technologies for implementation in the project design. Under the Net-Zero New Industry Policy, new industrial facilities are required to demonstrate alignment with world-leading emissions intensities. As a result, review of all potential emission reduction measures will be necessary to ensure the project maintains an emission intensity in line with world leading throughout operations.
EAC - 1 - 24	Initial Project Description	Early Engagement	Greenhouse Gas Emis	ENV CAS	Section 4.5.2 Greenhouse Gas Emissions: Under the Net-Zero New Industry policy, B.C.'s net GHG emissions equation differs from the federal net GHG emissions equation noted on page 35, Equation 1, in that it does not include the use of Avoided Domestic Emissions.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 25	Initial Project Description	Early Engagement	Groundwater	WLRS - WSA	Wells around the plant site will require a water licence under the WSA for groundwater extraction. Key considerations: aquifer sustainability, interference with other users, water quality monitoring
EAC - 1 - 26	Initial Project Description	Early Engagement	Surface Water	WLRS - WSA	Any water diverted or used from streams or ponds must be licensed (possible ore processing, site operations, effluent dilutions, road maintenance, land improvement (water diverted or impounded to facilitate the development, drainage, etc). Streams impacted include the headwaters of Harper Creek, Baker Creek and Jones Creek. Key considerations: water availability, interference with other users, Environment Flow Needs (EFNs). Impacts on Harper Creek, Baker Creek, Jones Creek, North Thompson River, tribuaries and aquifers must be assessed and mitigated.
EAC - 1 - 27	Initial Project Description	Early Engagement	Groundwater	WLRS - WSA	Seepage from the TSF and contact water systems may interact with groundwaer or surfacewater, requiring licensing and monitoring.
EAC - 1 - 28	Initial Project Description	Early Engagement	Groundwater	WLRS - WSA	Temporary water use during early construction phases may require short term use approvals under Section 10. Key considerations: volume and rate of withdrawal, impact on licenced water users.
EAC - 1 - 29	Initial Project Description	Early Engagement	Surface Water	WLRS - WSA	Post-closure water treatment and discharge licensing. Long term water treatment and discharge plans must be licensed and maintained until water quality allows for safe releases. Key considerations: water treatment continuation, discharge quality and volume, monitoring and adaptive management.
EAC - 1 - 30	Initial Project Description	Early Engagement	Permitting	Interior Health	Permitting for Industrial Camp through Interior Health. Adhere to Industrial Camp Regulation - https://www.bclaws.gov.bc.ca/civix/document/id/lc/statreg/70_2012#section1 and Industrial Camp Guidelines - https://www2.gov.bc.ca/assets/gov/health/keeping-bc-healthy-safe/industrial-camps/bc_guidelines_for_industrial_camps_regulation.pdf.
EAC - 1 - 31	Initial Project Description	Early Engagement	Permitting	Interior Health	Permitting for drinking water system through Interior Health (construction, operations, closure, post closure). https://www.interiorhealth.ca/information-for/businesses/drinking-water-providers-and-operators#new-drinking-water-source-assessment--for-new-or-existing-systems-
EAC - 1 - 32	Initial Project Description	Early Engagement	Permitting	Interior Health	Hiring an Authorized Person to design the septic system (construction, operations, closure, post closure). https://www.interiorhealth.ca/health-and-wellness/environmental-health-and-hazards/sewerage-subdivisions-and-healthier-industries
EAC - 1 - 33	Initial Project Description	Early Engagement	Permitting	Interior Health	Permitting for food service through Interior Health (construction, operations, closure, post closure). https://www.interiorhealth.ca/information-for/businesses/food-premises
EAC - 1 - 34	Initial Project Description	Early Engagement	Environmental Assess	WLRS - Integrated Stewardship (TO)	Section 9.2: Cumulative Effects (CE) section is vague. To improve this section, we reccomend the proponents consider BC Cumulative Effects Framework (CEF) data and guidance (draft info can be provided by me, published items are on the website), and specifically evaluate the landscape scale cumulative effects of the project in combination with existing disturbances / current condition (supported by CEF data) and reasonably foreseeable future disturbances/impacts.
EAC - 1 - 35	Initial Project Description	Early Engagement	Other	WLRS - Integrated Stewardship (TO)	Section 9.2: The spatial boundary for the CEA should include the mine site boundary and any associated development (i.e. transmission line) for the additional impacts. Recommend using the Kamloops LRMP boundary and including additional area for the whole transmission line.
EAC - 1 - 36	Initial Project Description	Early Engagement	Other	WLRS - Integrated Stewardship (TO)	Section 9.2: Please see the bulletin for more info and support in aligning assessment with the CEF https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/cumulative-effects/bulletin_1_cef-ea_feb_2017.pdf, suggest following the process described in the arrow document on that page. However note that our knowledge of future condition for this area is limited.
EAC - 1 - 37	Initial Project Description	Early Engagement	Environmental Assess	WLRS - Integrated Stewardship (TO)	Section 9.2: CEF values that should be considered include: watersheds, old growth, forest biodiversity. Mule Deer Winter Range and Visual Quality Objectives may be relevant (hard to tell without road option polygons). Moose data is also avaiable for the area; moose value is low risk in this area but recommendations and indicators from Moose CEF report may be relevant.
EAC - 1 - 38	Initial Project Description	Early Engagement	Environmental Assess	WLRS - Integrated Stewardship (TO)	Section 9.2: Expect CEF values and indicators to be considered related to items addressed in these sections as well. CE of the project will be difficult to evaluate until the effects themselves are more specifically and clearly characterized.
EAC - 1 - 39	Initial Project Description	Early Engagement	Other	WLRS - Integrated Stewardship (TO)	General: Because much of the CEF work is unpublished as of now, please reach out to me (Sophie Collins) for the most current CE data once you are at that phase. Our team can help flag impacts from the proposed works on CE values indicators.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 40	Initial Project Description	Early Engagement	Other	WLRS - Integrated Stewardship (TO)	Section 9.2: CEF data can be used to support defining Value Components
EAC - 1 - 41	Initial Project Description	Early Engagement	Other	WLRS - Integrated Stewardship (TO)	Section 9.2: possible hydrology/runoff may be affected by the project more broadly, not just during clearing, should be considered in light of CE to watersheds
EAC - 1 - 42	Initial Project Description	Early Engagement	Other	WLRS - Integrated Stewardship (TO)	Section 9.2 Can consider effects to CEF values/indicators/benchmarks. Impacts to some indicators are fairly straightforward (e.g. road density) but some depend on whether the project overlaps specific land cover components. Some specific data that may be useful include interior old/mature forests, sediment sensitive zones, moose habitat ecotypes (it will be easier to evaluate which indicators/datasets are relevant when the effects are more clearly defined). CEF reports/info can also support defining mitigation measures.
EAC - 1 - 43	Initial Project Description	Early Engagement	Other	WLRS - Integrated Stewardship (TO)	Section 9.2: other effects that may influence CE values/indicators may include: traffic/road access impacts to water, biodiversity, wildlife values; clearing impacts to hydrology/water values (see comment above) and biodiversity/old growth values
EAC - 1 - 44	Initial Project Description	Early Engagement	Permitting	WLRS - Authorizations	Page 67 states "Land Act License of Occupation may be required for construction and operation of the transmission line on Crown Land." This would be required outside of the permitted mine area. The licence would authorize entry, occupation, and construction of the utility as an interim tenure pending completion of survey requirements and issuance of a statutory right of way.
EAC - 1 - 45	Initial Project Description	Early Engagement	Permitting	WLRS - Authorizations	Construction and operation of a road on Crown land that is not within the permitted mine area and not on a FSR may require a Crown land licence of occupation/statutory right of way.
EAC - 1 - 46	Initial Project Description	Early Engagement	Infrastructure and Ser	TNRD	The Vavenby Fire and Rescue Department would like to know any expectations of their services to the work camp (ie medical or fire response) during construction phase and also for the long term operation of mine. The department is currently only funded through local property taxes and provincial/federal grants.
EAC - 1 - 47	Initial Project Description	Early Engagement	Infrastructure and Ser	TNRD	The community of Birch Island are not within any fire protection zone (ie no emergency responses are dispatched unless it involved fires on crown land where BC Wildfire Service would be dispatched). There is concern that with heavy haul trucks expected to use the Birch Island Lost Creek Road, there is an increased likelihood for emergency services requests. We hope to come up with a way to address this.
EAC - 1 - 48	Initial Project Description	Early Engagement	Infrastructure and Ser	TNRD	There are some general issues from community about roads that relates to lessons learned from the previous major infrastructure project the Trans Mountain Expansion Project (TMEP). Highways in the winter would see an increased issue with packed snow turning into ice from increased local traffic. For TMEP, shifts usually saw work vehicles on highways before highway maintainence crews and therefore local residents would face the packed snow and ice on their morning commutes. Heavy haul vehicles generally did a lot of wear and tear on all roads within Vavenby during TMEP. There is an elementary school in Vavenby and parents have voiced concerns about incresed traffic and most children who walks to school. Sidewalks and speed bumps are requested to be considered.
EAC - 1 - 49	Initial Project Description	Early Engagement	Employment and Eco	TNRD	Vavenby residents voiced concerns about impact on property values and resulting property tax impacts.
EAC - 1 - 50	Initial Project Description	Early Engagement	Air Quality	TNRD	Vavenby and Birch Island residents would like to see testing for current pre-construction averages and a commitment from proponent to adhere to a range during construction and long term operation. A commitment should include action plan that the proponent will undertake should the levels drops outside the pre-construction ranges. (air quality)
EAC - 1 - 51	Initial Project Description	Early Engagement	Noise and Vibrations	TNRD	Vavenby and Birch Island residents would like to see testing for current pre-construction averages and a commitment from proponent to adhere to a range during construction and long term operation. A commitment should include action plan that the proponent will undertake should the levels drops outside the pre-construction ranges. (acoustic/noise)

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 52	Initial Project Description	Early Engagement	Groundwater	TNRD	Vavenby and Birch Island residents would like to see testing for current pre-construction averages and a commitment from proponent to adhere to a range during construction and long term operation. A commitment should include action plan that the proponent will undertake should the levels drops outside the pre-construction ranges. (groundwater)
EAC - 1 - 53	Initial Project Description	Early Engagement	Surface Water	TNRD	Vavenby and Birch Island residents would like to see testing for current pre-construction averages and a commitment from proponent to adhere to a range during construction and long term operation. A commitment should include action plan that the proponent will undertake should the levels drops outside the pre-construction ranges. (surface water)
EAC - 1 - 54	Initial Project Description	Early Engagement	Employment and Ecor	TNRD	Residents would like to see commitment from proponent on maintaining a human labour force during the construction and long term operational phases. With the trend of robotics and automation, there is concern the number of local jobs contributing to the local economy would shrink from the estimates proponent has given in the future years to come.
EAC - 1 - 55	Initial Project Description	Early Engagement	Effects of the Environr	TNRD	Residents would like to know if the mine design takes into account the increasingly extreme weather patterns due to climate change. Might they take additional buffers into the designs by considerating say 500 year rain events as normal as 100 year rain events? Are there any built in flexibility of design if weather patterns gets more extreme during the 25 year mine life?
EAC - 1 - 56	Initial Project Description	Early Engagement	Infrastructure and Ser	TNRD	The communities of Vavenby and Birch Island would like to know of any typical legacy projects the proponent could support locally; ie community centers, parks, annual events, wayfinding signages, trails etc.
EAC - 1 - 57	Initial Project Description	Early Engagement	Fish and Fish Habitat	TNRD	Residents would like to know of salmon and other freshwater fish protection plans.
EAC - 1 - 58	Initial Project Description	Early Engagement	Community Well-Bein	TNRD	The outdoors activties clubs in the area would like to keep access to their sites of recreational value, such as Harper Warming Cabin and all current rec sites, to be kept public as much as possible. If acccesses are blocked, they hope there are alternate sites developed to take their place.
EAC - 1 - 59	Initial Project Description	Early Engagement	Other	TNRD	Residents brought up the issue that when they looked at mineral claims in the Vavenby and Birch Island area, it appears the proponent has acquired the vast majority of them. There was concern that the mine would be expanded to areas beyond the IPD.
EAC - 1 - 60	Initial Project Description	Early Engagement	Employment and Ecor	TNRD	Local businesses such as Vavenby General Store and Dee's Store in Birch Island would like to see commitment from proponent to give them priority of offering services. As would employment of workers as well from the Vavenby and Birch Island communities being closest to the mine
EAC - 1 - 61	Initial Project Description	Early Engagement	Infrastructure and Ser	TNRD	While the IPD has decribed the work camp as being on site approximately 20kms away from Vavenby center, the TNRD would like to flag for consultation in any future changes that might make use of the Vavenby community water system as well as any potential sewage treatment set up.
EAC - 1 - 62	Initial Project Description	Early Engagement	Infrastructure and Ser	TNRD	Residents suggest conveyor system for product transfer from mine site to rail load out facility for reduced vehicle emissions and noise.
EAC - 1 - 63	Initial Project Description	Early Engagement	Infrastructure and Ser	TNRD	Consulting with the RCMP detachment commander in Clearwater, it is expected that similar to TMEP there would be an increased number of calls for their services. Additionally, vehicle incidents are naturally expected to increase due to higher number of traffic for workers. Currently, the Clearwater detachment is short of the 4 BC Highway Patrol officers that was stationed there during the TMEP. Residents would like to see provincial support to bring these highway officers back to keep our road users safe.
EAC - 1 - 64	Initial Project Description	Early Engagement	Other	TNRD	Residents raised the conern of disturbance of urainum deposits. This has been a major topic that has been brought up by many at every community meeting. Our communities would like to see plans for long term regular monitoring and commitment to action plan should radioactivity increase during both construction and long term operation phases.
EAC - 1 - 65	Initial Project Description	Early Engagement	Closure	TNRD	Residents would like to know how much funds or what is the formula for calculating the mine wind down cost. If a lake is to be created over the open pit mine after operations are finished, residents would like to see mitigation for drownings as they are a common hazard from decommissioned open pit mine/quarries.
EAC - 1 - 66	Initial Project Description	Early Engagement	Closure	TNRD	There was a septic system put in place somewhere at the proposed mine site by the previous owners Yellowhead Ventures. Residents would like that to be properly decommissioned or brought up the standards if it is to be used by the proponent. There has been some unmarked dumping sites on Forest Service Roads in the area. Residents would also like to see those properly attended to by proponent if they come across them during construction and long term operations.
EAC - 1 - 67	Initial Project Description	Early Engagement	Water	WLRS - Hydrology	Could the proposed NAG waster rock storage west of the pit be stored elsewhere to limit the impact to the drainage area and hydrology of P creek?

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 68	Initial Project Description	Early Engagement	Water	WLRS - Hydrology	What is the planned mine water efficiency, and how much water is anticipated to be recoverable (sent to the receiving environment) through the Water Treatment Plan?
EAC - 1 - 69	Initial Project Description	Early Engagement	Water	WLRS - Hydrology	Potential Project Interactions (Table 9-1): Vehicle transportation of equipment (…) component could interact with Water and Fish and Fish Habitat during road maintenance or spill during operation.
EAC - 1 - 70	Initial Project Description	Early Engagement	Water	WLRS - Hydrology	Potential Project Interactions (Table 9-1): Onsite clearing and preparation component could interact with Fish and Fish Habitat during construction.
EAC - 1 - 71	Initial Project Description	Early Engagement	Water	WLRS - Hydrology	Potential Project Interactions (Table 9-1): TSF and waster Rock management components can interact with Fish and Fish habitat as both are proposed in fish habitat, headwater of both T and P creeks.
EAC - 1 - 72	Initial Project Description	Early Engagement	Water	WLRS - Hydrology	In the 2015 application, fish habitat loss was only assessed between P and T Creek, further assessment needs to be conducted in Harper Creek below T creek as flow reduction and water quality will have an impact there as well. This will likely require further hydrometric/hydrologic, fish surveys and aquatic habitat work.
EAC - 1 - 73	Initial Project Description	Early Engagement	General Project Inquir	WLRS - Ecosystems	Please provide a shapefile or kml of the proposed mine and transmission line footprints (including all feasible transmission line routing options) to allow for proper review of potential impacts to environmental values.
EAC - 1 - 74	Initial Project Description	Early Engagement	Wildlife and Wildlife H	WLRS - Ecosystems	Please provide detailed information on project phase components (mine and transmission line) that overlap with Mountain Caribou Critical Habitat. Based on the proposed mine location and all feasible transmission line routing options, is complete avoidance of Mountain Caribou Critical Habitat possible?
EAC - 1 - 75	Initial Project Description	Early Engagement	Transmission Line	WLRS - Ecosystems	Table 4-15, page 58: Please provide detailed environmental acceptability analysis of all project power supply alternative scenarios to allow for reviewer comparison of potential environmental impacts of all project power supply alternatives.
EAC - 1 - 76	Initial Project Description	Early Engagement	Transmission Line	WLRS - Ecosystems	Section 4.9.5.2 Transmission Line Routing (page 59): To allow for a more complete understanding of the justification of the requirement for a power line to power project operations, please provide a more detailed explanation of why the substation at 100 Mile House was identified by BC Hydro as the only viable point of interconnection for the Project. Please provide rational as to why other interconnection points are non-viable?
EAC - 1 - 77	Initial Project Description	Early Engagement	Permitting	WLRS - Ecosystems	Section 7.1.2, Table 7-2 (page 85) under BC Ministry of Water, Lands and Resource Stewardship (WLRS) please add Responsible for permitting decisions under the BC Wildlife Act
EAC - 1 - 78	Initial Project Description	Early Engagement	Vegetation and Ecosy	WLRS - Ecosystems	Section 8.1.1 Ecosystems and Vegetation (page 90): WLRS Ecosystems requires that baseline data is current. Any data older than 5 years is useful background information, but questionable in terms of painting a current/baseline picture (i.e., data older than 5 years can be used, but should only be used to supplement new data that repeats original surveys and fills gaps). This information is essential to develop a complete understanding of the baseline conditions and the potential effects of the project on environmental values. The proponent needs to provide a detailed list of all proposed Vegetation and Rare plant baseline surveys. Previous and planned survyes listed in Table E-1 (page E-2) are insufficient. Please describe these planned surveys and when they are planned to occur.
EAC - 1 - 79	Initial Project Description	Early Engagement	Vegetation and Ecosy	WLRS - Ecosystems	Section 8.1.1 Ecosystems and Vegetation (page 90): A follow up study by Ecora (2020) identified about 1,500ha of wetlands within the area associated with the Harper Creek Project. Were wetland baseline assessments completed as part of this study? WLRS Ecosystems recommends that baseline field surveys be conducted to assess wetland health/function for all wetlands that have potential to be directly or indirectly impacted by any project phase component within the project footprint.
EAC - 1 - 80	Initial Project Description	Early Engagement	Wildlife and Wildlife H	WLRS - Ecosystems	Section 8.1.2 Terrestrial Wildlife (page 91): Will any of the baseline wildlife studies completed in support of the Harper Creek Project between 2008 and 2011 be repeated in advance of construction in order to obtain more recent data? If so, which field studies will be conducted?

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 81	Initial Project Description	Early Engagement	Wildlife and Wildlife H	WLRS - Ecosystems	Section 8.1.2 Terrestrial Wildlife (page 91) WLRS Ecosystems recommends that baseline data is current. Any data older than 5 years is useful background information, but questionable in terms of painting a current/baseline picture (i.e., data older than 5 years can be used, but should only be used to supplement new data that repeats original surveys and fills gaps). This information is essential to develop a complete understanding of the baseline conditions and the potential effects of the project on environmental values. The proponent needs to provide a detailed list of all proposed wildlife and Species at Risk baseline surveys. Previous and planned survyes listed in Table E-1 (page E-2) are insufficient. Please describe these planned surveys and when they are planned to occur.
EAC - 1 - 82	Initial Project Description	Early Engagement	Project Interactions	WLRS - Ecosystems	Section 9.1 Project Interactions and Effects (page 99): Please amend this section and associated table (Table 9-1) to include all potential indirect project interactions with biological VCs, in addition to all potential direct interactions. The proponent needs to evaluate all potential effects on biological VCs, differentiating between direct impacts which are immediate results (e.g. habitat loss from construction) and indirect impacts which are subsequent effects (noise and light pollution).
EAC - 1 - 83	Initial Project Description	Early Engagement	Project Interactions	WLRS - Ecosystems	Table 9-1 (page 100): Please amend Table 9-1 to reflect that "Onsite clearing and preparation (including earthworks and site leveling)" will interact with wildlife VCs during construction, operations and closure/post-closure (direct and indirect habitat loss; habitat destruction; habitat avoidance; increased mortality risk due to construction operations; reduced wildlife health as a result of disturbance/habitat loss, etc.)
EAC - 1 - 84	Initial Project Description	Early Engagement	Project Interactions	WLRS - Ecosystems	Table 9-1 (page 100): Please amend Table 9-1 to reflect that "onsite road infrastructure and laydown areas" will interact with wildlife VCs during construction (direct and indirect habitat loss; habitat destruction; habitat avoidance; increased mortality risk due to construction operations; reduced wildlife health as a result of disturbance/habitat loss, etc.)
EAC - 1 - 85	Initial Project Description	Early Engagement	Project Interactions	WLRS - Ecosystems	Table 9-1 (page 100): Please amend Table 9-1 to reflect that "Water management related infrastructure: diversion ditches, collection channels (contact water) and open bottom crossings (including potable water treatment plant, sewage treatment facility, site water treatment, and non-contact water management))" will interact with wildlife VCs during construction and operations (diversion of water away from natural settling areas, thereby changing habitat conditions; inadvertent creation of artificial amphibian breeding areas (areas which may reduce the health, fitness and/or survivability of amphibian eggs and/or larva).
EAC - 1 - 86	Initial Project Description	Early Engagement	Project Interactions	WLRS - Ecosystems	Table 9-1 (page 100): Please amend Table 9-1 to reflect that "Water management related infrastructure: diversion ditches, collection channels (contact water) and open bottom crossings (including potable water treatment plant, sewage treatment facility, site water treatment, and non-contact water management))" will interact with wildlife VCs during construction and operations (diversion of water away from natural settling areas, thereby changing habitat conditions; inadvertent creation of artificial amphibian breeding areas (areas which may reduce the health, fitness and/or survivability of amphibian eggs and/or larva).
EAC - 1 - 87	Initial Project Description	Early Engagement	Project Interactions	WLRS - Ecosystems	Table 9-1 (page 100): Please amend Table 9-1 to reflect that "onsite buildings (...)" will interact with wildlife VCs during construction (direct and indirect habitat loss; habitat destruction; habitat avoidance; increased mortality risk due to construction operations; reduced wildlife health as a result of disturbance/habitat loss, etc.)
EAC - 1 - 88	Initial Project Description	Early Engagement	Project Interactions	WLRS - Ecosystems	Please amend Table 9-1 to reflect that "Mine processing infrastructure and buildings (...)" will interact with wildlife VCs during construction (direct and indirect habitat loss; habitat destruction; habitat avoidance; increased mortality risk due to construction operations; reduced wildlife health as a result of disturbance/habitat loss, etc.)
EAC - 1 - 89	Initial Project Description	Early Engagement	Project Interactions	WLRS - Ecosystems	Please amend Table 9-1 to reflect that "Transmission line (including clearing as required)" will interact with wildlife VCs during operations (increased perches for birds of prey, risk of electrocution to birds, altered predator-prey dynamics as a result of cleared transmission line ROW, habitat connectivity disruption, etc.).
EAC - 1 - 90	Initial Project Description	Early Engagement	Wildlife and Wildlife H	WLRS - Ecosystems	Table E-1 (page E-3): Did the traffic assessment described in Table E-1 account for/address the increased risk of wildlife mortality/injury resulting from increased traffic in the area of the Project site? If not, where and how will this potential impact be addressed?

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 91	Initial Project Description	Early Engagement	Wildlife and Wildlife H	WLRS - Ecosystems	Appendix G. Wildlife Species at Risk with Potential to Occur in the Project Area. Please amend Table G-1 to include only SAR that have potential to occur in the project area. A cursory review identified SAR that do not have home ranges that extend into the project footprint (e.g. Western Tiger Salamander, Rocky Mountain Tailed Frog, Yellow-breasted Chat, Burrowing Owl, Green Heron, Mountain Beaver, Desert Nightsnake...)
EAC - 1 - 92	Initial Project Description	Early Engagement	Archaeology	FOR - Archaeology	If the project footprint is different than in 2011 when an AIA was completed, Arch Branch may recommend an additional AIA.
EAC - 1 - 93	Initial Project Description	Early Engagement	Infrastructure and Ser	ENV - Rec Sites and Trails	The proposed mine access routes may interact with snowmobile recreation where snowmobilers either directly use Forest Service Roads or where their trails cross Forest Service Roads to access alpine riding zones.
Federal Authorities					
EAC - 1 - 94	Initial Project Description	Early Engagement	Economic Impacts	ESDC	ESDC-01; a) Key issue: Economic Impacts; b) Project component or activity: Table ES-4: Potential Project Effects, (page xxviii). Social and Economic
EAC - 1 - 95	Initial Project Description	Early Engagement	Economic Impacts	ESDC	ESDC-01; a) Key issue: Economic Impacts; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 96	Initial Project Description	Early Engagement	Economic Impacts	ESDC	ESDC-01; a) Key issue: Economic Impacts; c)(ii) Concern unique to the project or a priority within your mandate: • Changes to local employment and contracting opportunities • Changes to labour income • Changes to regional economy
EAC - 1 - 97	Initial Project Description	Early Engagement	Economic Impacts	ESDC	ESDC-01; a) Key issue: Economic Impacts; c)(iii) Material to federal decision-making: This section of the IPD does not provide any detailed information regarding the changes the proposed Project will have on the impacted community's local employment, contracting opportunities, labour income and the regional economy.
EAC - 1 - 98	Initial Project Description	Early Engagement	Economic Impacts	ESDC	ESDC-01; a) Key issue: Economic Impacts; d) Means for issue resolution: The proponent could be asked to provide detailed information regarding the economic impact of the Project with respect to the impacted community's local employment, contracting opportunities, labour income and the regional economy.
EAC - 1 - 99	Initial Project Description	Early Engagement	Economic Impacts	ESDC	ESDC-01; a) Key issue: Economic Impacts; e) Additional information from the proponent: • How the project would economically benefit the community as a whole and equity -deserving groups in the community's labour market at the local, regional, and national levels. • Explicit indication of the anticipated time frame for the construction and completion of the project and its anticipated lifespan • including consideration of potential risks and mitigation measures related to boom-bust economic cycles. • Project's approximate budget and how much will be spent locally on construction and operation phases including the contracting that will be made to local businesses and the labour force.
EAC - 1 - 100	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-02; a) Key issue: Employment; b) Project component or activity: 4.4 Workforce, (page 33 of IPD).
EAC - 1 - 101	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-02; a) Key issue: Employment; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 102	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-02; a) Key issue: Employment; c)(ii) Concern unique to the project or a priority within your mandate: "It is expected that the region supports a skilled and experienced workforce, with transferable skills from other industries, to support project construction and operations for a range of skilled trades and technical disciplines.", (page 33 of IPD).
EAC - 1 - 103	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-02; a) Key issue: Employment; c)(iii) Material to federal decision-making: This section of the IPD does not provide any evidence that would support the assertion that the region the proposed Project is in supports a skilled and experienced workforce with transferable skills that the proposed Project requires.
EAC - 1 - 104	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-02; a) Key issue: Employment; d) Means for issue resolution: The proponent could be asked to provide evidence to support its expectation that the region within which the proposed Project is located supports a skilled and experienced workforce with transferable skills.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 105	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-02; a) Key issue: Employment; e) Additional information from the proponent: • Forecast of the number of jobs to be created, their job categories (i.e. contractual, part-time, or full-time), and the timeframe of these jobs during the construction phase and operation phases of the project. • Labour force characteristics of the community and local workforce (i.e., employment rate, participation rate, income distribution, level of education), broken down by gender, age, equity deserving groups (ie. Indigenous Peoples, racialized groups, persons with disabilities, newcomers) and any other relevant socioeconomic characteristics. • Adverse effects to local employment • how would they be managed or mitigated (mitigation measures); what employment related programs will be made accessible to those negatively affected by the project (e.g. ESDC employment and training programs), such as job skills and employment training or re-training. • Comprehensive inclusive workforce strategies that outline plans to hire and retain local residents and identify and reduce employment barriers to improve the labour market outcomes of Indigenous Peoples and equity deserving groups. • Assistance to be provided to former employees when the project's facility will permanently shut down (ie. severance pay, retraining/skilling, an offer of another job, or an early retirement package).
EAC - 1 - 106	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-03; a) Key issue: Employment; b) Project component or activity: Table 4-4: Estimated Project Workforce by Phase, (page 34). Post-Closure
EAC - 1 - 107	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-03; a) Key issue: Employment; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 108	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-03; a) Key issue: Employment; c)(ii) Concern unique to the project or a priority within your mandate: [no comment provided]
EAC - 1 - 109	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-03; a) Key issue: Employment; c)(iii) Material to federal decision-making: The table in this section of the IPD estimates that 1 full-time and 4 part-time employees will be required for the duration of the post-closure period of the Project. This section of the IPD does not provide any information regarding how the proponent intends to assist the proposed Project's labour force to transition to alternative employment once the Project is decommissioned.
EAC - 1 - 110	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-03; a) Key issue: Employment; d) Means for issue resolution: It is recommended that the proponent be requested to outline how they intend to assist the proposed Project's labour force to transition to alternative employment once the Project is decommissioned.
EAC - 1 - 111	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-03; a) Key issue: Employment; e) Additional information from the proponent: • Forecast of the number of jobs to be created, their job categories (i.e. contractual, part-time, or full-time), and the timeframe of these jobs during the construction phase and operation phases of the project. • Labour force characteristics of the community and local workforce (i.e., employment rate, participation rate, income distribution, level of education), broken down by gender, age, equity deserving groups (ie. Indigenous Peoples, racialized groups, persons with disabilities, newcomers) and any other relevant socioeconomic characteristics. • Adverse effects to local employment • how would they be managed or mitigated (mitigation measures); what employment related programs will be made accessible to those negatively affected by the project (e.g. ESDC employment and training programs), such as job skills and employment training or re-training. • Comprehensive inclusive workforce strategies that outline plans to hire and retain local residents and identify and reduce employment barriers to improve the labour market outcomes of Indigenous Peoples and equity deserving groups. • Assistance to be provided to former employees when the project's facility will permanently shut down (ie. severance pay, retraining/skilling, an offer of another job, or an early retirement package).
EAC - 1 - 112	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-04; a) Key issue: Training and Apprenticeships; b) Project component or activity: [no comment provided]
EAC - 1 - 113	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-04; a) Key issue: Training and Apprenticeships; c)(i) Biophysical effect pathway(s): [no comment provided]

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 114	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-04; a) Key issue: Training and Apprenticeships; c)(ii) Concern unique to the project or a priority within your mandate: [no comment provided]
EAC - 1 - 115	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-04; a) Key issue: Training and Apprenticeships; c)(iii) Material to federal decision-making: [no comment provided]
EAC - 1 - 116	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-04; a) Key issue: Training and Apprenticeships; d) Means for issue resolution: [no comment provided]
EAC - 1 - 117	Initial Project Description	Early Engagement	Employment	ESDC	ESDC-04; a) Key issue: Training and Apprenticeships; e) Additional information from the proponent: • Employer-sponsored training of employees and potential employees – how this will be facilitated, particularly for Indigenous Peoples and equity-deserving groups. • Engagement with the Indigenous Skills and Employment Training (ISET) and the Skills and Partnership Fund (SPF) First Nations and Métis service delivery providers in the region throughout the project's lifespan. • Details on the types of skills and knowledge that may be required to support the completion of the project throughout each stage of the project's lifespan (from construction to operation) and how to assist the local workforce in acquiring them, particularly for Indigenous Peoples and equity-deserving groups. • The availability and accessibility of training programs to effectively train the local population and potential workers from surrounding areas (e.g. ESDC employment and training programs).
EAC - 1 - 118	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-05; a) Key issue: Socio-economic conditions for Indigenous Peoples; b) Project component or activity: Table ES-4: Potential Project Effects, (page xxix). Indigenous Groups Culture, Rights and Interests
EAC - 1 - 119	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-05; a) Key issue: Socio-economic conditions for Indigenous Peoples; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 120	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-05; a) Key issue: Socio-economic conditions for Indigenous Peoples; c)(ii) Concern unique to the project or a priority within your mandate: • Changes to local employment and contracting opportunities
EAC - 1 - 121	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-05; a) Key issue: Socio-economic conditions for Indigenous Peoples; c)(iii) Material to federal decision-making: This section of the IPD does not provide any detailed information regarding the changes the proposed Project will have on local employment and contracting opportunities for Indigenous peoples.
EAC - 1 - 122	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-05; a) Key issue: Socio-economic conditions for Indigenous Peoples; d) Means for issue resolution: The proponent could be asked to provide detailed information regarding the socio-economic conditions for Indigenous peoples regarding the changes to local employment and contracting opportunities that result from the proposed Project.
EAC - 1 - 123	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-05; a) Key issue: Socio-economic conditions for Indigenous Peoples; e) Additional information from the proponent: • Specific strategies to increase hiring and training of Indigenous people of varying socioeconomic characteristics, such as through the ISET and the SPF programs. These strategies must include an estimation of the total number of employees expected from local Indigenous communities and the elimination of existing barriers to participation of Indigenous peoples.
EAC - 1 - 124	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-06; a) Key issue: Socio-economic conditions; b) Project component or activity: Estimated Project Workforce by Phase (page xi of IPD).
EAC - 1 - 125	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-06; a) Key issue: Socio-economic conditions; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 126	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-06; a) Key issue: Socio-economic conditions; c)(ii) Concern unique to the project or a priority within your mandate: "A full-service camp to house the construction workforce is planned to be located near the plant site. The camp will house a peak workforce of approximately 540 personnel that will be expected to be onsite during construction. It will be a single-story prefabricated modular building with services such as dormitories, washrooms, kitchen, and dining facilities. The camp design is planned to be self contained with any domestic wastes being transported offsite for disposal The camp will be decommissioned and removed from site once the construction phase is complete or no longer required for the Project.", (page xi of IPD).

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 127	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-06; a) Key issue: Socio-economic conditions; c)(iii) Material to federal decision-making: This section of the IPD that outlines what services will be provided to the labour force responsible for the construction of the proposed Project is limited with respect to the number of social services that are to be made available. For example, it does not indicate if any social services for labour force families will be provided, such as, daycare facilities and schooling.
EAC - 1 - 128	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-06; a) Key issue: Socio-economic conditions; d) Means for issue resolution: The proponent could be asked to provide a more comprehensive list of social services that will be made available to the Project's labour force that will fully address their needs throughout the duration of the Project's construction period.
EAC - 1 - 129	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-06; a) Key issue: Socio-economic conditions; e) Additional information from the proponent: • The social and economic context of the region of study (i.e. main economic industries, similar projects in the area) in relation to the project. • Details on any commitments to maximize the positive socio-economic outcomes of the project for local communities and all segments of their populations, such as employment and enhanced social services. • Evaluation of the availability and affordability of childcare services for workers that provides details on the number of childcare spaces available, costs and how the project will impact access to early learning and childcare programs and services to the broader community. • An assessment of essential wraparound supports and community services (education, transportation, access to social services) that are available to the project's local workforce.
EAC - 1 - 130	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-07; a) Key issue: Socio-economic conditions; b) Project component or activity: Table ES-4: Potential Project Effects, (page xxviii). Social and Economic
EAC - 1 - 131	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-07; a) Key issue: Socio-economic conditions; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 132	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-07; a) Key issue: Socio-economic conditions; c)(ii) Concern unique to the project or a priority within your mandate: • Changes to community wellbeing and social determinants of health • Changes to local housing and accommodation availability • Changes to demand on local supporting infrastructure and community services
EAC - 1 - 133	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-07; a) Key issue: Socio-economic conditions; c)(iii) Material to federal decision-making: This section of the IPD does not provide any detailed information regarding the changes the proposed Project will have on the following: • community wellbeing and social determinants of health; • local housing and accommodation availability; • and demand on local supporting infrastructure and community services.
EAC - 1 - 134	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-07; a) Key issue: Socio-economic conditions; d) Means for issue resolution: The proponent could be asked to provide detailed information regarding the socio-economic impact of the Project with respect to the impacted community's wellbeing and social determinates of health, local housing and accommodation, and infrastructure and community services.
EAC - 1 - 135	Initial Project Description	Early Engagement	Socio-Economic Cond	ESDC	ESDC-07; a) Key issue: Socio-economic conditions; e) Additional information from the proponent: • The social and economic context of the region of study (i.e. main economic industries, similar projects in the area) in relation to the project. • Details on any commitments to maximize the positive socio-economic outcomes of the project for local communities and all segments of their populations, such as employment and enhanced social services. • Evaluation of the availability and affordability of childcare services for workers that provides details on the number of childcare spaces available, costs and how the project will impact access to early learning and childcare programs and services to the broader community. • An assessment of essential wraparound supports and community services (education, transportation, access to social services) that are available to the project's local workforce.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 136	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-01; a) Key issue: Mitigation measures for potential gender-based violence (GBV) related to the Project; b) Project component or activity: • Section 4.2.1.10 Construction Camp • Section 4.4 Workforce • Section 8.2 Human Environment and Community Wellbeing • Table 9-1 Potential Project Interactions
EAC - 1 - 137	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-01; a) Key issue: Mitigation measures for potential gender-based violence (GBV) related to the Project; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 138	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-01; a) Key issue: Mitigation measures for potential gender-based violence (GBV) related to the Project; c)(ii) Concern unique to the project or a priority within your mandate: Include mitigation measures for potential GBV against Indigenous women, girls, and 2SLGBTQI+ peoples.
EAC - 1 - 139	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-01; a) Key issue: Mitigation measures for potential gender-based violence (GBV) related to the Project; c)(iii) Material to federal decision-making: • Section 4.2.1.10 Construction Camp states that a full-service camp to house the construction workforce is planned and will house peak workforce of 540 personnel" and will be decommissioned and removed after construction is complete (pgs. 30-31). • Table 4-4 Estimated Project Workforce by Phase indicates that 2,180 direct (construction) workers will be employed. However, it is not clear where these workers will be housed, nor why there is a discrepancy between "peak workforce of 540 personnel" (pg. 30) and 2180 direct workers (pg. 34) during the construction phase. • Table 4-4 indicates that "It is expected that operations personnel will live and integrate with local communities." This is approximately 590 direct and 1,120 indirect workers over the operation period (25 years). • Table 9-1 identifies Construction Camp Use as having a potential project interaction with "social and economic" during construction but not operation. What is the rationale for this if approx. 590+ workers are expected to live and integrated with local communities during the 25-year operational period? (pg. 100). • Given that there are a number of Indigenous and rural communities (e.g., Vavenby is 3KM from the proposed Project site with a population of approx. 237 people). in the surrounding region, potential social impacts from an influx of temporary workers – whether housed in a construction camp or within nearby communities – on Indigenous women, girls and 2SLGBTQI+ people should be considered. • WAGE recommends the Proponent to include gender-based violence risks and considerations in workforce plans, as there are potential social, economic, health, and cultural impacts. For example, the Proponent could survey sexual health services that are currently available to the community (e.g. proximity of sexual and medical assault care centres to the Project) as a mitigation measure for potential GBV risk exists (e.g. sexual violence, STIs, etc.) and potential increase in demand for these services by workers, their families (if they move to the area), and potentially impacted communities, including Indigenous groups.
EAC - 1 - 140	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-01; a) Key issue: Mitigation measures for potential gender-based violence (GBV) related to the Project; d) Means for issue resolution: Consider adopting the following mitigation measures to address potential GBV risks. (a) Robust workplace education and sensitivity training, including, but not limited to, anti-violence policy that incorporates gender-appropriate, gender-specific, and culturally appropriate policies and processes. (b) Survey and include existing services and supports related to gender-based violence (e.g. sexual assault services, shelters, family violence, victim and legal services, Indigenous supports, 2SLGBTQIA+ supports, etc.) to be added to Section 8.2 Human Environment.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 141	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-01; a) Key issue: Mitigation measures for potential gender-based violence (GBV) related to the Project; e) Additional information from the proponent: (1) FEWO • Resource Development and Violence Against Indigenous Women and Girls. (2) Impact Assessment & MMIWG Calls for Justice – Particularly the link between sexually transmitted diseases and workers camps as an impact on "social infrastructure" pgs. 11, 13-14. (3) Gender based violence is a public health issue: using a health systems approach (WHO). (4) Human Trafficking Corridors in Canada. Sex trafficking identified by service providers, Mining camps, see pg. 14. Extraction camp corridor (AB), pg. 30. British Columbia corridors, pg. 31-32. (5) Resource: GiiiA Gender-based Indigenous Intersectional Impact Assessment Network.
EAC - 1 - 142	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-02; a) Key issue: Application of Gender-based Analysis Plus (GBA Plus) in assessing potential effects of the Project on Indigenous Peoples; b) Project component or activity: • Section 8.2 Human Environment and Community Wellbeing. • Section 8.2.1 Social Environment. • Appendix C: Engagement Plan.
EAC - 1 - 143	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-02; a) Key issue: Application of Gender-based Analysis Plus (GBA Plus) in assessing potential effects of the Project on Indigenous Peoples; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 144	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-02; a) Key issue: Application of Gender-based Analysis Plus (GBA Plus) in assessing potential effects of the Project on Indigenous Peoples; c)(ii) Concern unique to the project or a priority within your mandate: Inclusion of GBA Plus.
EAC - 1 - 145	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-02; a) Key issue: Application of Gender-based Analysis Plus (GBA Plus) in assessing potential effects of the Project on Indigenous Peoples; c)(iii) Material to federal decision-making: • Currently, GBA Plus is only referred to in "Appendix C: Engagement Plan," and how "community members may be disproportionately impacted by the Project or may be underrepresented will be identified." (Appx C, 13) However, this is not expanded upon nor is GBA Plus integrated or included elsewhere in the IPD. • Section 8.2 Human Environment and Community Wellbeing, does not apply GBA Plus to inform the existing conditions and potential for effects of social, economic, cultural, and Indigenous interests (pg.94). As a result, there is little-to-no information regarding the demographics of local communities (e.g., Vavenby, Clearwater, Barriere, and Chu Chua) who are predicted to "provide sources of employment, business and contracting services" for the Project (pg. 97). • Section 8.2.1 Social Environment does not provide information about employment rates or types of employment for nearby communities, or insight for social or health services that may be impacted with an influx of workers into the community. • In addition, Simpcw, which was identified as the "highest potential to be affected by the Project site and transmission line" (pg. 75) have identified "employment, education, contracting opportunities, and economic benefits and opportunities for current and future Simpcw generations" (pg. 81). However, detailed plans on how the Project will ensure economic inclusion through Indigenous employment needs further elaboration. • For example, are there any plans to prioritize Indigenous hiring or training during the construction and operation phases of the Project to support a) identified Indigenous and Band interests b) Section 4.4 Workforce of "a skilled and experienced workforce, with transferable skills from other project construction and operations for a range of skilled trades and technical disciplines." (pgs. 33, 92).

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 146	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-02; a) Key issue: Application of Gender-based Analysis Plus (GBA Plus) in assessing potential effects of the Project on Indigenous Peoples; d) Means for issue resolution: WAGE recommends the Proponent include GBA Plus to ensure a sustainable economic reconciliation that will be beneficial to the local Indigenous groups. Include the following text in Section 8.2 GBA Plus is an analytical tool used to support the development of responsive and inclusive policies, programs, and other initiatives. GBA Plus is a process for understanding who is impacted by the issue or opportunity being addressed by the initiative; identifying how the initiative could be tailored to meet diverse needs of the people most impacted; and anticipating and mitigating any barriers to accessing or benefitting from the initiative. GBA Plus is an intersectional analysis that goes beyond biological (sex) and socio-cultural (gender) differences to consider other factors, such as age, disability, education, ethnicity, economic status, geography (including rurality), language, race, religion, and sexual orientation. The application of GBA Plus will support the creation and collection of baseline information for monitoring social, economic, health, and cultural impact on potentially effected communities. Below are some suggestions on how GBA Plus could be included in Section 4.4 Workforce and Section 8.2 Human Environment and Community Well-being: (a) Targeted hiring and skills training goals for local Indigenous communities (e.g. target percentage) (b) Robust workplace education and sensitivity training, including, but not limited to, anti-violence policy that incorporates gender-appropriate, gender-specific, and culturally appropriate policies and processes (also applicable to WAGE-01).
EAC - 1 - 147	Initial Project Description	Early Engagement	Human Health	WAGE	WAGE-02; a) Key issue: Application of Gender-based Analysis Plus (GBA Plus) in assessing potential effects of the Project on Indigenous Peoples; e) Additional information from the proponent: (1) What is Gender-based Analysis Plus • Canada.ca. (2) Introduction to GBA Plus • Women and Gender Equality Canada. (3) Strengthening Impact Assessment for Indigenous Women, see pgs. 56, 58 and (4) Indigenous Women and Impact Assessment Final Report pgs. 16, 48.regarding the importance of establishing baseline data for monitoring and reporting, particularly for Indigenous women and children.
EAC - 1 - 148	Initial Project Description	Early Engagement	Human Health	ISC	ISC-01; a) Key issue: Safety of First Nations communities; b) Project component or activity: Table 6–7 notes First Nation concerns on the community impacts related to the increase of employees and contractors through the construction operation of the mine. In particular, the large workforce needed to construct and operate the mine would dramatically increase the population in the area (i.e., 2180 direct jobs, and 1120 indirect jobs vs. 200 residents in Chu Chua).
EAC - 1 - 149	Initial Project Description	Early Engagement	Human Health	ISC	ISC-01; a) Key issue: Safety of First Nations communities; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 150	Initial Project Description	Early Engagement	Human Health	ISC	ISC-01; a) Key issue: Safety of First Nations communities; c)(ii) Concern unique to the project or a priority within your mandate: An influx of transient workers can create rapid social changes and can be accompanied by racial and sexual violence, substance abuse, crime, and adverse effects on family and home life for Indigenous people. This issue is common in resource development projects and has been well documented. Support for the wellbeing of Indigenous people (First Nations, Inuit and Métis), falls within the mandate of Indigenous Services Canada (ISC). In addition, the Government of Canada is committed to addressing the Calls for Justice outlined in the Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 151	Initial Project Description	Early Engagement	Human Health	ISC	ISC-01; a) Key issue: Safety of First Nations communities; c)(iii) Material to federal decision-making: There is a potential adverse effect of mining development on the health, safety and security of First Nations communities, and in particular, women girls and gender-diverse people. The potential adverse effects of extractive industries on Indigenous communities have been well documented. In particular, the National Inquiry on Missing and Murdered Indigenous Women and Girls identified the potential to exacerbate gender-based violence, and calls on extractive industries to consider the wellbeing of Indigenous women, and gender diverse people in all phases of project development.
EAC - 1 - 152	Initial Project Description	Early Engagement	Human Health	ISC	ISC-01; a) Key issue: Safety of First Nations communities; d) Means for issue resolution: The help mitigate potential safety risks, the proponent could articulate its commitments, including in the Impact Statement and provide measures to promote safety and wellbeing in First Nations communities.
EAC - 1 - 153	Initial Project Description	Early Engagement	Human Health	ISC	ISC-01; a) Key issue: Safety of First Nations communities; e) Additional information from the proponent: While the proponent does indicate that they are committed to engaging on safety concerns throughout the project (Table 6–7), the proponent should specify mitigation measures, including in response to the Summary of Issues and/or in the Impact Statement. These measures should include: • Community-led social impact studies on safety and gender-based violence • safety protocols • cultural awareness training • culturally appropriate support for Indigenous workers • the inclusion of women's groups and gender diverse individuals in the Impact Assessment planning/consultation
EAC - 1 - 154	Initial Project Description	Early Engagement	Human Health	ISC	ISC-02; a) Key issue: Wellbeing and Sustainability of Communities; b) Project component or activity: Section 8.2.2 notes that project will rely on local communities for source employment and housing, while domestic waste will be disposed offsite at licenced facilities (Section
EAC - 1 - 155	Initial Project Description	Early Engagement	Human Health	ISC	ISC-02; a) Key issue: Wellbeing and Sustainability of Communities; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 156	Initial Project Description	Early Engagement	Human Health	ISC	ISC-02; a) Key issue: Wellbeing and Sustainability of Communities; c)(ii) Concern unique to the project or a priority within your mandate: The project proposes to leverage local employees and resources to construct and operate the proposed mine could affect services and infrastructure requirements in First Nations communities. As part of its mandate to support the wellbeing and sustainability of Indigenous Peoples, ISC provides funding to support service delivery in key areas that could be affected by the proposal, such as housing, local works (waste management, water, infrastructure etc.) and social services.
EAC - 1 - 157	Initial Project Description	Early Engagement	Human Health	ISC	ISC-02; a) Key issue: Wellbeing and Sustainability of Communities; c)(iii) Material to federal decision-making: There is a potential adverse effect on First Nations living on reserve lands, as sourcing employment from First Nations communities can place pressure on existing community resources and infrastructure. First Nations can face challenges to attract and retain skilled workers in their communities. Drawing on existing labour pools in communities could affect community capacity to deliver local services (i.e., local works, trades, etc.). In addition, the majority of affected First Nations members identified in the proposal currently live off-reserve (e.g., Simpcw has 895 members, with 695 members off-reserve)uld members want to live on reserve in order to take part in any employment opportunities.

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EAC - 1 - 158	Initial Project Description	Early Engagement	Human Health	ISC	ISC-02; a) Key issue: Wellbeing and Sustainability of Communities; d) Means for issue resolution: The proponent could make commitments to support community-led baseline studies on the socio-economic impacts of the proposed development. ISC programs may generally help mitigate the potential effects to community infrastructure to accommodate population changes.
EAC - 1 - 159	Initial Project Description	Early Engagement	Human Health	ISC	ISC-02; a) Key issue: Wellbeing and Sustainability of Communities; e) Additional information from the proponent: The proponent should support community-led impact studies that examine how the proposed employment opportunities will affect community resources such as housing, infrastructure, social services, and local works. These activities should occur in all First Nations communities affected by the proposed mine (the IPD identifies Simpcw First Nation, Neskonlith Indian Band, Skwlāx te Secwepemcúlecw, Adams Lake Indian Band, Tsq̓ éscen̓ First Nation, Whispering Pines/Clinton Indian Band, and Stswēcem̓c Xgāt'tem First Nation).
EAC - 1 - 160	Initial Project Description	Early Engagement	Socio-Economic Conc	ISC	ISC-03; a) Key issue: Socio economic opportunities for First Nations Communities; b) Project component or activity: Section 8.2 indicates that this project has the potential to influence the social and economic characteristics of the region, including First Nations communities. This section also discusses the opportunities for local employment and corollary business development.
EAC - 1 - 161	Initial Project Description	Early Engagement	Socio-Economic Conc	ISC	ISC-03; a) Key issue: Socio economic opportunities for First Nations Communities; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 162	Initial Project Description	Early Engagement	Socio-Economic Conc	ISC	ISC-03; a) Key issue: Socio economic opportunities for First Nations Communities; c)(ii) Concern unique to the project or a priority within your mandate: The project could bring substantial economic development to the region, including First Nations communities. As part of its mandate, ISC offers a variety of programs to support training and economic development in First Nations communities. In addition, ensuring that First Nations people can meaningfully benefit from economic development opportunities also aligns with broader government commitments to build the economy.
EAC - 1 - 163	Initial Project Description	Early Engagement	Socio-Economic Conc	ISC	ISC-03; a) Key issue: Socio economic opportunities for First Nations Communities; c)(iii) Material to federal decision-making: There is a potential adverse effect to First Nations communities, if they face barriers to benefitting from economic opportunities contemplated in the project compared to non-Indigenous communities. Historically, economic development in First Nations communities has been limited by colonial policies and inequalities that have, among other things, limited access to capital for business development, reduced opportunities to attract investment, and created educational/training gaps needed for skilled workers. As a result, First Nations communities may require unique strategies to ensure that members are employed in skilled jobs and that business development is supported.

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EAC - 1 - 164	Initial Project Description	Early Engagement	Socio-Economic Conc	ISC	ISC-03; a) Key issue: Socio economic opportunities for First Nations Communities; d) Means for issue resolution: The proponent could make commitments supporting Indigenous groups' opportunities to benefit from the project, including: providing culturally appropriate training, advancement opportunities and procurement strategies to support First Nations businesses. ISC programs may generally support community and business readiness to pursue and benefit from related economic opportunities. ISC also possesses some tools that may be useful in determining socio-economic impacts, such as Community Wellbeing Index, which measures socio-economic wellbeing for individual First Nations communities across Canada, as well as the ISC's Economic Estimator Tool, which estimates that impact of proposed projects on Indigenous communities and identifies key variables that influence project effects on economic conditions.
EAC - 1 - 165	Initial Project Description	Early Engagement	Socio-Economic Conc	ISC	ISC-03; a) Key issue: Socio economic opportunities for First Nations Communities; e) Additional information from the proponent: The proponent should provide information about the overall project workforce, with specific information on how the project will affect nearby First Nations communities, including local job creation and hiring practices. Wherever possible, demographic information should disaggregate First Nations communities from non-Indigenous communities. The proponent should provide information on their procurement strategy for First Nations businesses, and a baseline analysis of the existing First Nations businesses that could participate in the project, as well as potential opportunities to develop joint business ventures.
EAC - 1 - 166	Initial Project Description	Early Engagement	Air Quality	ECCC	ECCC-01; a) Key issue: Air quality; b) Project component or activity: Mining operations, processing, and activities associated with combustion (including transportation by road or rail) can result in the emission of contaminants such as sulphur oxides (SOx), nitrogen oxides (NOx), volatile organic compounds (VOCs), and particulate matter (PM2.5, PM10 and Total Particulate Matter (TPM)). Activities which cause a physical disturbance to land and ore material, such as earth moving, land clearing, blasting, drilling. and transportation, can also introduce particulate matter (e.g., dust and soot) to the surrounding region.
EAC - 1 - 167	Initial Project Description	Early Engagement	Air Quality	ECCC	ECCC-01; a) Key issue: Air quality; c)(i) Biophysical effect pathway(s): The emission of air contaminants can result in local or regional degradation of ambient air quality or the settling of contaminants out of the air and into the surrounding environment, which may result in potential impacts on the health of Indigenous Peoples.
EAC - 1 - 168	Initial Project Description	Early Engagement	Air Quality	ECCC	ECCC-01; a) Key issue: Air quality; c)(ii) Concern unique to the project or a priority within your mandate: ECCC provides expertise on the fate of air emissions to help support Health Canada's assessment of potential impacts on Indigenous health.
EAC - 1 - 169	Initial Project Description	Early Engagement	Air Quality	ECCC	ECCC-01; a) Key issue: Air quality; c)(iii) Material to federal decision-making: The assessment of impacts on Indigenous health falls under the purview of Health Canada.
EAC - 1 - 170	Initial Project Description	Early Engagement	Air Quality	ECCC	ECCC-01; a) Key issue: Air quality; d) Means for issue resolution: ECCC recommends that the principles of continuous improvement and the protection of unpolluted regions in the context of airshed and air zone management within the Air Quality Management System are considered within the assessment. Air quality impacts may also be addressed through well-understood or standard mitigation measures, such as fugitive dust management or best practices such as minimizin gidling or keeping equipment well maintained.

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EAC - 1 - 171	Initial Project Description	Early Engagement	Air Quality	ECCC	ECCC-01; a) Key issue: Air quality; e) Additional information from the proponent: Should impacts from the Project on air quality be shown to be an effect within federal jurisdiction and material to the Project decision, ECCC recommends the following be included in the Proponent's Impact Statement to assess potential impacts to air quality: • Baseline and reference ambient air quality, including quantified emission sources for all relevant contaminants, including but not limited to: particulate matter, metals, NOx, SOx, VOCs, any other products of fossil fuel combustion, and other relevant pollutants from mobile, stationary, and fugitive sources. • Consideration of the impact of wildfires on baseline air quality data. If applicable, refer to the British Columbia active wildfire map available at https://wildfiresituation.nrs.gov.bc.ca/map. • Comparison of ambient baseline and reference air quality with applicable provincial and federal standards. • Inventory and description of Project activities and equipment that have the potential to impact air quality. • Quantitative prediction of air pollutants that will be generated during all Project phases. • Comparison of the predicted levels of air pollutants with baseline air quality data, and the strictest federal (CAAQS) or provincial air quality standards; if applicable. • An air quality management plan that includes a dust management plan. This should encompass sources of air pollution, common mitigation measures for air contaminants (including a detailed complaint resolution process), the performance effectiveness of air contaminant control devices, best practice programs, as well as monitoring and follow-up.
EAC - 1 - 172	Initial Project Description	Early Engagement	Water	ECCC	ECCC-02; a) Key issue: Water quality and quantity; b) Project component or activity: The activities linked to the construction, operation, and decommissioning of mining projects (e.g., waste rock and tailings management, open pit development, effluent discharges, land or streambed disturbance for transmission lines, etc.) can have adverse effects on the quality of groundwater and surface water through the release of metals, suspended solids, and other contaminants to surrounding waters through metal leaching and/or acid rock drainage, erosion, sedimentation, seepage, or runoff processes. Furthermore, mining activities may impact water quantity through site re-contouring, drawdown of the water table, surface water management (e.g., diversions, ponds, water treatment facilities), changes in land cover, etc. These adverse effects have the potential to affect the hydrological and hydraulic regime (e.g., timing and magnitude of peak flows, range of seasonal and/or inter-annual flow variation) within affected watercourses and the channel morphology because of erosion and changes in sediment transport patterns.
EAC - 1 - 173	Initial Project Description	Early Engagement	Water	ECCC	ECCC-02; a) Key issue: Water quality and quantity; c)(i) Biophysical effect pathway(s): Adverse impacts to water quality and quantity could, in turn, result adverse impacts to fish, terrestrial species at risk and migratory birds through direct impacts (e.g., minimum flow requirements, habitat alteration, etc.) or exposure to contaminants in the water or via food web interactions. Indigenous health could also be impacted via dietary exposure, including for bioaccumulative substances such as mercury and selenium.
EAC - 1 - 174	Initial Project Description	Early Engagement	Water	ECCC	ECCC-02; a) Key issue: Water quality and quantity; c)(ii) Concern unique to the project or a priority within your mandate: Impacts to water quality and quantity can often cause effects for complex mining projects. Impacts are project-specific as they are linked to the mine design and mining plan, which are unique to each project
EAC - 1 - 175	Initial Project Description	Early Engagement	Water	ECCC	ECCC-02; a) Key issue: Water quality and quantity; c)(iii) Material to federal decision-making: Water quality and quantity can result in adverse impacts to fish and fish habitat, which are effects within federal jurisdiction.

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EAC - 1 - 176	Initial Project Description	Early Engagement	Water	ECCC	ECCC-02; a) Key issue: Water quality and quantity; d) Means for issue resolution: ECCC is responsible for the administration of subsections 36(3) to (6) of the Fisheries Act, which prohibits the deposit of a deleterious substance in waters frequented by fish unless authorized by regulations (e.g., the Metal and Diamond Mining Effluent Regulations). For more information on the pollution prevention provisions of the Fisheries Act, please visit https://www.canada.ca/en/environment-climate-change/services/managing-pollution/fisheries-act-registry/frequently-asked-questions.html. Water quality impacts of the Project can also be mitigated through proper mine design, including source control, and implementation of measures to manage and treat mine contact water (e.g., tailings storage facilities, water management ponds, active water treatment, etc.). Please refer to the Environmental Code of Practice for Metal Mines for more information.
EAC - 1 - 177	Initial Project Description	Early Engagement	Water	ECCC	ECCC-02; a) Key issue: Water quality and quantity; e) Additional information from the proponent: ECCC recommends that the Impact Statement describe and, whenever possible, quantify all potential effects, including direct and indirect effects, of project components or activities, including changes to water quality and quantity during all Project phases. The Impact Statement should also describe mitigation strategies and assess applicability of these strategies to the Project. Thus, ECCC recommends the following information requirements be captured in the Tailored Impact Statement Guidelines (or provincial equivalent) for the Project: • Baseline Conditions: Characterize and quantify baseline and reference conditions for surface water and groundwater quality and quantity for all impacted water courses within the Project site and the local and regional assessment areas (Table 8-1 of the IPD), including groundwater-surface water interactions. • Mine Waste Quantity and Reactivity: Characterize all mine wastes and develop geochemical source terms for water quality predictions, preferably in accordance with The Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials (Price, 2009) and Guidelines for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia (Price and Errington,1998). • Contaminant Identification: Identify all potential contaminants of concern. • Water Management: Describe surface water and groundwater management strategies, including any applicable water treatment measures and their effectiveness, throughout all Project phases. • Mine Waste Management: Describe management and mitigation strategies for all mine wastes, including their effectiveness during all Project phases. • Closure Plan: Provide a detailed description ofclosure and post-closure plans. • Water Quantity and Quality Predictions: Provide quantitative predictions of surface water and groundwater quantity and quality for all Project phases, including assessment of prediction uncertainties. • Water Monitoring Programs: Describe monitoring plans for surface water and groundwater quantity and quality across all Project phases in both the local and regional areas. • Fish and Fish Habitat Impact Assessment: Assess Project-related impacts on fish and fish habitat resulting from changes in surface water and groundwater quantity and quality. This assessment should take into consideration the hydrological impacts caused by climate change including water management and mitigation measures that can be implemented during extreme events (e.g., flooding, drought, etc.). • Cumulative Effects Assessment: Assess cumulative effects of the Project on fish and fishhabitat due to changes in surface water and groundwater quantity and quality.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 178	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-03; a) Key issue: Terrestrial species at risk and their habitat Species at Risk that are likely to occur in the project area include, but may not be limited to: [see ECCC FAAR Attachment for full list of species] b) Project component or activity: The activities linked to the construction, operation, and decommissioning of a mine and associated infrastructure could adversely affect species at risk (e.g., amphibians, arthropods, birds, terrestrial mammals, reptiles, etc.) listed under SARA, and their habitat and critical habitat. The IPD states that the transmission line crosses many watercourses and wetlands between 100 Mile House and the Project site, which may provide valuable habitat for species at risk and migratory birds.
EAC - 1 - 179	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-03; a) Key issue: Terrestrial species at risk and their habitat Species at Risk that are likely to occur in the project area include, but may not be limited to: [see ECCC FAAR Attachment for full list of species] c)(i) Biophysical effect pathway(s): The construction of the Project may also increase public access to the region for activities such as hunting or recreation. Species at risk could also be affected by sensory disturbances during the construction, operation, and decommissioning of the Project. Some examples of potential sources of sensory disturbance include noise from various Project activities, lights, vibrations from grading and compaction, the operation of machinery, and the presence of workers. The duration, frequency, and timing of noise are important to understand potential effects. Sensory disturbance may make adjacent habitats unsuitable for use by species at risk and cause avoidance effects in many species. The pathway through which potential effects are conveyed will depend on the land, air, and water constituents associated with the site along with the behavioural adaptability, presence and interaction with the species limiting factor (e.g. habitat supporting staging, nesting, roosting or foraging) and population resilience.
EAC - 1 - 180	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-03; a) Key issue: Terrestrial species at risk and their habitat Species at Risk that are likely to occur in the project area include, but may not be limited to: [see ECCC FAAR Attachment for full list of species] c)(ii) Concern unique to the project or a priority within your mandate: Species at risk and their habitat (including wetlands) are within the mandate of ECCC pursuant to the SARA.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 181	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-03; a) Key issue: Terrestrial species at risk and their habitat Species at Risk that are likely to occur in the project area include, but may not be limited to: [see ECCC FAAR Attachment for full list of species] c)(iii) Material to federal decision-making: Adverse effects within federal jurisdiction include: • Impacts to terrestrial species at risk which are also migratory birds; and • Impacts to terrestrial species at risk which may result in a non-negligible adverse impacts on the physical and cultural heritage or the current use of lands and resources for traditional purposes (e.g., hunting, trapping, gathering, etc.). Additionally, the entity responsible for the impact assessment (IAAC in this case) has obligations under s.79 of SARA to ensure that measures are taken to lessen or avoid impacts and monitor effects to listed species at risk in a manner that is consistent with existing recovery strategies or action plans.
EAC - 1 - 182	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-03; a) Key issue: Terrestrial species at risk and their habitat Species at Risk that are likely to occur in the project area include, but may not be limited to: [see ECCC FAAR Attachment for full list of species] d) Means for issue resolution: Please refer to Question 1 of the FAAR for information on the Proponent's responsibilities under the SARA and the potential requirements for permits, as well as links to guidance documents. The Proponent should: • Identify all species at risk listed on Schedule 1 of SARA and any critical habitat (including wetlands), and known residences, that may interact with the Project and describe how they may be adversely affected by the Project; • Describe what measures will be taken to avoid or lessen the effects of each Project activity and stage for species which fall under federal jurisdiction for impact assessment, and how these measures will be implemented and effects monitored to ensure they are avoided, minimized or whetheradaptive management may be required. ECCC also recommends that Proponents design their projects to be consistent with Recovery Strategies for relevant terrestrial species at risk and in alignment with principles of the mitigation hierarchy. Standard mitigation measures that may be applicable include the following examples: • Applying activity restriction guidelines for sensitive wildlife; • Limiting and orienting lighting to minimize light pollution; • Placement of deterrents for stormwater ponds; • Giving wildlife the right of way and adjusting speed limits; and • Applying exclusion techniques to prevent access to project infrastructure.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 183	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-03; a) Key issue: Terrestrial species at risk and their habitat Species at Risk that are likely to occur in the project area include, but may not be limited to: [see ECCC FAAR Attachment for full list of species] e) Additional information from the proponent: The Proponent should identify all species at risk listed on Schedule 1 of SARA and any critical habitat that may interact with the Project and describe how, for species which are under federal jurisdiction for impact assessment, how they may be adversely affected by the Project. They should describe what measures will be taken to avoid or lessen the effects of each project activity and stage, as well as how these measures will be implemented and effects will be monitored to ensure they are avoided, minimized or addressed through adaptive management. Additionally, there is always the possibility that species assessed by COSEWIC may be added to Schedule 1 of SARA with potential critical habitat identified. As best practice it is recommended to also consider species assessed by COSEWIC to implement measures to lessen or avoid impacts and to monitor them. ECCC recommends that the following be included in the Proponent's Impact Statement to assess potential impacts to terrestrial species at risk and their habitat: • Characterization of baseline conditions for species at risk that is informed by desktop surveys as well as project-specific baseline surveys and habitat suitability mapping. Surveys should be designed to identify seasonal and annual variation, distribution, and habitat use (requires adequate scope, survey effort, and consideration of locations, etc.) and be in alignment with the best available standards and scientific literature, including, but not limited to those developed by BC's Resource Inventory Standards Committee (RISC) and ECCC. • Assessment of impacts to terrestrial species at risk and their habitat, including critical habitat and wetlands, in the Project area, local assessment area and regional assessment area. • Description of all potential effects, including direct, indirect and cumulative effects, of the Project on terrestrial species at risk, including their habitat. • Application of the mitigation hierarchy: avoid, reduce, and finally offset for the unavoidable loss of habitats that support species at risk, including a description of how effects will be avoided. • Design of mitigation measures and monitoring that is based on the best available standards, guidelines, best management practices, and scientific literature.
EAC - 1 - 184	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-04; a) Key issue: Migratory Birds; b) Project component or activity: Activities linked to the construction, operation, and decommissioning of the Project and associated infrastructure, such as site preparation, right-of-way maintenance and project dismantling, could impact migratory birds resulting in individual mortality and the destruction of their habitat (including wetlands), nests, and eggs. Mortality in migratory birds could also occur because of collisions with vehicles or infrastructure related to the Project. Accidental oil or chemical spills could also have adverse effects if these substances make their way into the habitats frequented by migratory birds.

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EAC - 1 - 185	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-04; a) Key issue: Migratory Birds; c)(i) Biophysical effect pathway(s): Activities associated with mining can result in mortality of individuals and/or the destruction of nests and eggs or any other structure necessary for the reproduction and survival of migratory birds during all Project phases. There is a higher risk that these effects would be more severe for migratory birds that are also species at risk. Noise, vibrations, artificial lighting/flaring and disturbances from construction, operation and decommissioning activities may result in injury, mortality, sensory disturbance and change in habitat use. Attraction to lights at night or in poor visibility conditions may cause birds to collide with lit structures or their vertical support structures, resulting in injury or death. Accidental release of harmful substances to the onsite stormwater ponds could also have adverse effects on migratory birds that frequent the ponds. There is a higher risk that these effects would be more severe for migratory birds that are also species at risk and species where habitat is sensitive to disturbance (e.g. wetlands) or where there is already a high degree of cumulative effects to habitat or individuals. Destruction and/or disturbance of habitat can have increased impacts on migratory bird species at risk individuals, residences and their critical habitat, which can lead to changes in prey and predator dynamics, loss of food resources, loss of breeding areas, and changes in migration or movement. In some cases, construction can create features that are attractive for species and increase their mortality risk. For example, certain migratory bird species at risk (e.g. Bank Swallow, Common Nighthawk) may nest in large piles of soil or graveled areas left unattended/unvegetated during the most critical period of the breeding season, making them vulnerable to construction activities. To help avoid the risk of adverse effects to migratory birds, project activities and components can be planned to coincide with least-risk timing windows and locations.
EAC - 1 - 186	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-04; a) Key issue: Migratory Birds; c)(ii) Concern unique to the project or a priority within your mandate: Migratory birds are within the mandate of ECCC pursuant to the MBCA and its regulations (i.e., MBR 2022)
EAC - 1 - 187	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-04; a) Key issue: Migratory Birds; c)(iii) Material to federal decision-making: Adverse impacts to migratory birds are defined as effects within federal jurisdiction.

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EAC - 1 - 188	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-04; a) Key issue: Migratory Birds; d) Means for issue resolution: The MBCA and the MBR 2022 protect migratory birds and prohibit the disturbance or destruction of migratory bird nests when they contain a viable egg or a migratory bird themselves (young or adult). Schedule 1 of MBR 2022 provides year-round nest protection for 18 species, with Pileated Woodpecker having the potential to occur in the Project area. The legislation and regulations apply to all lands and waters in Canada, regardless of ownership. Regarding disturbance or harm to nesting birds, with the exception of the 18 species listed on Schedule 1 that are protected year round, the principal risk factors are location and time of year with the breeding season being the main sensitive period to consider. To aid in the planning of activities in order to reduce the risk of effects to migratory birds, their nest and eggs, consider the Guidelines to Avoid Harm to Migratory Birds, found here: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html. In accordance with these guidelines, ECCC recommends vegetation and habitat clearing activities occur outside of the migratory bird nesting period, to prevent the destruction of migratory birds and their eggs and nests. Lighting required for the construction, operation and decommissioning of the Project should be controlled and minimized to reduce cumulative adverse effects on migratory birds and species at risk. Other sources of collision risk should be identified and measures implemented to minimize those risks. ECCC also recommends the Proponent implement mitigation measures, including deterrents around waterbodies containing substances harmful to migratory birds.
EAC - 1 - 189	Initial Project Description	Early Engagement	Wildlife and Wildlife H	ECCC	ECCC-04; a) Key issue: Migratory Birds; e) Additional information from the proponent: ECCC recommends that the following be included in the Proponent's Impact Statement to assess potential impacts to migratory birds: • Characterization of baseline conditions for migratory birds that is informed by desktop surveys as well as project-specific baseline surveys. • Assessment of Project impacts on migratory birds in the Project area, local assessment area and regional assessment area. • Description of all potential effects, including direct, indirect and cumulative effects, of the Project on migratory birds. • Application of the mitigation hierarchy: avoid, reduce, and finally offset for the unavoidable loss of habitats the support migratory birds, including a description of how effects will be avoided. • Design of mitigation measures and monitoring based on the best available standards, guidelines, best management practices, and
EAC - 1 - 190	Initial Project Description	Early Engagement	Accidents and Malfun	ECCC	ECCC-05; a) Key issue: Environmental emergencies; b) Project component or activity: The proposed mining project includes a tailings storage facility, waste rock storage facilities, sewage waste management, fuel storage, reagent facility, explosives storage, and water management structures near a natural stream. As such, there is potential for adverse environmental effects from accidents and malfunctions, such as a failure of the tailings storage facility, spills of fuel, reagents or wastewater, and the danger of explosions.
EAC - 1 - 191	Initial Project Description	Early Engagement	Accidents and Malfun	ECCC	ECCC-05; a) Key issue: Environmental emergencies; c)(i) Biophysical effect pathway(s): Adverse effects to air quality, water quality, species at risk, fish and fish habitat, migratory birds, or changes to the environment resulting in non-negligible adverse impacts to Indigenous Peoples of Canada could result from a malfunction of the tailings storage facility and the accidental release of hazardous substances.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 192	Initial Project Description	Early Engagement	Accidents and Malfun	ECCC	ECCC-05; a) Key issue: Environmental emergencies; c)(ii) Concern unique to the project or a priority within your mandate: Potential accident and malfunction scenarios are relevant due to the large scale of the open-pit mine, as well as the use and storage of hazardous materials including explosives, fuels, reagents (e.g., flotation agents), and process chemicals involved in copper ore processing and water treatment. The operation will handle large volumes of substances that, if released, could pose acute or chronic risks to both terrestrial and aquatic ecosystems. Additionally, the tailings and waste rock storage facilities represent long-term risks of seepage, structural instability, or failure, especially under extreme weather conditions or seismic events. While accidents and malfunctions such as fuel spills, chemical leaks, or tailings pipeline ruptures are not unique to the Project and are common across the mining sector, the scale of the Project and its proximity to sensitive receptors, including fish-bearing watercourses and downstream Indigenous communities, elevate the potential for serious adverse effects. The site's geography and climatic variability also introduce uncertainty regarding the fate and transport of contaminants, underscoring the need for robust emergency preparedness, predictive modelling, and contingency planning. ECCC provides environmental emergency management planning advice and guidance related to potential accidents and malfunctions involving unplanned or uncontrolled releases or spills of hazardous substances into the environment, including scenarios where such releases could result in non-negligeable adverse environmental effects within ECCC's mandate (i.e., air quality, water quality, species at risk, fish and fish habitat, migratory birds) or changes to the environment resulting in non-negligible adverse impacts to Indigenous Peoples of Canada. ECCC also has specialized experts in the atmospheric transport and dispersion modelling of airborne contaminants, the fate and behaviour of contaminants, and hydrologic trajectory modelling of contaminants in water.
EAC - 1 - 193	Initial Project Description	Early Engagement	Accidents and Malfun	ECCC	ECCC-05; a) Key issue: Environmental emergencies; c)(iii) Material to federal decision-making: Section 22(1) of the Impact Assessment Act specifies, in part, that the effects of accidents and malfunctions that could occur in connection with a designated project, as well as the mitigation measures that are technically and economically feasible, must be taken into account in the impact assessment of a designated project. During construction, operation, and decommissioning of the project, accident and malfunction scenarios could result in the release of hazardous substances to the environment, with potential adverse effects to air quality, water quality, species at risk, fish and fish habitat, migratory birds, and changes to the environment resulting in non-negligible adverse impacts to Indigenous Peoples of Canada. To mitigate the potential for spills and minimize their impacts, the Proponent has proposed to implement various mitigation measures, including use of secondary containment for storage of hazardous substances, and the production of various plans including an environmental construction plan, spill response plan, and emergency response plan. Assessing the risk of accidents and malfunctions and the effectiveness of the proposed mitigation measures, is an important component of understanding the overall potential adverse effects of the project on areas under federal jurisdiction.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 194	Initial Project Description	Early Engagement	Accidents and Malfun	ECCC	ECCC-05; a) Key issue: Environmental emergencies; d) Means for issue resolution: Optimized spill prevention, preparedness, and response measures and systems will be important during all activities associated with the construction, operation, and decommissioning of the Project, given the risk of release of hazardous substances to the environment. Some uncertainties remain regarding the mitigation measures outlined in the Initial Project Description (IPD) to address accidents and malfunctions. The IPD does not clearly specify the quantities of hazardous materials that will be used or stored on-site, nor does it provide sufficient detail on containment methods, facility configurations, or associated measures to prevent or control spills. Additionally, the document does not include information on the development of a preliminary spill contingency plan. The IPD outlines several mitigation measures to address potential accidents and malfunctions. These include the design of a water management system capable of accommodating variability in flow, including peak freshet events; provision of on-site fire suppression equipment and supplies; and deployment of mine rescue personnel trained in firefighting techniques. The selection of appropriate design earthquake events for pit slopes, waste rock storage areas (WRSAs), and tailings storage facility (TSF) embankments will follow regulatory and technical guidance, including the Canadian Dam Association's Dam Safety Guidelines, the Health, Safety and Reclamation Code for Mines in British Columbia, and the Guidelines for Mine Waste Dump and Stockpile Design. In addition, the development of appropriate management plans, such as an emergency response plan and emergency communication protocols, will help mitigate the risk of spills and minimize environmental impacts should such events occur. Part 8 of the Canadian Environmental Protection Act, 1999 (CEPA) on environmental emergencies (sections 193 to 205) addresses the prevention of, preparedness for, response to, and recovery from environmental emergencies caused by uncontrolled, unplanned, or accidental releases. It also addresses the reduction of any foreseeable likelihood of releases of toxic or other hazardous substances listed in Schedule 1 of the Environmental Emergency Regulations, 2019. This act may apply if Schedule 1 substances onsite meet or exceed the threshold to be regulated under CEPA. Technical Guidelines for the Environmental Emergency Regulations, 2019 may be found at: https://www.canada.ca/en/environment-climate-change/services/environmental-emergencies-program/regulations/technical-guidelines.html. ECCC also recommends that the Proponent review and incorporate ECCC's National Wildlife Emergency Response Framework, available at: https://www.canada.ca/en/services/environment/wildlife-plants-species/national-wildlife-emergency-framework.html.
EAC - 1 - 195	Initial Project Description	Early Engagement	Accidents and Malfun	ECCC	ECCC-05; a) Key issue: Environmental emergencies; e) Additional information from the proponent: The Proponent is encouraged to adopt all relevant industry best practices related to spill prevention, preparedness, response, and recovery in the event of accidents and malfunctions. The Proponent's Impact Statement should include a robust analysis of potential accidents and malfunctions, including an assessment of their geographic extent, likelihood, potential consequences, and residual risks that take into account the proposed mitigation measures. It is expected that this analysis will be supported by reliable modelling of contaminant behavior in the event of releases to air, land, or water.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 196	Initial Project Description	Early Engagement	Climate Change	ECCC	ECCC-06; a) Key issue: Climate change resilience; b) Project component or activity: Climate over the lifetime of the Project is likely to be different from past and current climate in the Project area. Given that the operational lifetime of the project is 25 years with a proposed closure period of 7 years, climate change is an important consideration. In the IPD, the Proponent indicates that site water management is subject to potential effects from extreme precipitation and drought events. These climate hazards are expected to change with climate change in the future.
EAC - 1 - 197	Initial Project Description	Early Engagement	Climate Change	ECCC	ECCC-06; a) Key issue: Climate change resilience; c)(i) Biophysical effect pathway(s): There is potential for climate change to affect the Project which, in turn, may have impacts on the surrounding environment (e.g., through accidents or malfunctions, fish and fish habitat, etc.). Climate changes in the Project area, such as possible changes in mean and extreme precipitation and temperature and related environmental conditions, may alter baseline conditions, with implications for climate sensitive aspects of Project design and associated effects within federal jurisdiction.
EAC - 1 - 198	Initial Project Description	Early Engagement	Climate Change	ECCC	ECCC-06; a) Key issue: Climate change resilience; c)(ii) Concern unique to the project or a priority within your mandate: There is potential for climate change to affect the Project which, in turn, may have impacts on the surrounding environment (e.g. through accidents or malfunctions)
EAC - 1 - 199	Initial Project Description	Early Engagement	Climate Change	ECCC	ECCC-06; a) Key issue: Climate change resilience; c)(iii) Material to federal decision-making: There is potential for climate change to affect the Project which, in turn, may have impacts on the surrounding environment (e.g. through accidents or malfunctions).
EAC - 1 - 200	Initial Project Description	Early Engagement	Climate Change	ECCC	ECCC-06; a) Key issue: Climate change resilience; d) Means for issue resolution: IPD states on page 33 that: “The Application will include an assessment of the Effects of the Environment on the Project, which will include consideration of climate change and discussion of mitigations to reduce climate change influences on the Project.” The Strategic Assessment of Climate Change (SACC) was published in 2020 and works in conjunction with the Impact Assessment Act to provide guidance on how to consider climate change throughout federal impact assessments. Proponents may find the technical guidance of the SACC helpful in assessing the impacts to climate change and in ensuring consistent, predictable, efficient and transparent consideration of impacts to climate change. Information typically requested for the project description is outlined in the SACC (including section 4.1) and the draft Technical Guide (including sections 2.4, 3.3, and 4.2).
EAC - 1 - 201	Initial Project Description	Early Engagement	Climate Change	ECCC	ECCC-06; a) Key issue: Climate change resilience; e) Additional information from the proponent: The SACC provides guidance related to climate change throughout the impact assessment process. The SACC outlines information that the Proponent should provide during the impact assessment process related to climate change resilience. More details are provided in the “Draft technical guide related to the Strategic Assessment of Climate Change: Assessing climate change resilience” published in March 2022. Links: Strategic Assessment of Climate Change: https://www.strategicassessmentclimatechange.ca Draft technical guide related to the Strategic Assessment of Climate Change• Assessing climate change resilience: https://www.strategicassessmentclimatechange.ca/28896/widgets/117114/documents/77106

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 202	Initial Project Description	Early Engagement	Greenhouse Gas	ECCC	ECCC-07; a) Key issue: Greenhouse gas (GHG) emissions and climate change; b) Project component or activity: The construction, operation and decommissioning of the proposed Project is likely to result in the emissions of GHGs and impacts to carbon sinks. Following review of the IPD, ECCC notes: • An emission estimate was provided for the Construction and Operations phases of the Project, but not for the Decommissioning/ Closure phase. • The IPD states there will be 4,000 ha of land disturbance from the Project, but emissions from land-use change are not included in the emissions estimate. • No information is provided on the Project's impacts on carbon sinks.
EAC - 1 - 203	Initial Project Description	Early Engagement	Greenhouse Gas	ECCC	ECCC-07; a) Key issue: Greenhouse gas (GHG) emissions and climate change; c)(i) Biophysical effect pathway(s): n/a
EAC - 1 - 204	Initial Project Description	Early Engagement	Greenhouse Gas	ECCC	ECCC-07; a) Key issue: Greenhouse gas (GHG) emissions and climate change; c)(ii) Concern unique to the project or a priority within your mandate: ECCC has GHG expertise and technical guidance available that can inform the assessment of impacts to GHGs and carbon sinks.
EAC - 1 - 205	Initial Project Description	Early Engagement	Greenhouse Gas	ECCC	ECCC-07; a) Key issue: Greenhouse gas (GHG) emissions and climate change; c)(iii) Material to federal decision-making: Although it is not an effect within federal jurisdiction, the assessment of GHG emissions and carbon sinks from the Project would be relevant in considering the extent to which the effects of the designated Project hinder or contribute to Canada's ability to meet its environmental obligations and its commitments with respect to climate change (IAA s.22(i) factor to be considered).
EAC - 1 - 206	Initial Project Description	Early Engagement	Greenhouse Gas	ECCC	ECCC-07; a) Key issue: Greenhouse gas (GHG) emissions and climate change; d) Means for issue resolution: See comment ECCC-06.
EAC - 1 - 207	Initial Project Description	Early Engagement	Greenhouse Gas	ECCC	ECCC-07; a) Key issue: Greenhouse gas (GHG) emissions and climate change; e) Additional information from the proponent: he Project's GHG emissions and climate change impacts should be assessed and mitigated consistent with guidance in the SACC. Technical guidance on the SACC can be found at: https://www.strategicassessmentclimatechange.ca/24391/ widgets/98155/documents/62220. ECCC recommends that the DPD be updated to include: • The maximum annual GHG emissions for Decommissioning/Closure phase (see section 4.1.1 of the SACC and sections 2.1 and 2.1 of the draft Technical Guide); • GHG emissions from land-use change, including land clearing, deforestation, biomass decay, etc. (see draft Technical Guide Annex B); and • Information on the Project's impacts on carbon sinks, including a description of the activities that would result in an impact on carbon sinks and the land areas expected to be impacted by the Project, by ecosystem type (e.g., forests, cropland, grassland, wetlands, built-up land, etc.) over the course of the Project lifetime, including any areas of restored or reclaimed ecosystems (see section 4.1.2 of the SACC and section 4.2 of the draft Technical Guide).
EAC - 1 - 208	Initial Project Description	Early Engagement	Human Health	Health Canada	HC-01; a) Key issue: Potential exposure of Indigenous peoples to contaminants of potential concern (COPCs); b) Project component or activity: Activities throughout the life of the Project (e.g., construction and operations) will potentially emit and discharge contaminants into the environment where Indigenous peoples may be exposed. Sources of Project related emissions and discharges include, but are not limited to: tailings, waste rock and ore storage areas, roads, diesel and gasoline engines, and Project related activities such as blasting, digging and ore processing.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 209	Initial Project Description	Early Engagement	Human Health	Health Canada	HC-01; a) Key issue: Potential exposure of Indigenous peoples to contaminants of potential concern (COPCs); c)(i) Biophysical effect pathway(s): Project emissions could result in Indigenous peoples being exposed to COPCs through contact with environmental media (e.g., traditional foods, air, water, soil, sediment). Examples of potential exposure routes include: • Inhalation of COPCs in air contaminated via combustion, ore processing and/or dust. • Ingestion of COPCs in water (surface or groundwater) contaminated via deposition, direct discharge, and/or leaching. • Direct contact with COPCs in water, soil and/or sediment contaminated via deposition, direct discharge or leaching. • Ingestion of COPCs in traditional foods contaminated via uptake of COPCs from Project impacted water, soil and/or sediment.
EAC - 1 - 210	Initial Project Description	Early Engagement	Human Health	Health Canada	HC-01; a) Key issue: Potential exposure of Indigenous peoples to contaminants of potential concern (COPCs); c)(ii) Concern unique to the project or a priority within your mandate: Under the Impact Assessment Act HC provides expert information and knowledge to support the assessment of impacts on Indigenous health. The Project is projected to be one of the largest open-pit copper mines in Canada. It is situated in the unceded territory of the Secwépemc Nation, and primarily within the territory of Simpcw First Nation. The Project will be located 3 km SE of Vavenby, where there are Indigenous residents. Potential exposure of Indigenous peoples to COPCs is commonly observed with mining projects, and will be applicable to this Project.
EAC - 1 - 211	Initial Project Description	Early Engagement	Human Health	Health Canada	HC-01; a) Key issue: Potential exposure of Indigenous peoples to contaminants of potential concern (COPCs); c)(iii) Material to federal decision-making: As per Impact Assessment Act Sections 2(e) and 2(f), adverse effects on the health of Indigenous peoples related to the Project falls within federal jurisdiction. The initial Project Description (iPD) indicates the Simpcw First Nation and several other First Nations are potentially impacted by the Project. The closest Simpcw community is Chu Chua which is approximately 27 km to the southwest of the Project. The closest town is Vavenby (approximately 3 km to the northwest of the Project), and the closest park is the Dunn Peak park (approximately 2 km to the west of the Project). The iPD also describes various land use sites and activities surrounding the Project (e.g., cultural and spiritual sites, hunting, fishing, boating, berry and plant gathering, hiking and other recreational activities). Given this information, Indigenous peoples may be exposed to contaminants as a result of the Project which could potentially result in non-negligible effects on heath. In addition, the iPD indicates that during initial engagement, Indigenous peoples have raised concerns related to cumulative impacts from Project activities, and impacts on: traditional foods, vegetation and plant gathering sites, access to cultural land use sites, air quality, and water quality.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 212	Initial Project Description	Early Engagement	Human Health	Health Canada	HC-01; a) Key issue: Potential exposure of Indigenous peoples to contaminants of potential concern (COPCs); d) Means for issue resolution: To minimize Project related discharges and emissions of contaminants, the iPD proposes management and mitigation measures (e.g., implementation of Best Available Technologies and standard operating procedures, electrification of equipment where possible). However, in order to understand the overall Project related impacts on the health of Indigenous peoples, HC recommends that a Human Health Risk Assessment (HHRA)* of potential Project impacts is undertaken as part of the Application to be submitted by the Proponent. The results of the HHRA can inform necessary project-specific monitoring and mitigation measures. HC is aware that BC's Interior Health Authority provides health services within the Project area and could be consulted to better understand the existing human health environment and any anticipated changes from future project development. * HC. 2023. Guidance for Evaluating Human Health Effects in Impact Assessment: Human Health Risk Assessment. Available online at: https://publications.gc.ca/collections/collection_2024/sc-hc/H129-54-6-2023-eng.pdf
EAC - 1 - 213	Initial Project Description	Early Engagement	Human Health	Health Canada	HC-01; a) Key issue: Potential exposure of Indigenous peoples to contaminants of potential concern (COPCs); e) Additional information from the proponent: To address the issue of contaminant exposure, HC recommends that an HHRA be undertaken. An HHRA can be used to identify relevant COPCs and exposure pathways and estimate the likelihood and severity of adverse health effects.
EAC - 1 - 214	Initial Project Description	Early Engagement	Water	DFO	DFO-01; a) Key issue: The key issue is potential flow reductions in Harper Creek, its tributaries and Baker Creek during summer bull trout migration, fall bull trout spawning, and overwintering periods. These reductions may result in a loss of productivity through death of fish, and/or harmful alteration, disruption and/or destruction of fish habitat.; b) Project component or activity: The project components linked to the key issue are the construction, operation and closure of the open pit and the Tailings Storage Facility, and ongoing water management throughout all project activities.
EAC - 1 - 215	Initial Project Description	Early Engagement	Water	DFO	DFO-01; a) Key issue: The key issue is potential flow reductions in Harper Creek, its tributaries and Baker Creek during summer bull trout migration, fall bull trout spawning, and overwintering periods. These reductions may result in a loss of productivity through death of fish, and/or harmful alteration, disruption and/or destruction of fish habitat.; c)(i) Biophysical effect pathway(s): The biophysical effect pathways between the relevant project components and Harper Creek/ Baker Creek bull trout include: • placement of materials in water; • water level/flow modifications; • water diversion; and • dewatering
EAC - 1 - 216	Initial Project Description	Early Engagement	Water	DFO	DFO-01; a) Key issue: The key issue is potential flow reductions in Harper Creek, its tributaries and Baker Creek during summer bull trout migration, fall bull trout spawning, and overwintering periods. These reductions may result in a loss of productivity through death of fish, and/or harmful alteration, disruption and/or destruction of fish habitat.; c)(ii) Concern unique to the project or a priority within your mandate: Alteration of surface water and groundwater flow is common for mining projects of this scale. The receiving environment, specifically Harper Creek, is noteworthy because the high elevation, cold water stream provides important spawning and juvenile rearing habitat for a bull trout population in the lower North Thompson watershed. This population is known to spawn in Harper Creek, and migrate extensive distances, including into the South Thompson to feed at certain times of the year.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 217	Initial Project Description	Early Engagement	Water	DFO	DFO-01; a) Key issue: The key issue is potential flow reductions in Harper Creek, its tributaries and Baker Creek during summer bull trout migration, fall bull trout spawning, and overwintering periods. These reductions may result in a loss of productivity through death of fish, and/or harmful alteration, disruption and/or destruction of fish habitat.; c)(iii) Material to federal decision-making: The key issue is important to the decision maker because the project may result in an adverse effect within DFO jurisdiction. The impact may be significant based on the presence of sensitive species and habitats. The issue is challenging to address because impacts to surface flow and groundwater flow rates can be difficult to measure, model and confirm. Subject Matter Experts in hydrology and hydrogeology are required to determine potential impacts. High levels of uncertainty are common in the complex modelling approaches used in these assessments.
EAC - 1 - 218	Initial Project Description	Early Engagement	Water	DFO	DFO-01; a) Key issue: The key issue is potential flow reductions in Harper Creek, its tributaries and Baker Creek during summer bull trout migration, fall bull trout spawning, and overwintering periods. These reductions may result in a loss of productivity through death of fish, and/or harmful alteration, disruption and/or destruction of fish habitat.; d) Means for issue resolution: The Proponent will need to provide assurance that impacts to surface flow and groundwater flow are adequately characterized. Uncertainties in these predictions should be considered in the Proponent's Environmental Flow Needs (EFN) assessments. Impacts arising from changes to surface water flow can be mitigated by development of storage reservoirs. Mitigation measures to address impacts to groundwater flow are much more challenging to implement.
EAC - 1 - 219	Initial Project Description	Early Engagement	Water	DFO	DFO-01; a) Key issue: The key issue is potential flow reductions in Harper Creek, its tributaries and Baker Creek during summer bull trout migration, fall bull trout spawning, and overwintering periods. These reductions may result in a loss of productivity through death of fish, and/or harmful alteration, disruption and/or destruction of fish habitat.; e) Additional information from the proponent: The Proponent can commit to providing hydrology and hydrogeology assessments for the baseline, construction, operations and closure periods. The Proponent can use these studies to inform the risk to fish and fish habitat.
EAC - 1 - 220	Initial Project Description	Early Engagement	Economic Impacts	NRCan	NRCan-01; a) Key issue: Economic Conditions-Project feasibility; b) Project component or activity: 8.2.2 Economic Conditions
EAC - 1 - 221	Initial Project Description	Early Engagement	Economic Impacts	NRCan	NRCan-01; a) Key issue: Economic Conditions-Project feasibility; c)(i) Biophysical effect pathway(s): [no comment provided]
EAC - 1 - 222	Initial Project Description	Early Engagement	Economic Impacts	NRCan	NRCan-01; a) Key issue: Economic Conditions-Project feasibility; c)(ii) Concern unique to the project or a priority within your mandate: The positive economic impact of mining projects is a key issue within NRCan's mandate, as it directly supports the federal government's priorities related to economic growth, critical mineral development, regional development, and reconciliation with Indigenous Peoples.
EAC - 1 - 223	Initial Project Description	Early Engagement	Economic Impacts	NRCan	NRCan-01; a) Key issue: Economic Conditions-Project feasibility; c)(iii) Material to federal decision-making: The positive economic impact of a mining project is material to decision-making as a factor in the justification in the public interest under the Impact Assessment Act. It can represent a likely positive effect that contributes to sustainability, supports Canada's climate and environmental objectives—particularly through the responsible development of critical minerals—and aligns with federal priorities such as advancing regional economic development and reconciliation with Indigenous Peoples. Economic benefits, including employment, infrastructure investment, and local and Indigenous business opportunities, are often key to the long-term viability and acceptability of a project. These benefits can offset or contextualize potential adverse effects, provided they are transparently assessed and equitably distributed. As such, the economic dimension is integral to a balanced determination of whether a project is in the public interest.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 224	Initial Project Description	Early Engagement	Economic Impacts	NRCan	NRCan-01; a) Key issue: Economic Conditions-Project feasibility; d) Means for issue resolution: The proponent could provide a detailed assessment of the positive economic impacts of their project by conducting an economic impact analysis. The analysis could include a quantitative and qualitative evaluation of how the project will contribute to the local, regional, and national economy, and consider aspects such as job creation (direct, indirect, and induced employment), local business opportunities, government revenues (taxes and royalties), and infrastructure development. The analysis could also assess the long-term economic sustainability of the project, including potential economic diversification. To support the analysis, models such as StatCan's public input-output model are recommended to estimate the broader economic effects. Additionally, it would be valuable to compare findings with similar projects in other regions and provide insights into how the project aligns with market demand, global supply chains, and Canada's critical minerals strategy.
EAC - 1 - 225	Initial Project Description	Early Engagement	Economic Impacts	NRCan	NRCan-01; a) Key issue: Economic Conditions-Project feasibility; e) Additional information from the proponent: The proponent could leverage Input-Output (IO) models to assess and quantify the positive economic impacts of their initiative, such as job creation, contributions to GDP, and overall economic activity. By providing key data—such as capital and operational expenditures, industry classification, supply chain details, and expected production or service output—such analysis can generate insights into direct, indirect, and induced economic effects. IO models use this information to estimate how spending circulates through the economy, affecting employment levels, labour income, and tax revenues at local, regional, and national levels. This analysis helps stakeholders and decision-makers understand the broader economic benefits of the project.
EAC - 1 - 226	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-02; a) Key issue: Terrain Hazards; b) Project component or activity: Terrain and Soils
EAC - 1 - 227	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-02; a) Key issue: Terrain Hazards; c)(i) Biophysical effect pathway(s): Terrain modifications during construction, operations, and mine closure could possibly trigger terrain hazards and could potentially impact the project and the valued components.
EAC - 1 - 228	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-02; a) Key issue: Terrain Hazards; c)(ii) Concern unique to the project or a priority within your mandate: Section 10 of the Initial Project Description (pg. 106, Version 2, June 23, 2025) lists the effects of the environment on the Project. Bullet 4 indicates that Natural Hazards, such as earthquakes, could pose a potential risk to the project, however, this list does not include terrain hazards. Terrain hazards, which are common in mountainous terrain of British Columbia, could pose a risk to the valued components of the project, such as project linear infrastructure.
EAC - 1 - 229	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-02; a) Key issue: Terrain Hazards; c)(iii) Material to federal decision-making: Terrain hazards could have a potential adverse effect on project valued components (e.g., species, habitats, public safety).
EAC - 1 - 230	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-02; a) Key issue: Terrain Hazards; d) Means for issue resolution: NRCan recommends that bullet 4 of Section 10, Initial Project Description (pg. 106, Version 2, June 23, 2025) be updated to: 'Natural hazards such as seismic events (e.g., earthquakes), and terrain hazards.' The purpose is to identify that terrain hazards be considered in the Proponents assessment of effects of the environment on the project.
EAC - 1 - 231	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-02; a) Key issue: Terrain Hazards; e) Additional information from the proponent: NRCan suggests that information on terrain hazards be provided as the project moves forward.
EAC - 1 - 232	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-03; a) Key issue: Seismicity; b) Project component or activity: Seismic hazards
EAC - 1 - 233	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-03; a) Key issue: Seismicity; c)(i) Biophysical effect pathway(s): Seismic hazards, design and mitigation measures

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 234	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-03; a) Key issue: Seismicity; c)(ii) Concern unique to the project or a priority within your mandate: Section 9.2 of the IPD (June 23, 2025) “Effects of the Environment on the Project” (pg. 65): “Natural hazards such as a seismic event could potentially impact site infrastructure, geotechnical stability, and personnel safety. A seismic hazard assessment was conducted for the Project indicating that the Project is at low risk of a damaging seismic event. The Project will include appropriate design for earthquake events based on criteria provided by regulations and guidelines.
EAC - 1 - 235	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-03; a) Key issue: Seismicity; c)(iii) Material to federal decision-making: Seismic hazards could have a potential adverse effect on project valued components (e.g., TSF) and public safety.
EAC - 1 - 236	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-03; a) Key issue: Seismicity; d) Means for issue resolution: Regarding the seismic hazard assessment referred in the IPD (June 23, 2025) especially important for the TSF facility: NRCan recommends sharing the updated seismic hazard assessment and confirming that the latest codes and regulations are being followed (e.g., the updated seismic hazard model included in the 2025 National Building Code of Canada is expected to be released in late 2025). The 2020 seismic hazard calculator is available at: https://www.earthquakescanada.nrcan.gc.ca/hazard-alea/interpolat/nbc2020-cnb2020-en.php 1. NRCan recommends that the proponent confirm that site-specific data will be collected at the site for use in potential seismic amplification (site response) and geotechnical evaluations. Furthermore NRCan recommends that the proponent confirm that there are no known active faults at/near the Project site. NRCan notes that the Wells Grey – Clearwater volcanic zone is located ~100 km to the NNW. Although volcanic eruptions are rare, there are hazards associated with such events that are worthy of some discussion. Note that lahars have been known to travel 100+ km from some volcanic centres, as a few examples: https://appliedvolc.biomedcentral.com/articles/10.1186/s13617-014-0016-4 https://www.usgs.gov/volcanoes/mount-rainier/science/significant-lahars-mount-rainier NRCan notes that an earthquake early warning system is now operational and provided at no cost in British Columbia – see: https://www.earthquakescanada.nrcan.gc.ca/eew-asp/system-en.php This may be of interest to the proponents for emergency response procedures– and would provide warning times for large, distant earthquakes.
EAC - 1 - 237	Initial Project Description	Early Engagement	Terrain	NRCan	NRCan-03; a) Key issue: Seismicity; e) Additional information from the proponent: NRCan requests that the information on seismic hazards be provided as the project moves forward.
EAC - 1 - 238	Initial Project Description	Early Engagement	Groundwater	NRCan	NRCan-04; a) Key issue: Groundwater; b) Project component or activity: Open pit, Tailings Storage Facility (TSF)
EAC - 1 - 239	Initial Project Description	Early Engagement	Groundwater	NRCan	NRCan-04; a) Key issue: Groundwater; c)(i) Biophysical effect pathway(s): Dewatering the open pit or seepage from the tailings storage facility may alter downstream fish and fish habitat
EAC - 1 - 240	Initial Project Description	Early Engagement	Groundwater	NRCan	NRCan-04; a) Key issue: Groundwater; c)(ii) Concern unique to the project or a priority within your mandate: Assessing the potential adverse effects of pit dewatering, and tailings storage facilities on groundwater, surface water, fish and fish habitat are common issues in mining projects.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 241	Initial Project Description	Early Engagement	Groundwater	NRCan	NRCan-04; a) Key issue: Groundwater; c)(iii) Material to federal decision-making: Any change to fish and fish habitat are within the legislative authority of the Federal government within the Fisheries Act. Pit dewatering lowers groundwater levels, induces groundwater flow into the pit from the surrounding area and can reduce groundwater discharge to adjacent surface waters. Reductions in groundwater discharge to streams reduces stream discharge and baseflow and can affect physical and chemical measurements in streams (e.g., stream temperature). The tailings storage facility (TSF) will increase groundwater levels within the facility. The TSF may alter existing groundwater flow and quality, seepage and possibly downstream surface water quantity and quality. Predicting groundwater flow and seepage patterns from the TSF can ensure design features to optimize seepage capture and reduce impacts to surface waters. These project components have the potential to influence operations, closure and post-closure phases.
EAC - 1 - 242	Initial Project Description	Early Engagement	Groundwater	NRCan	NRCan-04; a) Key issue: Groundwater; d) Means for issue resolution: NRCan recommends that Table 9.1 in Section 9 of the Initial Project Description report (June 23, 2025), include potential project interactions between “Surface/Ground Water Quantity and Quality” and “Mining, Open Pit” for CL/PC (closure/post-closure) project phases. Similarly, NRCan recommends that the table recognize potential interactions between “Surface/Ground Water Quantity and Quality” and “Tailings Storage Facility (TSF) and Tailings Management” for CL/PC project phases. Similar changes may be warranted for “Fish and Fish Habitat” since Table 9.2 indicates “Changes in water flows and quality” relate to “Fish and Fish Habitat”. NRCan recommends that prediction of changes to groundwater and surface water as a result of pit dewatering, and tailings storage facilities for each project phase be assessed. NRCan recommends that the potential adverse effects of groundwater and surface water changes on fish and fish habitat be assessed. NRCan recommends that the proponent present a follow-up program to verify the accuracy of the predictions and assessment of impacts and determine the effectiveness of any mitigation measures.
EAC - 1 - 243	Initial Project Description	Early Engagement	Groundwater	NRCan	NRCan-04; a) Key issue: Groundwater; e) Additional information from the proponent: NRCan recommends that the proponent provide updated groundwater modelling that assesses the potential impacts of pit dewatering and the tailings storage facility on groundwater levels, groundwater flow, stream discharge and stream baseflow, and that the consequent potential impacts on fish and fish habitat be assessed. NRCan recommends that the proponent provide a follow-up program, in which monitoring groundwater levels between the pit, TSF and the streams as well as monitoring flow and quality in the adjacent streams would provide information to verify model predictions, determine the
EAC - 1 - 244	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-05; a) Key issue: When disturbed through mining activities, large amounts of geologic material may release deleterious substances through geochemical processes such as metal leaching and acid rock drainage (ML/ARD). This key issue relates to the disturbance -Open pits walls and storage of ore, mine waste (waste rock, tailings, overburden), and engineered structures using construction materials (quarry rock, waste rock, overburden).; b) Project component or activity: This key issue is linked to standard project components, including the open pit, pit walls, waste rock piles, tailings storage facility (TSF), ore stockpiles, overburden stockpiles, engineered structures and embankments, road cuts, quarries and other borrow sources.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 245	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-05; a) Key issue: When disturbed through mining activities, large amounts of geologic material may release deleterious substances through geochemical processes such as metal leaching and acid rock drainage (ML/ARD). This key issue relates to the disturbance -Open pits walls and storage of ore, mine waste (waste rock, tailings, overburden), and engineered structures using construction materials (quarry rock, waste rock, overburden).; c)(i) Biophysical effect pathway(s): ML/ARD could mobilize metals and acidity from mine wastes into mine contact water, which can be released to surface through direct discharge of contained and/or treated waters, and into groundwater through seepage from mine waste storage facilities. These releases can degrade groundwater and receiving water quality, fish, and fish habitat. These effects may also disrupt public uses as well as Indigenous traditional uses of land and water, where clean water and healthy ecosystems are central to cultural practices, community well-being, and long-term sustainability.
EAC - 1 - 246	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-05; a) Key issue: When disturbed through mining activities, large amounts of geologic material may release deleterious substances through geochemical processes such as metal leaching and acid rock drainage (ML/ARD). This key issue relates to the disturbance -Open pits walls and storage of ore, mine waste (waste rock, tailings, overburden), and engineered structures using construction materials (quarry rock, waste rock, overburden).; c)(ii) Concern unique to the project or a priority within your mandate: ML/ARD from mine waste is a key issue as it is the primary source of contaminants to receiving waters. It is NRCan's expertise and mandate to support sustainable mine development by reviewing ML/ARD risk through geochemical characterization studies and determine if mitigation measures are suitable. ML/ARD is complex, requiring proactive and appropriate management of mine waste to minimize impacts to the environment. In this case, volcanogenic massive sulphide (VMS) deposits contain high levels of sulfide minerals, which can pose a significant risk of ML/ARD if not properly managed during mining and reclamation. This geological setting increases the likelihood and complexity of ML/ARD issues, making a robust geochemical characterization program critical to establish reliable source terms and inform effective waste and water management.
EAC - 1 - 247	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-05; a) Key issue: When disturbed through mining activities, large amounts of geologic material may release deleterious substances through geochemical processes such as metal leaching and acid rock drainage (ML/ARD). This key issue relates to the disturbance -Open pits walls and storage of ore, mine waste (waste rock, tailings, overburden), and engineered structures using construction materials (quarry rock, waste rock, overburden).; c)(iii) Material to federal decision-making: For robust federal decision-making, conservative waste rock and tailings source terms must be validated to capture potential risk for ML/ARD, as This information is the basis for ECCC and DFO to assess potential adverse effects to water quality, fish, and fish habitat under the Fisheries Act. Based on federal expert knowledge and learnings from Mount Polley and other TSF breaches, although the proposed mitigation measures are not novel or complex, subaqueous disposal of reactive mine wastes in the TSF requires rigorous oversight. For a VMS deposit, a high volume of potentially acid generating rock is anticipated, and any lack of transparency or uncertainty in estimating the timing and magnitude of deleterious substance release undermines confidence in water quality modelling, the design of containment facilities, and the adequacy of mitigation measures.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 248	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-05; a) Key issue: When disturbed through mining activities, large amounts of geologic material may release deleterious substances through geochemical processes such as metal leaching and acid rock drainage (ML/ARD). This key issue relates to the disturbance -Open pits walls and storage of ore, mine waste (waste rock, tailings, overburden), and engineered structures using construction materials (quarry rock, waste rock, overburden).; d) Means for issue resolution: The issue could be addressed through the commitment of the proponent to develop defensible and conservative source terms (Release rates of metal and acidity from tailings, waste rock, pit wall, overburden, etc...) based on comprehensive geochemical characterization studies that follow MEND guidance documents, as well as proven and well-understood mitigation measures to mitigate the effect pathway(s) through surface water runoff and/or seepage. Source terms predict how mining activities might affect water quality and fish habitat through the release of deleterious substances or acidic drainage, which in turn informs planning of how to manage waste and reduce risks to the environment. To adequately mitigate the risks, any existing and arising gaps in the mine material characterization program must be addressed early. Regular updating of the program with additional testing is necessary to ensure the water quality predictions are as accurate as possible and that waste is managed in a way that protects the environment and fish habitat. NRCan recommends that a geochemical mine waste characterization program be used to verify the accuracy of source terms (i.e. release rates) by comparing predicted and observed concentrations and/or additional release rates measurement on excavated rock and tailings put in cells or/and field barrel tests NRCan recommends that an environmental monitoring program also be used to compare predicted vs measured metal concentrations and acidity in effluent, groundwater, and the receiving environment against predictions. These predictions can be applied in the site's environmental risk model and should be treated as compliance or threshold values that trigger adaptive management of effluent, tailings, or waste rock.
EAC - 1 - 249	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-05; a) Key issue: When disturbed through mining activities, large amounts of geologic material may release deleterious substances through geochemical processes such as metal leaching and acid rock drainage (ML/ARD). This key issue relates to the disturbance -Open pits walls and storage of ore, mine waste (waste rock, tailings, overburden), and engineered structures using construction materials (quarry rock, waste rock, overburden).; e) Additional information from the proponent: NRCan recommends that the proponent follow MEND guidance documents to ensure comprehensive source term development and validation and that the Harper Creek Project EA Application Appendix 6-A report (Table D-1) is updated to clearly demonstrate spatial and chemical sample representativeness for all materials to be disturbed and produced by mining or utilized for construction. NRCan recommends that all sample locations be shown on cross sections or block model images, complete with geological units and mine infrastructure, as well as expected excavation tonnage for each geological unit. NRCan recommends that all kinetic test data be updated where applicable, and that samples utilized for the development of source terms be identified and their statistical representation of anticipated ML/ARD potential demonstrated through box and whisker or similar
EAC - 1 - 250	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-06; a) Key issue: When deposited and managed within the Tailings Storage Facility (TSF), tailings may release deleterious substances through metal leaching and acid rock drainage (ML/ARD). These releases could degrade groundwater and surface water quality, with potential effects on fish, fish habitat, public access and uses, as well as Indigenous traditional land and water uses dependent on healthy aquatic systems.; b) Project component or activity: Tailings management in the TSF

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 251	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-06; a) Key issue: When deposited and managed within the Tailings Storage Facility (TSF), tailings may release deleterious substances through metal leaching and acid rock drainage (ML/ARD). These releases could degrade groundwater and surface water quality, with potential effects on fish, fish habitat, public access and uses, as well as Indigenous traditional land and water uses dependent on healthy aquatic systems.; c)(i) Biophysical effect pathway(s): ML/ARD could mobilize metals and acidity into groundwater and surface water, degrading water quality, fish, and fish habitat. These effects may also disrupt Indigenous traditional uses of land and water, where clean water and healthy ecosystems are central to cultural practices, community well-being, and long-term sustainability.
EAC - 1 - 252	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-06; a) Key issue: When deposited and managed within the Tailings Storage Facility (TSF), tailings may release deleterious substances through metal leaching and acid rock drainage (ML/ARD). These releases could degrade groundwater and surface water quality, with potential effects on fish, fish habitat, public access and uses, as well as Indigenous traditional land and water uses dependent on healthy aquatic systems.; c)(ii) Concern unique to the project or a priority within your mandate: The Initial Project Description (IPD) indicates that tailings from processing Main Zone ore will be stored in a surface facility, with final design details to follow in later studies. Tailings storage will form a substantial component of the project footprint and has the potential to affect long-term water quality. The IPD does not provide any data to support the characterization of the tailings, and the assumption that any tailings material is not potentially acid generating remains unverified. Geochemical testing will provide the data required for these risks to be evaluated and for appropriate management measures to be developed in line with sustainable mining practices.
EAC - 1 - 253	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-06; a) Key issue: When deposited and managed within the Tailings Storage Facility (TSF), tailings may release deleterious substances through metal leaching and acid rock drainage (ML/ARD). These releases could degrade groundwater and surface water quality, with potential effects on fish, fish habitat, public access and uses, as well as Indigenous traditional land and water uses dependent on healthy aquatic systems.; c)(iii) Material to federal decision-making: The characterization and management of tailings has direct implications for long-term water quality and the integrity of the tailing's storage facility. If tailings material is assumed to be non-acid generating without sufficient testing and controls, there is a risk that acidity or metals could leach over time. Such outcomes may compromise environmental protection measures, results in long term institutional management of contamination and result in adverse effects on water resources, aquatic ecosystems, and fish habitat. Based on federal expert knowledge and learnings from Mount Polley and other TSF breaches, although the proposed mitigation measures are not novel or complex, subaqueous disposal of reactive mine wastes in the TSF requires rigorous oversight.
EAC - 1 - 254	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-06; a) Key issue: When deposited and managed within the Tailings Storage Facility (TSF), tailings may release deleterious substances through metal leaching and acid rock drainage (ML/ARD). These releases could degrade groundwater and surface water quality, with potential effects on fish, fish habitat, public access and uses, as well as Indigenous traditional land and water uses dependent on healthy aquatic systems.; d) Means for issue resolution: The proponent has committed to providing a new study on tailings source terms (Table E-1). In addition, NRCan recommends that the proponent also provide a detailed tailings management plan, supported by static and kinetic testing as outlined in MEND 1.20.1. Together, these reports would supply the data needed to evaluate drainage risks and outline mitigation measures such as seepage collection, covers, and adaptive deposition. This would reduce uncertainty and demonstrate that risks to water quality and structural integrity can be effectively managed using proven and sustainable practices.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 255	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-06; a) Key issue: When deposited and managed within the Tailings Storage Facility (TSF), tailings may release deleterious substances through metal leaching and acid rock drainage (ML/ARD). These releases could degrade groundwater and surface water quality, with potential effects on fish, fish habitat, public access and uses, as well as Indigenous traditional land and water uses dependent on healthy aquatic systems.; e) Additional information from the proponent: NRCan recommends that the proponent provide a tailings characterisation and management plan supported by a conceptual model that summarizes the geochemical characterization of the tailings and outlines how risks of ML/ARD will be addressed. The plan should establish clear criteria and a decision framework for tailings placement, water management, and closure strategies. NRCan recommends that this framework demonstrate how water quality protection and long-term stability will be achieved through proven and sustainable practices, thereby reducing risks to the environment and ensuring that the facility is designed, operated, and closed in a manner consistent with best practice.
EAC - 1 - 256	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-07; a) Key issue: Use of PAG and/or metal-leaching construction materials in site infrastructure; b) Project component or activity: Mine rock, overburden, borrow pits, quarry rock, and other materials used for construction of impoundments, roads, and water management structures, as well as quarry faces and road cuts.
EAC - 1 - 257	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-07; a) Key issue: Use of PAG and/or metal-leaching construction materials in site infrastructure; c)(i) Biophysical effect pathway(s): The use of potentially acid generating (PAG) and/or metal-leaching (ML) material in construction works could release deleterious substances, degrading groundwater and surface water quality, with potential adverse effects to water quality, fish, fish habitat, public usage and Indigenous traditional uses of water and aquatic resources.
EAC - 1 - 258	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-07; a) Key issue: Use of PAG and/or metal-leaching construction materials in site infrastructure; c)(ii) Concern unique to the project or a priority within your mandate: Construction materials are often less rigorously characterized than waste rock or tailings, yet their placement directly into facility embankments, roads, or other structures creates a potential release pathway. In a VMS setting, high sulfide content increases this risk.
EAC - 1 - 259	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-07; a) Key issue: Use of PAG and/or metal-leaching construction materials in site infrastructure; c)(iii) Material to federal decision-making: The selection and placement of construction materials has direct implications for water quality and the long-term integrity of engineered structures. If potentially acid-generating (PAG) or metal-leaching (ML) material is used without sufficient controls, it may compromise mitigation measures, undermine engineered structure stability, and weaken environmental protection, leading to effects to water resources, aquatic ecosystems, and fish habitat.
EAC - 1 - 260	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-07; a) Key issue: Use of PAG and/or metal-leaching construction materials in site infrastructure; d) Means for issue resolution: NRCan recommends that the proponent develop a comprehensive ML/ARD characterisation and management plan that establishes clear criteria and procedures for identifying and segregating non-acid generating and non-metal leaching material suitable for construction prior to its use. NRCan recommends that the use of non-PAG mine rock consider the potential for the release of metals independent of the generation of ARD. NRCan recommends that materials with the potential to generate acid or leach metals only be used in construction if no other materials are available from nearby quarries and as such should be encapsulated or placed in engineered zones with complete contact water collection and treatment.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 261	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-07; a) Key issue: Use of PAG and/or metal-leaching construction materials in site infrastructure; e) Additional information from the proponent: NRCan recommends that the proponent provide an ML/ARD characterisation and management plan with a conceptual model that summarizes the characterization of potential construction material that is geochemically suitable (non-PAG and not ML). NRCan recommends that the plan describe the criteria and decision framework for determining when PAG and/or ML material could be used in infrastructure while ensuring adequate water management. NRCan recommends that the proponent identify suitable proxies for identifying ML/ARD potential for testing of materials during development and operations to support rapid decision making, including the abundance and distribution of sulfides, iron carbonates, and all potential metals of concern.
EAC - 1 - 262	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-08; a) Key issue: No defined plan for segregating mine rock with ML/ARD potential including rock that has the potential to leach metals independently of ARD generation.; b) Project component or activity: Waste rock piles, ore stockpiles, TSF, overburden stockpiles, construction materials, open pits, water and mine waste management facilities
EAC - 1 - 263	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-08; a) Key issue: No defined plan for segregating mine rock with ML/ARD potential including rock that has the potential to leach metals independently of ARD generation.; c)(i) Biophysical effect pathway(s): ML/ARD could mobilize metals and acidity into groundwater and surface water, degrading water quality, fish, and fish habitat. These effects may also disrupt public usages as well as Indigenous traditional uses of land and water, where clean water and healthy ecosystems are central to cultural practices, community well-being, and long-term sustainability.
EAC - 1 - 264	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-08; a) Key issue: No defined plan for segregating mine rock with ML/ARD potential including rock that has the potential to leach metals independently of ARD generation.; c)(ii) Concern unique to the project or a priority within your mandate: The absence of an ML/ARD Characterisation and Management Plan and Conceptual Geochemical Model leaves uncertainty in how mine waste will be characterized, segregated, and mitigated during mine development and operations. Given the project's scale, the large waste volumes, and the sensitivity of downstream waters relied on by the public and Indigenous communities, this gap raises risks to water quality and site stability. Without clear measures, the likelihood and severity of adverse effects remain uncertain, increasing the potential for long-term environmental liabilities and unsustainable practices.
EAC - 1 - 265	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-08; a) Key issue: No defined plan for segregating mine rock with ML/ARD potential including rock that has the potential to leach metals independently of ARD generation.; c)(iii) Material to federal decision-making: If mine components are not properly characterized and managed, water quality could deteriorate over the long term and aquatic habitat could be lost, including downstream effects on public and Indigenous uses. To address this, the project requires an ML/ARD characterization and management plan together with a geochemical conceptual site model. These provide the framework needed to predict drainage chemistry, assess risks, and evaluate the effectiveness of mitigation. Without this framework, it is uncertain that mitigation will be effective, making the issue material to federal decision-making under the Fisheries Act with respect to water resources, aquatic ecosystems, fish habitat, and long-term site stability.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 266	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-08; a) Key issue: No defined plan for segregating mine rock with ML/ARD potential including rock that has the potential to leach metals independently of ARD generation.; d) Means for issue resolution: NRCan recommends that the proponent provide a comprehensive ML/ARD characterisation and management plan that clearly describes how potentially acid-generating and leachable materials will be identified and managed, and also how non-acid generating (NAG) rock will be verified and monitored. NAG rock can leach sulfate and metals such as copper, selenium, and zinc, as identified in Appendix 6A of the Harper Creek EA Application. To address this, NRCan recommends that the plan establish explicit methods for distinguishing NAG rock with low leaching potential from materials that may still release contaminants. This includes defining test protocols, verification criteria, and thresholds that support segregation decisions, as well as adaptive monitoring to confirm performance over time. By integrating this approach into the conceptual geochemical model and updating it with ongoing characterization data, the proponent can demonstrate that all classes of mine rock are appropriately managed to protect water quality and long-term site stability.
EAC - 1 - 267	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-08; a) Key issue: No defined plan for segregating mine rock with ML/ARD potential including rock that has the potential to leach metals independently of ARD generation.; e) Additional information from the proponent: To provide confidence that the issue can be resolved by existing means, NRCan recommends that the proponent describe commitments for ongoing updates to the characterization and management plan based on new data, collaborative engagement with provincial regulators, and consistency with established guidance such as MEND 1.20.1. NRCan recommends that additional field studies, such as test piles or pilot-scale evaluations, be considered to validate predictive models and demonstrate the long-term effectiveness of proposed mitigation measures.
EAC - 1 - 268	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-09; a) Key issue: Potential ML/ARD from pit wall exposures; b) Project component or activity: Exposed pit walls in closure and post-closure
EAC - 1 - 269	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-09; a) Key issue: Potential ML/ARD from pit wall exposures; c)(i) Biophysical effect pathway(s): Sulfide-bearing wall rock exposed to air and water can generate acid and/or release metals over time, contributing contaminated drainage to pit lakes, groundwater, and surface water systems, which could require long-term treatment.
EAC - 1 - 270	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-09; a) Key issue: Potential ML/ARD from pit wall exposures; c)(ii) Concern unique to the project or a priority within your mandate: In a VMS setting, pit wall exposures are expected to contain variable sulfide mineralization, increasing risks of ML/ARD. Unlike waste rock or tailings, exposed pit walls cannot be easily removed, isolated, or covered, and their large surface area makes prediction and management more challenging.
EAC - 1 - 271	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-09; a) Key issue: Potential ML/ARD from pit wall exposures; c)(iii) Material to federal decision-making: If pit wall drainage is acidic or metal-rich, it can persist for decades post-closure, contributing to long-term contaminant loading and degrading pit lake water quality. This has direct implications for water quality, fish, and fish habitat, leading to uncertainty in federal decision-making under the Fisheries Act with respect to water resources, aquatic ecosystems, and fish habitat.
EAC - 1 - 272	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-09; a) Key issue: Potential ML/ARD from pit wall exposures; d) Means for issue resolution: This issue could be mitigated by detailed geochemical characterization of pit wall material, including kinetic testing, to ensure long-term drainage quality predictions are representative of the material expected to be exposed at the end of mine life. Mitigation strategies (e.g., controlled flooding, engineered covers, collection/treatment systems, etc...) could then be developed based on these predictions.

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ID #	Application/Document	Stage	Subject - EA Topic	Comment Organization	Participant Issue or Comment
EAC - 1 - 273	Initial Project Description	Early Engagement	ML/ARD	NRCan	NRCan-09; a) Key issue: Potential ML/ARD from pit wall exposures; e) Additional information from the proponent: NRCan recommends that the proponent undertake detailed geochemical characterization of pit wall material, including kinetic testing, to ensure long-term drainage quality predictions are representative of the material expected to be exposed at the end of mine life. NRCan recommends that mitigation strategies (e.g., controlled flooding, engineered covers, collection/treatment systems, etc...) be developed based on these predictions. NRCan recommends that the proponent describe how pit wall drainage will be monitored, how predictions will be validated, and suggest trigger values that would lead to implementing adaptive measures should monitoring indicates higher-than-expected contaminant release.