Enclosure 1: Federal Authority Advice Record

Response due by September 13, 2023

Great Bear Gold Project Agency File: 85832

All comments should be submitted via the <u>Submit a Comment</u> feature available on the Project's Canadian Impact Assessment Registry page¹. Letters and forms can be uploaded using this feature. If you have any difficulties submitting this way, please contact the Agency at *GreatBear@iaac-aeic.gc.ca*.

| Department/Agency | Environment Climate Change Canada |
|-------------------|---|
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If yes, specify the Act of Parliament and that power, duty or function.

Species at Risk Act permits

ECCC is responsible for all species at risk listed on Schedule 1 of *Species at Risk Act*, 2002 (SARA), except for those occurring on lands administered by Parks Canada Agency and for aquatic species, as defined by the *Fisheries Act*, 1985. All information pertains only to species for which ECCC is responsible.

^{1. (}a) Is it probable that your department or agency may be required to exercise a power or perform a duty or function related to the Great Bear Gold Project (the Project) to enable it to proceed?

¹ https://iaac-aeic.gc.ca/050/evaluations/proj/85832

For species listed in Schedule 1 of the SARA as extirpated, endangered or threatened, a permit may be required from ECCC (section 73 of SARA) for activities that affect a listed terrestrial wildlife species, any part of its critical habitat, or the residences of its individuals, where those prohibitions are in place. Such permits may only be issued: if all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted; all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and if the activity will not jeopardize the survival or recovery of the species. Permits are also required by those persons conducting activities that contravene the critical habitat destruction prohibitions (subsection 58(1)).

Prohibitions are in place for individuals and residences on federal lands in a province, reserve or any other lands under the *Indian Act, 1985*, or lands under the authority of the Minister of the Environment, and for birds listed under the *Migratory Birds Convention Act, 1994* (MBCA) wherever they occur and regardless of land tenure.

Species that are both a migratory bird protected under the MBCA and listed on Schedule 1 of SARA as endangered, threatened, or extirpated, receive protections under the MBCA and SARA. For some migratory bird species listed under SARA, the residence prohibition (section 33) will protect nest and/or roost sites that are not active, for example when a species re-uses these sites in subsequent years. Please note that the protection afforded may differ between the two pieces of legislation.

Refer to the Species at Risk Registry for more information on migratory bird residences and protection requirements: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/residence-descriptions.html.

Refer to the following Protection Statement, which describes how critical habitat identified for at risk migratory birds, is protected on non-federal land in Canada: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/critical-habitat-statements/protection-statement-habitat-mbca-1994-applies-migratory-birds-listed-under-sara.html.

Furthermore, prohibitions may be in force on land other than federal land pursuant to other orders or regulations under SARA. It is possible that further prohibitions may come into force in the future through orders in Council for individuals, residences and critical habitat on non-federal lands and / or through ministerial order for critical habitat on federal lands. It is also possible that, over the course of the assessment or after the assessment, additional species could be listed under SARA; permits may be required for project activities that affect these additional species. Proponents are advised to monitor for such developments on the SARA Registry here: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html.

If prohibitions were to come into force, examples of activities that could require a SARA permit include:

- species surveys that would affect individuals or residences;
- site preparation (clearing, grubbing, site access, staging, blasting);
- deconstruction/decommissioning of infrastructure;
- construction and operation of temporary and permanent works and infrastructure;

- creation of new roads, rail lines, or power lines;
- infilling or dewatering of wetlands or watercourses;
- any monitoring that requires capture/release of individuals; and
- sensory disturbance effects (artificial lighting, noise, vibration, human activity, vehicular traffic).

ECCC will require detailed information on the potential effects of the Project, including locations and/or occurrences of species at risk, their use of habitat and critical habitat within the project area, and specific effects on federal land, before ECCC can determine whether a SARA permit is required. However, based on the Initial Project Description (IPD), ECCC notes that SARA permits will likely not be required given that there is no federal land, and currently no order in place to bring prohibitions into effect on non-federal land, within the project area. The potential for a permit in relation to migratory bird species at risk will require additional information (see *Migratory Birds Convention Act* permits below for additional information).

Links to other publicly available documents:

- Guidelines for permitting under Section 73 of SARA https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/policies-guidelines/permitting-under-section-73.html
- Species at Risk Permitting Policy https://species-registry.canada.ca/index-en.html#/consultations/2983

Migratory Birds Convention Act permits

The MBCA and the *Migratory Birds Regulations, 2022* (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). This legislation and regulations apply to all lands and waters in Canada, regardless of ownership.

Schedule 1 of the MBR 2022 provides year-round nest protection for 18 species and nests of these species cannot be damaged, destroyed, removed or disturbed, even when they are unoccupied, unless the following conditions of the regulations have been met:

- a notification of the unoccupied nest has been submitted/received through the Registry for Abandoned Nests and;
- the wait time designated in the regulations has passed, and during this time the nest was not occupied by a migratory bird.

Planning can help to avoid risks of detrimental effects to migratory birds, as the principal risk factors are the location and time of year of activities. For more information on ways to reduce the risk of detrimental effects to migratory birds, their nest and eggs, please visit: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html.

For more information on permits and the MBR 2022, please visit: https://www.canada.ca/en/environment-climate-change/services/migratory-game-bird-hunting/status-update-modernization-regulations.html

For more information and guidance on general nesting periods, please visit: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/overview.html

In some situations, it may be possible to obtain a permit to move or destroy an unoccupied nest of a Schedule 1 species. For more information, please visit: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html

Authorization to use a water body frequented by fish as a Tailings Impoundment Area under subsection 5(1) of the *Metal and Diamond Mining Effluent Regulations* of the *Fisheries Act*

ECCC is responsible for the administration of subsection 36(3) to (6) of the *Fisheries Act* and the implementation of the *Metal and Diamond Mining Effluent Regulations* (MDMER). Subsection 36(3) of the *Fisheries Act* prohibits the deposit of a deleterious substance in waters frequented by fish unless authorized by regulations. The MDMER authorizes the deposit of a deleterious substance under specified conditions, including deposits into a Tailings Impoundment Area (TIA) that is a water or place set out in Schedule 2 of the Regulations.

The use of waters frequented by fish for mine waste disposal can only be authorized by amending the MDMER to list the water body in Schedule 2 of the Regulations, designating it as a TIA. ECCC, on the expert advice from the Department of Fisheries and Oceans, will determine the water bodies that require listing in Schedule 2 of the MDMER.

Section 27.1 of the MDMER requires the development and implementation of a fish habitat compensation plan (FHCP) to offset the loss of fish habitat that would occur as a result of the use of a fish-frequented water body for mine waste disposal. The owner or operator of a mine is also required to submit an irrevocable letter of credit to cover the plan's implementation costs. The mining Proponent must also demonstrate that the disposal of tailings (including effluents) in these water bodies is the best approach from an environmental, technical, economic and socio-economic perspective in accordance with Environment and Climate Change Canada's "Guidelines for the Assessment of Alternatives for Mine Waste Disposal" (https://www.canada.ca/en/environment-climate-change/services/managing-pollution/sources-industry/mining-effluent/metal-diamond-mining-effluent/tailings-impoundment-areas/guidelines-alternatives-mine-waste-disposal.html). Providing this information during the impact assessment can reduce the time required for the regulatory amendment process under the MDMER, following the completion of the impact assessment. The timing of the submission of the assessment of alternatives and the FHCP, is however, determined by the Proponent.

The Governor in Council (Treasury Board), on the recommendation of the Minister of the Environment, makes the final decision to list water bodies in Schedule 2 of the MDMER.

The timeline for completion of the regulatory process is between 12-18 months following the completion of consultation with Indigenous groups and the public on the assessment of alternatives for mine waste disposal and the fish habitat compensation plan. For projects that meet certain conditions, however, a streamlined approach for approvals may be recommended to the Governor in Council as per the Department's policy on "Streamlining the Approvals Process for Metal Mines with Tailings Impoundment Areas"

(https://www.canada.ca/en/environment-climate-change/services/managing-pollution/sources-industry/mining-effluent/metal-diamond-mining-effluent/tailings-impoundment-areas/approvals-process-metal-mines-impoundment-areas.html). Where possible, consultations on amendments to Schedule 2 of the MDMER will be coordinated with the consultations undertaken during the impact assessment.

If not fully described in the IPD, the Proponent should provide in the Detailed Project Description (DPD) information on water bodies that may require listing on Schedule 2 of the MDMER. More specifically, maps or figures identifying the water bodies and information regarding fish studies or any other information that could support a determination on the presence of fish in the area that may be impacted by the disposal of mine waste.

For more information, contact the Metal and Diamond Mining Effluent Regulations inbox, mdmer-remmmd@ec.gc.ca.

Further information regarding amendments to Schedule 2 of the MDMER will be provided in the Permitting Plan.

(b) Please describe any Indigenous or public consultation that will be undertaken in relation to the excise of that power, duty or function, including when it would take place.

Should a SARA permit be required, ECCC's consultation activities with Indigenous communities would begin following receipt of a SARA permit application consistent with section 73(5) of the Act. These activities would typically begin with an initial letter to the band council or wildlife management board responsible for the lands where the activity is proposed. This initial contact is then followed by emails, phone calls and/or in person discussions as appropriate. Consultation on SARA permits would be coordinated during the assessment where possible and may include the review of permit terms and conditions.

Should a SARA permit be required, as per section 73 of SARA, there is no public participation during the process of SARA permit issuance. After a permit is issued, the description of the activity and how SARA's preconditions were met will be posted on the SARA Registry here: https://species-registry.canada.ca/index-en.html#/permits

ECCC engages and consults with Indigenous groups on proposed amendments to Schedule 2 of the MDMER to list waters frequented by fish as tailings impoundment areas. More specifically, ECCC engages and consults on the assessment of alternatives (AA) for mine waste disposal and the fish habitat compensation plan (FHCP) prepared by mine proponents.

ECCC, in collaboration with DFO and mine proponents, provide responses to comments submitted on the AA and FHCP and address any concerns raised by Indigenous groups.

The time required to complete Indigenous consultation and engagement on Schedule 2 amendments varies depending on the project and previous consultation efforts conducted by the Crown and mine proponents on the AA and the FHCP.

ECCC engages the public on the proposed amendments to Schedule 2 of the MDMER to list waters frequented by fish as tailings impoundment areas. Communities near the proposed mine site are contacted and provided with the documents ECCC consults on

(AA and FHCP), as well as summaries of these documents to facilitate public feedback. These documents are made available electronically on the Canada.ca website and commenting is open for a period of at least 30 days. If needed, hard copies are sent to public libraries. Furthermore, public consultation sessions are conducted by ECCC to explain the Schedule 2 regulatory process, the AA and the FHCP. Similarly, ECCC, in collaboration with mine proponents and DFO, provides response to comments and addresses concerns received during the public consultation period.

2. Is your department or agency in possession of specialist or expert information or knowledge that may be relevant to the conduct of an impact assessment of the Project?

Specify the specialist or expert information or knowledge.

ECCC has specialist or expert information that may be relevant to the impact assessment in the areas listed below. In each of these subject areas we have expertise related to establishing an adequate baseline, assessing potential effects to biophysical valued components, effectiveness of mitigation measures, methods for monitoring and follow-up, as well as information regarding federal policies, standards, and regulations that may be relevant to the assessment (Note: ECCC does not assess proposed projects for regulatory compliance, but instead provides technical input to the Agency to inform the assessment). Once the scope of the Project and of the assessment are established by the Agency, this list may change if additional project activities or components should come into scope.

Air quality: ambient air quality; sources of emissions; emissions estimation and measurement; atmospheric transport, transformation and dispersion modelling; cumulative effects, mitigation measures and follow-up monitoring.

Greenhouse gas emissions and climate change: estimations of greenhouse gas (GHG) emissions (net and upstream); impact on carbon sinks; GHG mitigation measures and determination of Best Available Technologies/Best Environmental practices (BAT/BEP); credible plan to achieve net-zero GHG emissions by 2050; climate change science to inform evaluation of potential changes to the environment and Project resilience to effects of climate change; climate change policies; and national GHG projections.

Water quality and quantity: surface water quality; contamination sources for surface water and groundwater, including effluent; wastewater; water quality predictions and modelling; seepage and runoff effects; management of contaminated soils or sediments; hydrology (streamflow rates data and modelling, flooding and extreme events management, drainage control, water levels, water balances); geochemistry; cumulative effects and follow-up and monitoring.

Wildlife, species at risk, and habitat: priority species and places as outlined in the *Pan-Canadian Approach to transforming species at risk conservation in Canada*; migratory birds, their nests, eggs, and habitat under authority of the MBCA; species assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC); species at risk, individuals, their residences, habitat and critical habitat including recovery strategies, action plans and management plans; ecological function of wetlands; and ecotoxicology. Species at Risk expertise may be particularly important in supporting the Proponent in providing information throughout the assessment required by the Agency to meet requirements under s79 of SARA, namely: 1) notifying the competent Minister of the Project if it is likely to affect a listed wildlife species or its critical habitat; 2) identifying

adverse effects of the Project on listed wildlife species and their critical habitat, and 3) if the Project is carried out, ensuring that measures are taken in a way that is consistent with recovery documents to avoid or lessen the adverse effects and to monitor the adverse effects of the Project.

Environmental emergencies: emergency management planning and guidance, including where the release of hazardous substances could affect species at risk and/or migratory birds; atmospheric transport and dispersion modelling of contaminants in air; fate and behaviour; and hydrologic trajectory modelling of contaminants in water.

Climate and meteorology: long-term climate patterns and norms.

| 3. | Has your department or agency considered the Project; exercised a power or |
|----|--|
| | performed a duty or function under any Act of Parliament in relation to the Project; |
| | or taken any course of action that would allow the Project to proceed in whole or in |
| | part? |

Specify.

No.

4. Has your department or agency had previous contact or involvement with the Proponent or other party in relation to the Project? (for example: an enquiry about methodology, guidance, or data; introduction to the Project)

Provide an overview of the information or advice exchanged.

No.

5. Does your department or agency have advice for the Proponent on whether and how they can provide information as part of the impact assessment process to streamline any permits, approvals or authorizations that may be required for the Project by your department or agency?

Specify as appropriate.

There is a 90-day service standard for SARA permits. However, for activities requiring a decision under the *Impact Assessment Act, 2019* (IAA), permit applications are not subject to the 90-day timeline because another Act of parliament requires that a decision be made before the competent Minister issues or refuses to issue a SARA permit. Applications for SARA permits can be reviewed concurrently with the impact assessment (IA) to facilitate alignment of the authorizations. It is important that all necessary information such as collection of baseline information that supports assessment of SARA preconditions is available to expedite the permitting process following the IA decision. Permits to conduct fauna and flora surveys required to obtain additional baseline information about SARA listed species can be issued prior to an IA decision but are still subject to the 90-day service standard and may be subject to other regulated exceptions. Additional information on the 90-day service standard can be found here: https://laws-lois.justice.gc.ca/eng/regulations/SOR-2013-140/FullText.html - h-3.

6. Does your department or agency have additional information or knowledge not specified, above, including information on the geographic, environmental, economic or social context of the project? (e.g., location of protected or sensitive areas, previous history between local communities and Proponent or similar projects, local or regional social or economic concerns)?

Specify as appropriate.

The Project footprint falls within critical habitat for Woodland Caribou Boreal population (Sydney Range). Habitat disturbance in the Sydney Range currently exceeds the 35% disturbance threshold in the *Woodland Caribou, Boreal Population Amended Recovery Strategy*, and the local population is considered not self-sustaining. The *Woodland Caribou, Boreal population Amended Recovery Strategy* also states the following: "In ranges with undisturbed habitat below the threshold, initially, critical habitat is the existing habitat that over time would contribute to the attainment of 65% undisturbed habitat." Given that the Sydney range has undisturbed habitat below the threshold, all existing habitat (disturbed or not) is critical habitat.

7. What are the <u>key issues</u> likely to be relevant to the public interest decision, based on the mandate and area(s) of expertise of your department, and which should be addressed in an impact assessment of the Project, should the Agency determine that one is required?

For each key issue:

- Describe the effect or the nature of the issue, including any relevant context;
- Provide the rationale and/or evidence for why it is a key issue;
- Identify briefly solutions to the issue, including any information or studies that should be required in the Tailored Impact Statement Guidelines, potential mitigation measures, and/or regulatory requirements relevant to the issue;
- Provide a concise, plain-language summary of the issue for inclusion in the Summary of Issues.

The information provided will be used by the Agency to determine if and an impact assessment is required and where appropriate to develop project-specific draft Tailored Impact Statement Guidelines that focus on the key issues likely to be relevant to the public interest decision.

Please use *Table 1: Key Issues to inform decision-making* to respond to this question.

- 8. Where possible, identify any clarifications or additional information the Proponent could include in the Detailed Project Description or in the response to the Summary of Issues that would:
 - give confidence that an issue or effect could be addressed and managed;
 - inform the decision as to whether an impact assessment is required; or
 - aid in tailoring the Impact Statement Guidelines if an impact assessment is required.

These clarifications and additional information will be included as specific questions in the Summary of Issues provided to the Proponent.

Please use Table 2: Clarification or additional information the Proponent could include in the Detailed Project Description or in the response to Summary of Issues to respond to this question.

| Rob Clavering |
|---|
| Name of Departmental / Agency Responder |
| Acting Regional Director Environmental Protection Operations Directorate Ontario Region |
| Title of Responder |
| 09/13/2023 |
| Date |

Table 1: Key Issues to inform decision-making

The Agency asks that federal authorities align expert advice to comment on whether potential project effects² in areas of federal jurisdiction have been accurately³ characterized and adequate⁴ mitigation to minimize those effects have been presented by the proponent. The Agency requires that advice consider the context and setting of the Project, and the regulatory mechanisms that may be in place to oversee effects in areas of federal jurisdiction. In identifying key issues relevant to the public interest decision, federal authorities should be mindful of the Project's context (size, scope, location), Indigenous knowledge and perspectives, and public concerns. Key issues that may be relevant to the public interest decision include:

- effects that in areas of federal jurisdiction and that may be significant, based on federal experts' knowledge and experience with past projects;
- effects that may impact Indigenous peoples and their rights, based on Indigenous knowledge and perspectives or experience with past projects;
- effects on key species or habitats (e.g. at risk, important to Indigenous communities, commercial importance, provide important ecosystem function);
- issues or effects that may result from novel project activities, components or technology;
- effects with large uncertainties, including in the effectiveness of mitigation measures;
- transboundary effects where mitigation measures are limited;
- positive effects, including where project may support other governmental priorities, including reconciliation with Indigenous peoples; and
- key concerns raised by Indigenous or local communities.

Effects that are anticipated to be minor or which can be managed using well understood mitigation measures, existing guidance, and/or other regulatory processes may have simplified information requirements or may be removed entirely. Measured advice from federal authorities on key issues and solutions —and on the scope and detail of any required information and studies — will enable the Agency to focus assessments on issues that are important to participants and to decision-makers.

| Comment ID | Valued Component or Factor to Consider | Description of Key Issue (Context and Rationale) | Solutions | Plain language summary for inclusion in Summary of Issues |
|--|---|--|--|--|
| Please identify comments by organization and comment number. | within the mandate | Provide a brief description of the issue and rationale for being a key issue. Include, where relevant,: the pathway of effects; social, economic or environmental context which are relevant to it being a key issue; key uncertainties that should be addressed in the impact assessment; Indigenous or public concerns or perspective; potential for differential effects among diverse subgroups; scientific evidence or traditional knowledge, including from past project experience, which supports inclusion as a key issue. | Where applicable, briefly identify solutions to address the potential issue or effects including Information or studies required to describe and characterize the effect, should an impact assessment be required; including any guidance for data collection and/or analysis or existing data sources to inform the assessment; Any powers, duties or functions that your department or agency has that may mitigate, manage, or set conditions related to the effect; Guidance or policies for mitigating effects or any standard and well-understood mitigation measures that would address the effect, including follow-up monitoring activities; and/or Commitments the Proponent could make to respond to the issue. Where available, please refer to existing text in the TISG template. | For issues to be included in the Summary of Issues, provide a concise, plain language synopsis of the key issue and any questions or directions for the Proponent. |
| ECCC-01 | Greenhouse Gas Emissions and Climate Change | Canada's environmental obligations and climate change commitments include the Paris Agreement, the 2030 Emissions Reduction Plan and the <i>Net-Zero Accountability Act</i> . Canada's emissions reduction target is 40 to 45 percent below | The Strategic Assessment of Climate Change (SACC) provides guidance related to climate change throughout the impact assessment process. Should the Project be subject to a federal impact assessment, the SACC would apply. The SACC outlines information that the Proponent should provide during the impact assessment process on greenhouse gas (GHG) emissions, impact on carbon sinks, impact on federal emissions reduction efforts and global GHG emissions, GHG mitigation measures and climate change resilience. The SACC also outlines the | If the Project undergoes a federal impact assessment, the SACC will apply. In this scenario, the Project's GHG emissions and climate change impacts must be assessed consistent with guidance in the |

² Effects in this context means effects in areas of federal jurisdiction as defined in section 2 of the Impact Assessment Act.

³ For effects in areas of federal jurisdiction, "accurately" means whether the proponent made sufficient effort to clearly (supported by baseline or studies undertaken) characterized the effect (including magnitude, geographic extent, duration, frequency, reversibility, context, etc.).

For effects in areas of federal jurisdiction, "adequately" means, in relation to project design and/or selection of mitigation measures, whether the proponent has identified reasonable measures to manage and minimize effects in the context of the Project (including, if applicable, follow-up monitoring, and adaptive management).

| | | 2005 levels by 2030 and to achieve net-zero emissions by 2050. The construction, operation, and decommissioning of the proposed Project may result in GHG emissions, and/or impact to carbon sinks, and may hinder or contribute to the Government of Canada's ability to meet its commitments in respect of climate change. In the IPD, the Proponent estimated the Project's GHG emissions from the operations phase but did not provide estimates for the construction or decommissioning phases. This results in an underestimation of emissions (see Comment ID ECCC-01 in Table 2 for details). If the Project undergoes a federal impact assessment, the Proponent may be asked to prepare an upstream GHG assessment, as the Project may cause incremental upstream GHG emissions. The Proponent also indicates in the IPD that the Project would be in operation until around 2054 followed by decommissioning until around 2058. The Proponent stated a corporate goal to be net-zero by 2050. | circumstances in which an upstream GHG assessment would be required and the circumstances in which a credible plan to achieve net-zero emissions by 2050 will be required. More details are provided in the draft Technical Guide Related to the Strategic Assessment of Climate Change: Guidance on quantification of net GHG emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment published in August 2021. Links: Strategic Assessment of Climate Change draft Technical Guide Related to the Strategic Assessment of Climate Change: Guidance on quantification of net GHG emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment | SACC to ensure that GHG emissions are mitigated. The Proponent must develop a plan to achieve net-zero emissions by 2050 as the following aspects of the Project's lifetime are anticipated to go beyond 2050: • Underground mine operations and ore processing (operations) • Decommissioning and closure and • Post-closure and monitoring. |
|----------|---------------------------|--|--|--|
| ECCC -02 | Climate change resilience | Climate over the current estimated lifetime of the Project is projected to be different from past and current climate in the project area. Given these projected changes in future climate, climate change considerations are relevant to the Project review. 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, which can have implications for climate sensitive aspects of Project design (such as water management infrastructure). The Proponent should identify where 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). | The SACC provides guidance related to climate change throughout the impact assessment process. Should the Project be subject to a federal impact assessment, the SACC would apply. The SACC outlines information that the Proponent should provide during the impact assessment process related to climate change resilience. If the Proponent is required to conduct an Impact Statement, further information would be required through the Tailored Impact Statement Guidelines (TISG) on how the Project is resilient to, and at risk from, both the current and future impacts of a changing climate. 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 draft technical guide related to the Strategic Assessment of Climate Change: Assessing climate change resilience | Describe the Project's resilience to future climate change and, where relevant, considered in the Project design. |

| ECCC-03 | Air Quality | In Section C(6)(1) "Climate Air Quality", it states that collection of baseline air quality data began in 2022 at three onsite monitoring stations and is ongoing. However, the average and maximum number for some of the substances is only provided and there is no data for key substances of concern to the environment such as PM _{2.5} , CO, PAHs and metals. In order to characterize air quality impacts within the project area, ambient air quality concentrations of key indicator substances that would be generated from project activities should be monitored. In addition, the location of stations and the proximity to receptors is unclear, and sampling methodology, frequency and analysis is not provided. | Conduct baseline air quality monitoring including a complete list of substances/air pollutants that will be generated from the Project such as, nitrogen dioxide, sulphur dioxide, dust (total suspended particles), PM ₁₀ , PM _{2.5} , carbon monoxide, ozone, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), diesel particulate matter (DPM), metals and any other substances that may be released. Alternatively, consider if baseline information related to the substances that are not part of the monitoring program could be obtained from available data from monitoring stations that represent the airshed and project area. Provide a detailed baseline air quality assessment that includes information about data from each station, sampling locations, frequency, equipment, lab analysis and duration. | Verify the list of substances is complete and accurate as per the information provided regarding the three onsite monitoring stations and confirm key substances of concern to the environment have been accounted for in the baseline assessment. Provide a detailed baseline air quality assessment that includes information about data from each station, sampling locations, frequency, equipment, lab analysis and duration. |
|---------|-------------|--|---|---|
| ECCC-04 | Air Quality | Activities associated with the construction and operation phases of the Project may have effects on air quality through the emission of gaseous contaminants and particulate matter which in turn could impact the environment. In Section E(6)(1) "Atmospheric Emissions", it states that air emissions will derive from point sources and fugitive sources during all phases of the Project. Fugitive sources will generate the majority of air emissions from drilling and blasting of rock, loading and offloading of rock, vehicles and heavy equipment travel, wind entrainment from exposed earth and mineral waste such as stockpiles and within the tailings management facility. The primary point source emissions are expected to be dust from crushers and conveyors. The IPD identifies emissions and substances for some sources that will affect air quality during the construction and operations phase. However, only a partial list of substances/air pollutants that will be released was provided. | Provide air quality assessment results for all phases of the Project including: emission estimates and assumptions, dispersion modelling, an inventory of all equipment, and a complete list of substances/air pollutants that will be generated from the Project, including nitrogen dioxide, sulphur dioxide, dust (total suspended particles), PM ₁₀ , PM _{2.5} , carbon monoxide, ozone, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), diesel particulate matter (DPM) and any other substances that may be released. Conduct modelling for the worst-case emission scenarios that will maximize the impacts on the air quality for each project phase. The Proponent will be required to compare the results of an effects assessment of air quality impacts, based on predictions of dispersion modelling, with the Canadian Ambient Air Quality Standards (CAAQS). The CAAQs are health and environmental-based outdoor air quality objectives for pollutant concentrations in the air. Links: CCME Air Quality Guidelines | Provide emissions estimates and any required dispersion modelling (using the latest approved model in Ontario for assessing contaminants). |

| ECCC-05 | Air Quality | In addition, emissions estimates, modelling results, and an assessment of air quality impacts has not been provided. This information is required to understand air quality effects and to determine appropriate mitigation and monitoring. Details on mitigation measures and any plan to conduct follow-up air quality monitoring have not been adequately articulated. In Table E(2) "Preliminary Summary of Potential Environmental Effects", standard preliminary mitigation measures to reduce the potential effects on air quality for construction and operation phase have been proposed. It also states that management practices and plans will be developed and implemented for the Project. Additional information on the procedures for implementing the mitigation measures for air quality emissions is required. The information provided on mitigation measures does not include the benchmarks/thresholds, scheduling and frequency that the Proponent will monitor to determine when mitigation will be implemented to reduce air emissions, and when adaptive management will be implemented to ensure a timely response to exceedances. Considering the nature of the Project and proximity to sensitive receptors, emissions monitoring of relevant air contaminants during the construction and operation phase will be required. | Provide details on best management practices (BMPs) including details on blasting plan, the application of mitigation measures; the methodology for implementing mitigation; inspection, record keeping, scheduling and frequency of the standard application of mitigation measures. In developing best management plans, incorporate best practices from Best Practices for the Reduction of Air Emissions From Construction and Demolition Activities, published in 2005. Provide planned follow-up emissions measurements or air quality monitoring, list of substances to be measured or monitored and details on the sampling location, duration and frequency. | Provide details on the application of mitigation measures; the methodology for implementing mitigation; inspection, record keeping, scheduling and frequency of the standard application of mitigation measures. Provide an air quality follow-up and monitoring plan for all components and all phases of the Project. |
|---------|---------------|---|---|--|
| ECCC-06 | Water Quality | In Table E(4) "Preliminary Comments and Preliminary Approach / Actions", potential effects of climate change on the Project is briefly mentioned and does not go into further detail of how this information will be used. The safety and effectiveness of water management infrastructure depends greatly on the accuracy of the design storms used to size this infrastructure. If the design events used for water management infrastructure (e.g. the tailings management facility) do not | Climate change (i.e. changes to intensity, duration, and frequency of precipitation and extreme heat) needs to be considered to ensure the safety and effectiveness of water management infrastructure over the entire time they are needed. | Provide a list of water management infrastructure or mine processes that are vulnerable to climate change. Ensure the initial design and planning uses estimates that incorporate climate change. |

| | | incorporate climate change, then there is a risk of under-designed infrastructure. Subsequently, this may lead to uncontrolled releases of mine contact water. A description of how climate change will be incorporated into the design of water infrastructure, nor how climate change could affect the frequency and severity of uncontrolled mine contact water releases has not been adequately addressed. Other water-dependent decisions are also vulnerable to climate change, such as periods of extreme drought where the time needed for mine pit filling may increase or there may be a need for supplemental water intakes from nearby rivers for ore processing. | | |
|---------|--|--|---|---|
| ECCC-07 | Fish & Fish Habitat - Groundwater drawdown effects to surface water and uncertainty in volumes | Section C(6)(3) "Surface Water and Groundwater" and Table E(2) "Preliminary Summary of Potential Environmental Effects", it mentions groundwater-surface water interactions and groundwater drawdown from mine and pit dewatering. Groundwater drawdown (lowering of the water table) often occurs with pit/mine dewatering and may reduce the groundwater contributions to nearby streams and lakes, such as Rice Lake and Dixie Creek. Reduced groundwater contributions to streams can affect the critical low flow periods and subsequently reduce fish habitat or reduce the capacity of the stream to dilute contaminants. Cold streams often have significant groundwater contributions. Additionally, there is currently no estimate of the volumes involved in dewatering activities and subsequent water treatment and discharge to the Chukuni River. | Incorporate groundwater drawdown and potential effects of reduced groundwater contributions to surface water. | Incorporate groundwater drawdown and potential effects of reduced groundwater contributions to surface water. |
| ECCC-08 | Fish & Fish Habitat – Water Quality | In Section B(3)(5) "Preliminary Decommissioning Approach, Stockpiles and Tailings Management Facility" it is stated that a "[] primary potential closure concern with respect to the mineral wastes (mine rock, tailings and overburden) is stability, and the quality of runoff and seepage from the facilities." During operations the quality and management of both runoff and seepage | For the benefit of minimizing effects on all potential surface watercourses (not only the Chukuni River) the Project must have a robust plan to collect, manage, possibly treat and monitor precipitation and groundwater that comes into contact with surface mine-related facilities including mineral wastes (mine rock, tailings and overburden) that results in both seepage and runoff to all watercourses. | Identify the concerns with seepage and plans to include seepage collection in the plans for Water Management Facilities and Drainage Works during operations of the mine as it has for decommissioning. |

| | | from mineral wastes (mine rock, tailings and | | |
|---------|-----------------------|---|---|---|
| | | overburden) is just as important as it is | | |
| | | during decommissioning. Yet in section | | |
| | | B(3)(3) "Proposed Mine Facilities and | | |
| | | Infrastructure, Water Management Facilities | | |
| | | and Drainage Works", it only identifies that | | |
| | | "Precipitation and surface runoff that comes | | |
| | | into contact with mine-related facilities on | | |
| | | surface will be collected in ditches / runoff | | |
| | | collection ponds" and does not outline plans | | |
| | | for seepage collection, control and treatment. | | |
| | | This is further illustrated in Table E(3) | | |
| | | "Preliminary List of Types of Wastes or | | |
| | | Emissions" where it states "Treated contact | | |
| | | runoff and effluent discharged to the Chukuni | | |
| | | River". | | |
| | | | | |
| | | Depending on topography and subsurface | | |
| | | hydrogeological characteristics seepage from | | |
| | | mineral wastes (mine rock, tailings and | | |
| | | overburden) may also be discharged to the | | |
| | | Chukuni River as well as the other smaller | | |
| | | creeks, ponds, and watercourses in the | | |
| | | project area including Genessee Lake, Tear | | |
| | | Drop Lake, Dixie Creek, and Rice Lake | | |
| | | during operations. The IPD further | | |
| | | understates the importance of proper water | | |
| | | management and monitoring by stating in | | |
| | | section E(6)(2) "Liquid Discharges, Mine | | |
| | | Water and Surface Contact Waters" that | | |
| | | "Precipitation and groundwater that comes | | |
| | | into contact with surface mine-related | | |
| | | facilities including potentially acid generating | | |
| | | materials (contact water), will be collected | | |
| | | using ditches and sumps, and will be | | |
| | | directed to the integrated water management | | |
| | | system. Runoff from the stockpiles (ore, mine | | |
| | | rock and overburden) and tailings | | |
| | | management facility may contain suspended | | |
| | | solids and dissolved metals" but does not | | |
| | | include seepage from mineral wastes (mine | | |
| | | rock, tailings and overburden) which will also | | |
| | | likely contain dissolved metals. | | |
| ECCC-09 | Fish and fish habitat | The Project, as proposed includes | Describe notantial impacts of assidents and malfunctions as water quality and wildlife in studies. | Demonstrate how the Dreinet's |
| ECCC-09 | Water quality | The Project, as proposed, includes construction work, including development | Describe potential impacts of accidents and malfunctions on water quality and wildlife including migratory birds and species at risk as well as identify their intended mitigation measures and | Demonstrate how the Project's environmental risks have been |
| | Migratory birds | and preparation of an open-pit and | relevant plans to reduce these impacts. Optimized prevention, preparedness and response | evaluated and provide detail on |
| | ivilgiatory bilus | underground mine, an ore processing | measures and systems will be important given the risk of spills or uncontrolled releases of | what has been done to prepare for |
| | | facility, as well as various support | hazardous substances to the environment, especially to nearby waterways and environmentally | and mitigate spills or releases of |
| | | infrastructure including outbuildings, | sensitive areas. | hazardous or deleterious |
| | | staging areas, a tailings management | ้ จะแจแพช ดเซลจ. | substances that are likely to result |
| | _1 | staying areas, a tailings management | | Substances that are likely to result |

| | | facility, mine water storage pond, roads, electricity and natural gas supplies, and water and wastewater management facilities. The Project also involves operation of the mine and associated facilities, including underground and open-pit dewatering, mine use (including use of fuels and explosive substances), and operation of an ore processing facility (including use of cyanide). As such, there is potential for adverse environmental effects from accidents and malfunctions including slope failure in the pits or waste rock storage areas, collapse or flooding of underground mine areas, containment failure at tailings and mine water storage facilities, equipment malfunction and accidents, and spills or releases of hazardous and / or explosive materials such as cyanide, diesel fuel, propane, natural gas, and ammonium nitrate / fuel oil. Adverse effects to air quality, water quality, wildlife, and wildlife habitat could result from the accidental release or explosion of fuels or explosion from ammonium nitrate / fuel oil during transportation, storage, or use. Potential effects of accidents and malfunctions (specifically spills) wildlife including migratory birds and species at risk and water quality were not considered in the summary of potential environmental effects. | Subsections 36(3) to (6) of the <i>Fisheries Act</i> are the main pollution prevention provisions protecting fish and other aquatic life by prohibiting pollution that could be harmful to them. Section 5(1) of the <i>Migratory Birds Convention Act</i> , 1994 prohibits the deposit of pollution that could be harmful to migratory birds in waters frequented by migratory birds. Part 8 of the <i>Canadian Environmental Protection Act</i> (CEPA) 1999 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 addressed the reduction of any foreseeable likelihood of releases of toxic or other hazardous substances listed in 12 Schedule 1 of the <i>Environmental Emergency Regulations</i> . This act may apply if Schedule 1 substances onsite meet or exceed the threshold to be regulated under CEPA 1999. | from unplanned accidents and malfunctions. |
|---------|-----------------|--|--|---|
| ECCC-10 | Species at Risk | Additional information is required in order to understand the pathways of effects to species at risk including any mitigation being considered and any residual effects after mitigation has been applied. Detailed information is required in order to understand if requirements under s79 of the Species at Risk Act (SARA) have been met. | See Table 2, Comment ID# ECCC-04 for additional clarification and information. Recovery Documents for species at risk can be found here: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html Species that are both a migratory bird protected under the <i>Migratory Birds Convention Act, 1994</i> (MBCA) and listed on Schedule 1 of SARA as endangered, threatened, or extirpated, receive protections under the MBCA and SARA. Please note that the protection afforded may differ between the two pieces of legislation. For example, under SARA, protection of residences (typically nests or roosts for some species of migratory birds) may be different than under the MBCA. Please refer to the Species at Risk Registry for more information on migratory bird residences and protection requirements: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/residence-descriptions.html . Please also refer to the following Protection Statement, https://species-registry.canada.ca/index-en.html#/documents/1638 . ECCC advocates for no net loss of biodiversity. Conservation allowances or conservation offsets are the last step of the mitigation hierarchy, a three-step approach that first examines options to | In regards to the identification of valued components 1. Provide baseline informatio on species at risk at the project site, including seasonal and annual variation, distribution, and habitat use. 2. Provide information on potential direct and indirect effects on species at risk individuals, residences, and habitat. |

| | | | avoid and minimize potential adverse effects. Offsetting may be required for species at risk and their habitats. More information on the mitigation hierarchy can be found here: https://www.canada.ca/en/environment-climate-change/services/sustainable-development/publications/operational-framework-use-conservation-allowances.html | 3. | Provide information on potential pathways of effects to boreal caribou to determine extent of critical habitat destruction. |
|---------|-----------------|---|--|---------|---|
| | | | | 4. | Provide information on mitigation measures for potential effects to species at risk that are consistent with recovery documents. |
| | | | | 5. | Provide information on potential effects on species at risk individuals, residences, and habitats. |
| | | | | 6. | Provide information on potential need for offsetting plans for species at risk and their habitat, taking into account the mitigation measures. |
| | | | | 7. | Update Table C(4) "Species at Risk Presence Summary" |
| | | | | 8. | Update section C(6)(4) "Terrestrial Environment" |
| ECCC-11 | Migratory Birds | The IPD describes pathways of effects and standard mitigation however, additional | See Table 2, Comment ID# ECCC-05 for additional clarification and information. | In rega | ards to the identification of |
| | | information is required to understand the impact of effects on individuals, local and regional populations and habitat and the potential residual effects after mitigation has been applied. Detailed information is also required in order to understand whether regulatory obligations under the MBCA and its regulations (MBR | The MBCA and its regulations (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. The legislation and regulations apply to all lands and waters in Canada, regardless of ownership. The main sensitive period to consider is the breeding season. With respect to disturbance or harm to nesting birds, the principal risk factors are location and time of year. More information on the MBR 2022 can be found on the ECCC web site (https://www.canada.ca/en/environment-climate-change/services/migratory-game-bird-hunting/status-update-modernization-regulations.html). | 1. | Provide baseline information on migratory birds known to occur and with the potential to occur at the project site including seasonal and annual variation, distribution and habitat use. |
| | | 2022) will have been met. | Migratory birds, the nests of migratory birds and/or their eggs can be inadvertently harmed or disturbed as a result of many activities, including but not limited to clearing trees and other vegetation, draining or flooding land, or using fishing gear; this is also known as incidental take. This inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs is prohibited under the MBCA. Harming individual birds, nests or eggs, can have long-term | 2. | Provide mitigation measures for potential effects to migratory birds and their habitat including timing windows. |
| | | | consequences for migratory bird populations in Canada, especially through the cumulative effects of many different incidents. For further details, please refer to the Avoiding Harm to Migratory Birds website at: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html . The active season for migratory birds is from the end of March to the end of August. | 3. | Provide information on potential and residual effects on migratory birds and their habitat. |

| ECCC-12 | Wetlands | Additional information is required to understand potential effects to wetlands as it | See Table 2, Comment ID# ECCC-06 for additional clarification and information. | 1. | Provide baseline information about wetlands in the project |
|---------|----------|--|---|----------|--|
| | | relates to migratory birds and species at risk including mitigation being considered and | Describe any potential effects of the Project on wetlands and wetland functions as it relates to impacts to species at risk and migratory birds, including the amount of wetland loss, if any, and any | 0 | footprint. |
| | | any residual effects once mitigation has been applied. | avoidance or mitigation being considered to lessen effects. | 2. | Describe potential direct and indirect effects on wetlands |
| | | | ECCC advocates for no net loss of biodiversity. Conservation allowances or conservation offsets are the final step of the mitigation hierarchy, a three-step approach that first examines options to | | and wetland functions during all project phases as it |
| | | | avoid and minimize potential adverse effects. Offsetting and plans may be required for wetlands. https://www.canada.ca/en/environment-climate-change/services/sustainable- The state of the | | relates to migratory birds and species at risk. |
| | | | development/publications/operational-framework-use-conservation-allowances.html | 3. | Provide information on |
| | | | More information on Wetlands Function Assessment can be found at: | . | mitigation measures for |
| | | | https://publications.gc.ca/collections/collection_2010/ec/CW69-5-497-eng.pdf More information on Recovery Documents for species at risk can be found at: | | potential effects to wetlands and wetland functions as it |
| | | | https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html | | relates to migratory birds and species at risk. |
| | | | The MBCA and its regulations (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. The | 4. | Provide information on the potential and residual effects |
| | | | legislation and regulations apply to all lands and waters in Canada, regardless of ownership. The | | on wetland functions during |
| | | | main sensitive period to consider is the breeding season. With respect to disturbance or harm to nesting birds, the principal risk factors are location and time of year. More information on the MBR | | all project phases as it relates to migratory birds |
| | | | 2022 can be found at: https://www.canada.ca/en/environment-climate-change/services/migratory-game-bird-hunting/status-update-modernization-regulations.html . | | and species at risk. |
| | | | game-bird-nunting/status-update-modernization-regulations.ntml. | | |
| | | | Migratory birds, the nests of migratory birds and/or their eggs can be inadvertently harmed or disturbed as a result of many activities, including but not limited to clearing trees and other | | |
| | | | vegetation, draining or flooding land, or using fishing gear; this is also known as incidental take. | | |
| | | | This inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs is prohibited under the MBCA. Harming individual birds, nests or eggs, can have long-term | | |
| | | | consequences for migratory bird populations in Canada, especially through the cumulative effects | | |
| | | | of many different incidents. For further details, please refer to the Avoiding Harm to Migratory Birds website at: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm- | | |
| | | | migratory-birds.html. The active season for migratory birds is from the end of March to the end of | | |
| | | | August. | | |

Please insert additional rows as necessary

Table 2. Clarifications or additional information the Proponent could include in the Detailed Project Description or in the response to Summary of Issues

| Comment ID | Relevant section of the Initial Project Description | Description of Issue, Concern or Uncertainty | Clarification or additional information | Plain language summary for inclusion in Summary of Issues |
|--|---|---|--|---|
| Please identify comments by organization | If the comment is related to a specific | Provide a description of the issue, | Provide recommended clarification or | For issues to be included in the Summary |
| and comment number. | section of the Initial Project Description, | concern or uncertainty the Proponent | additional information to be included in | of Issues, provide a concise, plain |
| | please provide a reference. | could address in their detailed project | the Detailed Project Description to | language synopsis of the issue and of the |
| e.g.: IAAC-01 | | | address the issue, concern or uncertainty, | question or direction for the Proponent. |
| | You may also choose to copy the relevant | that the issue will be addressed and | for example | |
| | text here. | | | |

| | | managed, or which could aid in tailoring | Clarifications to project description | |
|---------|--------------------------------------|--|---|--|
| | | the Guidelines | (e.g. components, activities, locations or alternatives); | |
| | | | Project design changes that could | |
| | | | avoid effects; | |
| | | | Evidence that could be presented to | |
| | | | demonstrate there is no effect pathway or that effects will be | |
| | | | negligible; | |
| | | | Evidence that standard mitigations will | |
| | | | address potential effects; | |
| | | | Commitments the Proponent could | |
| | | | make to respond to the issue, | |
| | | | including the implementation of federal operational policies or | |
| | | | guidance documents. | |
| ECCC-01 | Section E(5) "Estimate of Greenhouse | In section E(5) "Estimate of Greenhouse | The SACC and the associated draft | In the DPD, provide all information |
| | Gas Emissions", p.58 | Gas Emissions", some information related | Technical Guides provide guidance and | specified in section 4(1) of the <u>SACC</u> and |
| | | to greenhouse gas emissions, land use | information requirements (relating to GHG | sections 2(4), 3(3) and 4(2) of the |
| | | change, carbon sink impacts and | and climate change) for proponents going | Technical Guide. |
| | | mitigation measures is provided. The IPD provided does not align with the guidance | through the planning phase. ECCC suggests the DPD include the following | |
| | | provided in the Strategic Assessment of | information: | |
| | | Climate Change (SACC) section 4(1) in | | |
| | | terms of information provided on GHG | GHG emission estimates: | |
| | | emission estimates, carbon sinks, and | The Proponent should follow section | |
| | | alternative means of carrying out the Project. | 4(1)(1) of the SACC and section 2(4) of the Technical Guide for GHG emission | |
| | | 1 Toject. | estimate information requirements, | |
| | | | including: | |
| | | | Estimate of the maximum annual | |
| | | | net GHG emissions for each | |
| | | | phase of the Project, including a breakdown of each term; and, | |
| | | | the methodology, data, emission | |
| | | | factors and assumptions used. | |
| | | | It should be noted that GHG emissions | |
| | | | from land use change must be included in | |
| | | | the net GHG emissions, evaluated | |
| | | | separately from the Project's impacts on | |
| | | | carbon sinks. | |
| | | | Carbon Sinks: | |
| | | | The Proponent should follow section | |
| | | | 4(1)(2) of the SACC and section 4(2) of | |
| | | | the <u>Technical Guide</u> for the information | |
| | | | requirements for carbon sinks, including: • A description of the activities that | |
| | | | would result in an impact on | |
| | | | would result ill all lillpact off | |

| | | | and an about A contract the | |
|---------|---|--|---|---|
| | | | carbon sinks. A carbon sink represents a land that absorbs CO2 and the storage of that carbon in either living biomass or in soil organic carbon. Activities that result in a removal of a sink are those that remove actively growing biomass (deforestation), or disrupt a process in which carbon is being integrated into soil organic carbon, such as peat accumulation (wetland disturbance); and • the land areas expected to be directly impacted by the Project over the course of the project lifetime, classified by IPCC landuse category (IPCC 2006): Forest Land, Cropland, Grassland, Wetlands. Alternative means of carrying out the Project: The Proponent should follow section 4(1)(3) of the SACC and section 3(3) of the Technical Guide for the information requirements for alternative means of carrying out the Project. • For the DPD, the Proponent should discuss the potential impacts of the alternatives on GHG emissions and how GHG emissions were considered as a criterion in the alternatives selection. | |
| ECCC-02 | Section E(6)(1) "Atmospheric Emissions", p.59 | In section E(6)(1) "Atmospheric Emissions", a brief summary of the point source and fugitive sources of air emissions is provided. However, should an impact assessment be required, more information will be required on vehicles and engines to be used to demonstrate if best available technology during all phases of the Project will be used. | Consider providing descriptions of vehicles and engines including engine type, engine make/model, model year, power rating, fuel type, etc. Consider providing detail on assumptions regarding the activity data (e.g. hours per day) and the emissions factors referenced for the emissions estimates for air pollutants, for all phases of the Project and provide the methods along with the sample calculations used. | Demonstrate that best available technology, such as the use of Tier 4 engines for off-road mobile engines, for all phases of the Project is used. |

| ECCC-03 | No section on accidents and malfunctions | · | Include a section addressing potential | Provide information on potential effects |
|---------|--|---|--|--|
| | included in the IPD. | accidents and malfunctions, their impacts | accident and malfunction scenarios, their | from accidents and malfunctions and the |
| | | on the valued components, as well as a | impacts on valued components, proposed | measures to prepare for, and prevent |
| | | description of their planned mitigation | mitigation strategies, relevant plans, and | them, particularly unintentional releases |
| | | strategies, relevant plans, and the | the residual risk, considering all phases of | of hazardous materials (e.g., fuel, |
| | | residual risk. | the proposed Project. | cyanide) during all project phases. |
| | | | | Provide information on emergency |
| | | | | response plans and procedures to |
| | | | | respond to any accidents or |
| | | | | malfunctions, including fuel or chemical |
| | | | | spills. |
| CCC-04 | Section C(6)(6) "Species at Risk" | Consider each species at risk as a | Indicate that each species at risk will be | In regards to the identification of valued |
| | (6)(6) | separate VC. | considered as a separate VC. | components |
| | Table E(2) "Preliminary Summary of | | | |
| | Potential Environmental Effects", p.64 | Details on how assessments for species | Provide information on the potential | Provide baseline information on |
| | · | at risk were carried out have not been | occurrence of species at risk at the | species at risk at the project site, |
| | | provided for the project area. | project site, including species listed on | including seasonal and annual |
| | | | Schedule 1 of SARA and species | variation, distribution, and habitat |
| | | Pathways of effects are not identified for | assessed as at risk by the Committee on | use. |
| | | species at risk. | the Status of Wildlife in Canada | |
| | | | (COSEWIC), such as a list of species | 2. Provide information on potential |
| | | Standard mitigation measures are listed | known to occur or with the potential to | direct and indirect effects on |
| | | for wildlife in Table E(2) "Preliminary | occur within the study area. Seasonal and | species at risk individuals, |
| | | Summary of Potential Énvironmental | annual variations in species at risk | residences, and habitat. |
| | | Effects", but no information is provided on | abundance, distribution and habitat use | |
| | | the potential for remaining effects after | should be considered. | 3. Provide information on potential |
| | | mitigation has been applied. Measures | | pathways of effects to boreal |
| | | must be consistent with applicable | Describe potential effects (even if | caribou to determine extent of |
| | | recovery documents for the species. | minimal) related to the Project on | critical habitat destruction. |
| | | | individuals, residences, and habitat or | |
| | | This information is required for all species | provide a detailed rationale as to why | 4. Provide information on mitigation |
| | | potentially impacted by the Project that | there are no anticipated effects. | measures for potential effects to |
| | | are listed on SARA Schedule 1, as well as | | species at risk that are consistent |
| | | species assessed as at risk by | If there is the potential for any effects, | with recovery documents. |
| | | COSEWIC, to identify and gain a better | describe avoidance and mitigation | • |
| | | understanding of adverse effects of the | measures to lessen the effects as well as | 5. Provide information on potential |
| | | Project on listed wildlife species and their | monitoring measures. Provide information | effects on species at risk |
| | | critical habitat, and if the Project is carried | on the potential for residual effects after | individuals, residences, and |
| | | out, to ensure that measures are taken in | mitigation has been applied. | habitats, taking into account |
| | | a way that is consistent with recovery | | mitigation measures. |
| | | documents to avoid or lessen the adverse | Indicate that offsetting plans may be | |
| | | effects and to monitor the adverse effects | required for species at risk and their | 6. Provide information on potential |
| | | of the Project. | habitat. | need for offsetting plans for |
| | | , | | species at risk and their habitat. |
| | | ECCC advocates for no net loss of | Specifically for Boreal Caribou, provide | |
| | | biodiversity. Conservation allowances or | information (consistent with Recovery | 7. Update Table C(4) "Species at |
| | | conservation offsets are the last sten of | Strategy definitions) on the impact to | Risk Presence Summary" |

conservation offsets are the last step of the mitigation hierarchy, a three-step approach that first examines options to avoid and minimize_potential adverse

Strategy definitions) on the impact to "disturbance" levels at the scale of the

range, impact to "existing habitat", impact to "biophysical attributes" currently within

Update Table C(4) "Species at Risk Presence Summary"

8. Update section C(6)(4) "Terrestrial Environment"

effects. Offsetting may be required for species at risk and their habitats.

https://www.canada.ca/en/environmentclimate-change/services/sustainabledevelopment/publications/operationalframework-use-conservationallowances.html

The following updates should be made to Table C(4) "Species at Risk Presence Summary":

 Olive-sided Flycatcher – recently downlisted to Special Concern under SARA.

Additionally, it is noted in section C(6)(4) "Terrestrial Environment" that common snapping turtle has not been observed and in section C(6)(6) "Species at Risk" for amphibians/reptiles viewed or identified as present on the property, it says none. However, in Table C(4) "Species at Risk Presence Summary" Snapping Turtle is identified in the footprint of the property.

Caribou

The IPD states that the proposed Project is located near the eastern boundary of the Sydney Range for Woodland Caribou and that the property has no evidence of current use of Caribou although the area has formerly supported the species. Potential effects (direct and indirect) to caribou and caribou habitat are not provided in the IPD. In addition, mitigation and/or monitoring measures are not provided in the IPD. This information is required to provide expert opinion or advice on these measures.

Habitat disturbance in the Sydney Range currently exceeds the 35% disturbance threshold in the Woodland Caribou, Boreal Population Amended Recovery Strategy, and the local population is considered not self-sustaining. The Woodland Caribou, Boreal population Amended Recovery Strategy also states the following: "In ranges with undisturbed habitat below the threshold, initially,

the project study areas, potential impact on connectivity, and the potential predator/prey access to "undisturbed" habitat.

Update Table C(4) "Species at Risk Presence Summary"

Update section C(6)(4) "Terrestrial Environment" with regards to Snapping Turtle.

Specifically for bats, provide information on studies carried out to determine how species were confirmed and how habitat such as maternity roosts and hibernacula are not present on site.

critical habitat is the existing habitat that over time would contribute to the attainment of 65% undisturbed habitat." Given that the Sydney range has undisturbed habitat below the threshold, all existing habitat (disturbed or not) is critical habitat. Bats Additional information is required to understand how the conclusion was reached that there is no roosting or hibernacula on the property for SAR bats. In section C(6)(4) "Terrestrial Environment", it is noted that Tricolored Bat has potential to use the area for foraging. Tricolored bat was included in Table C(4) "Species at Risk Presence Summary" however, it was not carried through and described in the summary of species identified to be present near the project footprint. **SAR Birds** In section C(6)(4) "Terrestrial Environment", the following species were included in Table C(4) "Species at Risk Presence Summary" as being present in the footprint: Eastern Wood Pewee, evening Grosbeak, and Rusty Blackbird. However, they were not carried through and described in the summary of species identified to be present near the project footprint. **Snapping Turtle** In section C(6)(4) "Terrestrial Environment", Snapping Turtle was included in Table C(4) "Species at Risk Presence Summary" as being present in the footprint however, it was not carried through and described in the summary of species identified to be present near the project footprint. Black Ash Black Ash is currently not listed under Schedule 1 of SARA, so there are currently no federal requirements for this species. However, consideration for

| | | species assessed by COSEWIC as | | |
|---------|--|--|--|--|
| | | extirpated, endangered, threatened or of special concern is recommended. If Black Ash is listed under Schedule 1 of SARA | | |
| | | during the IA process it will need to be | | |
| | | assessed appropriately. | | |
| ECCC-05 | Section C(6)(4) "Terrestrial Environment" p.39 At least 144 species of birds have been observed on or near the Property, with common boreal species predominating. Table E(1) "Preliminary List of Changes to the Environment under Federal Jurisdiction", p.60 Table E(2) "Preliminary Summary of Potential Environmental Effects", p.64 | during the IA process it will need to be assessed appropriately. While potential effects are acknowledged in Table E(1) "Preliminary List of Changes to the Environment under Federal Jurisdiction" of the IPD and potential changes to migratory birds and their habitat as a result of the Project are included (habitat loss, disturbance of species, increased risk of collision or mortality and habitat redevelopment), additional information is required on the impact of effects on individuals, local and regional populations, and habitat. Standard mitigation measures are provided in the IPD for wildlife in Table E(2) "Preliminary Summary of Potential Environmental Effects" and include developing a compact site to limit disturbance to new areas as reasonable, avoiding vegetation removal where reasonable during the bird nesting season and reclaiming the site after mining ends to support future productive habitat. However, a list of migratory birds known to occur on site, details on how migratory birds and their habitat were assessed and information on the potential for residual effects after mitigation is applied, has not been provided. This information is required to provide expert opinion on these measures. | site such as a list of species known to occur or with the potential to occur within the study area. Consider the following bird groups as separate VCs: • raptors, such as hawks, eagles, falcons; • waterfowl, such as ducks, geese, swans; • waterbirds, such as loons, gulls, terns; • marshbirds, such as grebes, rails, herons; • shorebirds, such as sandpipers, plovers, snipes; • forest birds, such as warblers, vireos, thrushes; | In regards to the identification of VCs 1. Provide baseline information on migratory birds known to occur and with the potential to occur at the project site including seasonal and annual variation, distribution and habitat use. 2. Provide mitigation measures for potential effects to migratory birds and their habitat including timing windows. 3. Provide information on potential and residual effects on migratory birds and their habitat. |
| | | ECCC advocates for a no net loss of biodiversity. Conservation allowances or conservation offsets are the final step of | windows and other mitigation being considered. | |
| | | the mitigation hierarchy, a three-step approach that first examines options to avoid and minimize potential adverse effects. Offsetting may be required for bird | Provide information on potential for residual effects after mitigation has been applied. | |
| | | habitat loss. https://www.canada.ca/en/environment- climate-change/services/sustainable- development/publications/operational- | | |

| | | framework-use-conservation- | | |
|---------|---|--|---|---|
| | | allowances.html | | |
| | | | | |
| | | The MBCA and its regulations (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. The legislation and regulations | | |
| | | apply to all lands and waters in Canada, | | |
| | | regardless of ownership. The main | | |
| | | sensitive period to consider is the | | |
| | | breeding season. With respect to | | |
| | | disturbance or harm to nesting birds, the | | |
| | | principal risk factors are location and time | | |
| | | of year. More information on the MBR | | |
| | | 2022 can be found on the ECCC web site | | |
| | | (https://www.canada.ca/en/environment- | | |
| | | climate-change/services/migratory-game- | | |
| | | bird-hunting/status-update-modernization- | | |
| | | regulations.html). | | |
| | | | | |
| | | Migratory birds, the nests of migratory | | |
| | | birds and/or their eggs can be | | |
| | | inadvertently harmed or disturbed as a | | |
| | | result of many activities, including but not | | |
| | | limited to clearing trees and other | | |
| | | vegetation, draining or flooding land, or | | |
| | | using fishing gear; this is also known as | | |
| | | incidental take. This inadvertent harming, | | |
| | | killing, disturbance or destruction of | | |
| | | migratory birds, nests and eggs is | | |
| | | prohibited under the MBCA. Harming | | |
| | | individual birds, nests or eggs, can have | | |
| | | long-term consequences for migratory | | |
| | | bird populations in Canada, especially | | |
| | | through the cumulative effects of many | | |
| | | different incidents. For further details, | | |
| | | please refer to the Avoiding Harm to | | |
| | | Migratory Birds website at: | | |
| | | https://www.canada.ca/en/environment- | | |
| | | climate-change/services/avoiding-harm- | | |
| | | migratory-birds.html. The active season | | |
| | | for migratory birds is from the end of | | |
| | | March to the end of August. | | |
| ECCC-06 | Section C(6)(4) "Terrestrial Environment" | Information on the size and extent of | Indicate wetlands will be considered as a | In regards to the identification of VCs |
| | p.39 | wetlands within the project footprint has | separate VC. | |
| | Thicket swamps, fens and open wetlands | not been provided. | | Provide baseline information about |
| | are most common along the shores of | | | wetlands in the project footprint. |
| - | | 1 | 1 | |

| | Rice Lake and Teardrop Lake, as well as along Dixie Creek and other riparian habitats. Figure C(6) "Wetlands and Low-lying Areas" Table E(2) "Preliminary Summary of Potential Environmental Effects" p.63 Underground mine and open pit dewatering will affect the local groundwater levels and may affect surface water flows Ground water quality is not expected to be affected Preliminary Areal Extent: Dewatering may result in depression in the local groundwater level which is currently under investigation. | Potential effects to wetlands as it relates to migratory birds and species at risk are not provided in the IPD, in terms of the amount of wetland loss expected and the functions that may be impacted (directly or indirectly). In addition, mitigation and/or monitoring methods are not provided in the IPD. This information is required to provide expert opinion on these measures. Avoidance and minimization of wetland loss may not always be possible. Additional information on specific measures being proposed may be required prior to determining if the loss of wetland habitat and function attributable to the Project has been adequately addressed in relation to migratory birds and species at risk. ECCC advocates for no net loss of biodiversity. Conservation allowances or conservation offsets are the final step of the mitigation hierarchy, a three-step approach that first examines options to avoid and minimize potential adverse effects. Offsetting may be required for wetlands https://www.canada.ca/en/environment-climate-change/services/sustainable-development/publications/operational-framework-use-conservation-allowances.html | Describe the size and extent of wetlands that will be affected by the Project. Describe any potential effects to wetlands as it relates to migratory birds and species at risk, including direct and indirect effects from project components or activities including changes to wetland functions. If there is the potential for any effects to wetlands as it relates to migratory birds and species at risk, describe avoidance and mitigation measures to lessen the effects as well as monitoring measures. Provide supporting information to show mitigation measures outlined in the IPD related to surface water, ground water, sedimentation and accidents and spills will mitigate potential effects to wetlands or wetland functions as it relates to migratory birds and species at risk. Provide information on the potential for residual effects after mitigation has been applied. | Describe potential direct and indirect effects on wetlands and wetland functions as it relates to migratory birds and species at risk during all project phases. Provide information on mitigation measures for potential effects to wetlands and wetland functions as it relates to migratory birds and species at risk. Provide information on the potential and residual effects on wetland functions during all project phases as it relates to migratory birds and species at risk. |
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| ECCC-07 | Section B(3)(2) "Ongoing Exploration-Related Facilities and Infrastructure Advanced Exploration", p.12 Section B(3)(3) "Proposed Mine Facilities and Infrastructure", p.14 Table B(1) "Preliminary List of Designated Project (Mine) Facilities in Comparison to AEX Program Facilities", p.15-17 | In Section B(3)(3) "Proposed Mine Facilities and Infrastructure" it states that "the mine and associated surface facilities are proposed to be placed on lands held or anticipated to be held by Kinross, utilizing and/or expanding on the advanced exploration (AEX) program facilities as practical to minimize environmental effects". An up-to-date footprint that shows the location of reutilized and/or expanded components of the AEX program footprint is required to understand the potential effects to species at risk, migratory birds and wetlands. | Provide an updated footprint for the Project in applicable sections and tables showing any new components, changes, or extensions that will be incorporated from the AEX footprint. | Provide an updated footprint of the Project accounting for the components that will be reutilized or expanded from the AEX footprint. |

