Federal Authority Advice Record (FAAR)
FAAR Response must be submitted by August 12, 2024
Big Bear Camp Aerodrome Project – Big Bear Contracting Ltd.
Registry File: 88735

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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 Project to enable it to proceed?

   If yes, specify the Act of Parliament and that power, duty or function.

   ECCC does not expect that it will be required to exercise a power or perform a duty or function related to the Project to enable it to proceed. Once the scope of the Project and of the assessment are established by the Agency, this may change as additional activities or Project components could come into scope.

   Please note the following requirements that may apply to this Project:

   ***Species at Risk Act* permits**

   For species listed in Schedule 1 of the *Species at Risk Act* (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, the residences of its individuals or any part of its critical habitat 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 the residences of its individuals or its critical habitat; and if the activity will not jeopardize the survival or recovery of the species.

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

Furthermore, prohibitions may be in force on land other than federal land pursuant to other orders or regulations under SARA. It is possible that additional 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 a 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 https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html.

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.

***Migratory Birds Convention Act, 1994* permits**

The *Migratory Birds Regulations, 2022* (MBR 2022) protect migratory birds, their eggs and their nests, by prohibiting activities that may harm them. Unless a person has a permit or the regulations authorize it, it is prohibited to engage in the following activities:

- Capturing, killing, taking, injuring or harassing a migratory bird or attempting to do so;
- Destroying, taking or disturbing an egg; and
- Damaging, destroying, removing or disturbing a nest, nest shelter, eider duck shelter or duck nesting box, unless the following exceptions apply:
  - The nest does not contain a live migratory bird or a viable egg; and,
  - The nest was not built by a species listed in Schedule 1.

Modernization of the MBCA in 2022 has additionally identified 18 species of birds whose nests are protected year round (Schedule 1 of MBR 2022). The nests of species listed in Schedule 1 are protected at all times, unless the following conditions are met:

- Notification of the unoccupied nest has been submitted/received through the Registry for Abandoned Nests; and,
- The waiting time designated in the regulations has passed, during which time the nest has not been occupied by a migratory bird.

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

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

ECCC does not expect to exercise any powers or perform a duty or function under any Act of Parliament in relation to the Project that will involve public and Indigenous Consultation.

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2. Is your department or agency in possession of specialist or expert information or knowledge in its area of expertise 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; effectiveness of 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 plans 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: migratory birds, their nests, eggs, and habitat under authority of the *Migratory Birds Convention Act 1994*; species assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC); species at risk under the *Species at Risk Act 2002*, individuals, their residences, habitat and critical habitat including recovery strategies, action plans and management plans under ECCC's mandate; ecological function of wetlands; and ecotoxicology.

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.

Open Science Data Platform (OSDP)

The Open Science Data Platform (OSDP) provides information relevant to cumulative effects and development activities across Canada, and is publicly available at the following website: https://osdp-psdo.canada.ca/dp/en. More specifically, the platform provides a single window to access data and scientific knowledge relevant to understanding cumulative effects from existing federal, provincial, and territorial on-line databases and registries, including publications from the federal government and its scientists. It provides an interactive geospatial mapping tool to enable mapping of multiple datasets from multiple sources. It offers various features, including keyword-based searching, interactive data visualization on maps, and educational resources covering key topics such as cumulative effects, water, air, climate, biodiversity, land, economy and industry, health, and society and culture.

OSDP information may be of value to persons preparing and reviewing Projects assessments, including cumulative effects assessments. The following are some examples of ECCC information available on the OSDP.

Water – quality and quantity

- National long-term water quality monitoring data
- Real-time hydrometric data
- Canadian Aquatic Biomonitoring Network (CABIN)
- National Pollutant Release Inventory (NPRI)
  - Facilities that reported releases to water
- Find additional water-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP here.

Biodiversity (e.g., birds, species at risk, wetlands)

- Critical habitat for species at risk (terrestrial)
- Range map extents – Species at risk
- Canadian wetlands
- Canadian Protected and Conserved Areas Database (CPCAD)
- Canadian Breeding Bird Census plots
- Priority places for species at risk
- Find additional biodiversity-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP here.

Air Quality

- National Pollutant Release Inventory (NPRI), including:
  - Facilities that reported release of criteria air contaminants
- Canadian Environmental Sustainability Indicators (CESI), including
  - Average ambient fine particulate matter concentrations
  - Peak ambient ozone concentrations
  - Ambient volatile organic compound concentrations
  - Average ambient sulphur dioxide concentrations
  - Peak ambient nitrogen dioxide concentrations
- Find additional air-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP here.

Climate, including climate change

- Hourly and daily climate observations
- Monthly climate observation summaries
- Climate normals, averages and extremes 1981-2020
- Homogenized surface air temperature
- Homogenized precipitation
- Find additional climate-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP here.

Beyond ECCC's mandate, the OSDP also contains resources on topics led by departments and other levels of government (e.g., human health, economy and industry). The OSDP also provides access to regulatory registries that list government authorizations of other developments (e.g., *Fisheries Act* Registry), which can be useful in understanding the cumulative pressures on an area.

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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.

   ECCC has not considered, exercised a power or performed a duty, or taken any course of action as part of the Project.

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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.

   As indicated by the Proponent (Initial Project Description, Section 2.3.1) and based on information readily available, ECCC has not had any direct involvement with the Proponent or other parties that would be relevant to the assessment of this Project. ECCC Prairie and Northern Region (PNR) has not been in contact with the Proponent regarding permitting or authorizations for the Project.

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5. Does your department or agency have additional information or knowledge on the Project 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 Proponent has acknowledged and is using other information available known to ECCC and relevant to the assessment of this Project, namely the draft Environmental Impact Statement for the Rook I Project.

   ECCC is aware of the environmental context of the area given the proximity of this Project to NexGen's proposed Rook I Uranium Mine adjacent to Patterson Lake. ECCC has been providing expert review and information requests for NexGen's Project, including information requests for offsetting plans for caribou critical habitat.

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6. Based on the mandate and area(s) of expertise of your department or agency, what are the key issues related to the Project?

   For each key issue:

   - Describe the potential effect or the nature of the issue, including any relevant context;
   - Provide the rationale and/or evidence for why it is a key issue;
   - Provide advice on how to address 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 considered by the Impact Assessment Agency of Canada (IAAC) and may be used to inform its decision on whether an impact assessment is required and, where appropriate, for next steps in the impact assessment process including to develop Project-specific draft Tailored Impact Statement Guidelines.

   Please use Table 1 to respond to this question.

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7. Where possible, identify any additional information the Proponent could include in the response to the Summary of Issues and, if IAAC requires it, in their Detailed Project Description, that would:

   - Give confidence that minor issues or effects could be addressed and managed by clear measures, existing guidelines, other regulatory processes or other existing tools;
   - Inform the decision as to whether an impact assessment is required; or
   - Aid in tailoring the Tailored Impact Statement Guidelines, if IAAC decides 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 to respond to this question.

Environment and Climate Change Canada

Name of Departmental / Agency Responder

N. John Olyslager

A/Regional Director
Environment Protection and Operation Directorate
Prairie and Northern Region

Title of Responder

August 12, 2024

Date

Table 1: Key Issues to inform the impact assessment process

The IAAC asks that federal authorities align expert advice with IAAC's approach to tailoring by Project, which focuses on key Project issues, clearly focused on the prevention of adverse effects within federal jurisdiction. In identifying key issues, 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 decision include:

- adverse effects within federal jurisdiction and direct or incidental adverse effects that may be to some extent significant, based on federal experts' knowledge and experience with past Projects;
- potential impacts on 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;
- adverse effects within federal jurisdiction or direct or incidental adverse 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 groups or local communities.

Effects that are anticipated to be minor or which can be managed using well understood mitigation, 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 IAAC to focus assessments on issues that are important to participants and to decision-makers.

Comment ID	Relevant section of the Initial Project Description	Valued Component or Factor to Consider	Description of Key Issue (Context and Rationale)	Advice	Plain language summary for inclusion in Summary of Issues
Please identify comments by organization and comment number. *e.g.: IAAC-01*	*If the comment is related to a specific section of the Initial Project Description, please include that reference.*	*Identify valued component(s) or factor to consider—within the mandate of your department or agency—to which the potential effect or issue applies.*	*Provide a brief description of the issue and rationale for being a key issue.* *Include, where relevant,:* • *the pathway of effects;* • *relevant context on why it is 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 Indigenous Knowledge, including from past Project experience, which supports inclusion as a key issue.*	*Where applicable, briefly provide solutions on how to address the potential issue or effects including:* • *Information or studies required to describe and characterize the potential effect; including any guidance for data collection and/or analysis or existing data sources to inform the assessment;* • *Any means, including any powers, duties or functions, that your department or agency has that may mitigate, manage, or set conditions related to the issue or 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 Tailored Impact Statement Guidelines 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		Air Quality	The construction, operation, and decommissioning of the Project can result in adverse effects on air quality. Air contaminant emissions from fuel combustion sources and earthwork activities during the construction phase may be considerable. The combustion of fuels produces a large amount of chemical substances that are emitted into the atmosphere. The use of fossil fuels to power, among other things, on-road and off-road vehicle engines, aircrafts, machinery, and equipment generates the emission of combustion products (engine exhaust gases), including but not limited to nitrogen oxides (NO_x) and sulfur oxides (SO_x); carbon monoxide (CO); volatile organic compounds (VOCs); any other products of fossil fuel combustion; and any other relevant air pollutants from mobile, stationary, and fugitive sources. Activities which cause a physical disturbance to land, such as tree clearing, topsoil stripping, earth moving, and transportation, can also introduce particulate matter (e.g., dust and soot) to the surrounding region. The emission of these air contaminants can result in local or regional degradation of ambient air quality, with potential impacts on sensitive ecosystem receptors. Furthermore, emissions of air contaminants as a result of this Project may add cumulatively to the emissions from other activities, contributing to degradation of air quality in the region. When contaminants settle out of the air in the surrounding environment, their deposition may result in adverse impacts to terrestrial and aquatic ecosystems. For example, emissions of NO_x and SO_2 may also lead to acidification and potential exceedance of ecosystems' critical loads. Air contaminant emissions can result in contamination of nearby land and waterbodies, and may affect sensitive ecosystem receptors.	Provide the results of a baseline study on ambient air quality by identifying and quantifying emission sources for all relevant contaminants. To this end, describe the ambient air quality in the Project's local and regional study areas and identify existing emissions and sources of contaminants. Describe dust and acid deposits using existing monitoring data. If applicable, then include a description of the impact of wildfires on air quality by referring to the Saskatchewan active wildfire situation map. To assess the effects on the atmospheric environment, provide a detailed description of all sources of air pollutant emissions; provide an inventory and description of activities and all equipment, including the list of on-road and off-road vehicles, etc. (engine type, power, group (Tier 0, 2, 3, or 4)); provide a comprehensive list of substances and air pollutants that will be generated by the Project as well as their quantification for the entire Project life cycle; quantify, without limitation, the emissions of the following contaminants: particulate matter (TSP, $PM_{2.5}$, PM_{10}); nitrogen dioxide and sulfur dioxide (NO_2, SO_2); carbon monoxide (CO); volatile organic compounds (VOCs); polycyclic aromatic compounds (PACs), specific aldehydes contained in fuel combustion products (e.g., acetaldehydes, formaldehydes, 1,3-butadiene, acrolein, benzene, diesel particulate matter [DPM], black carbon); and any other relevant air pollutant from mobile, stationary, and fugitive sources. Evaluate the effects of acidifying emissions on the receiving environment, where applicable. Take into account 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. Provide 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.	Describe the ambient air quality in the Project's local and regional study areas and identify the existing emissions and sources for all relevant contaminants. Describe the effects on air quality for all relevant phases of the Project. To do this, provide a detailed description of all sources of air pollutant emissions. Provide an inventory and description of activities and all equipment. Provide a comprehensive list of substances and air contaminants that will be generated by all components and activities of the Project, as well as their quantification for the construction and operational phases. Describe the best management practices, mitigation measures, as well as monitoring and follow-up.
ECCC-02		Greenhouse Gas Emissions (GHGs) and Climate Change	The construction, operation, and decommissioning of the proposed Project may result in greenhouse gas (GHG) emissions, 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. Furthermore, the Project has the potential to be affected by future climate change, possibly resulting in impacts to the environment. Climate change may alter the likelihood or magnitude of sudden weather events such as extreme precipitation that can contribute to flooding, as well as contribute to longer-term changes such as sea level rise, permafrost thaw and changes to migration patterns. Changes related to warming are already evident in many parts of Canada, and are Projected to continue in the future with further warming. The duration of the operation phase is not defined and there is no plan for a timeline of decommissioning the Project. It is expected that the Project's lifetime will go beyond 2050.	The Strategic Assessment of Climate Change (SACC) (published in October 2020) 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 on GHG emissions, impact of the Project on carbon sinks, impact of the Project on federal emissions reduction efforts and on global GHG emissions, GHG mitigation measures and climate change resilience; the 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	Should the Project be designated under the IAA, the SACC would apply. The Project's GHG emissions and climate change impacts should be assessed consistently so that GHG emissions are mitigated, and the Project Proponent has a plan to achieve net-zero emissions by 2050 as it is expected that the Project's lifetime will go beyond 2050.
ECCC-03		Climate Change Resilience	The Initial Project Description does not anticipate decommissioning or abandonment of the proposed Project. Climate over the lifetime of the Project is thus likely to be different from past and current climate in the Project area. Given these Projected changes in	The Strategic Assessment of Climate Change (SACC) (published in 2020) provides guidance related to climate change throughout the impact assessment process. Should the Project be subject to an impact assessment under the IAA, the SACC would apply. The SACC outlines	The Project's resilience to future climate change should be described and, where relevant, considered in Project design.

			future climate, climate change considerations are relevant to the Project review. 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). 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 on the environment. For example, Project components and activities for which climate change resilience could be important for this Project such as those related to water management, and future flood mitigation. If the Proponent is required to conduct an Impact Statement, then 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.	information that the Proponent should provide during the impact assessment process related to climate change resilience. If the Proponent is required to prepare an Impact Statement, then further information would be required through the Tailored Impact Statement Guidelines (TISG) on how the Project is resilient to, and at risk from, 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" 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	
ECCC-04		Water Quality	The activities linked to the construction, operation, and decommissioning of the Project can have adverse effects on the quality of groundwater and surface water. The proposed Project includes the following activities: tree clearing, excavating or reworking of soils, the construction of a concrete apron, with lined sump for glycol collection, production and installation of granular base for runway, taxiway, apron and safety areas, and operation of the aerodrome. These activities could result in adverse effects to water quality through the release of suspended solids, hydrocarbons, and other contaminants to surrounding waters through erosion, sedimentation or runoff processes. Project activities may also produce airborne particulate matter which could also be a source of surface water contamination upon deposition. Water quality could also be impacted by spills, including fuel, glycol, and other wastes. Adverse effects to water quality could, in turn, result in adverse effects to sensitive ecosystem receptors.	Environment and Climate Change Canada (ECCC) is responsible for the administration of subsection 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. The Proponent is proposing to use erosion and sediment control, dust suppression and Emergency Response Plans to mitigate potential effects of the Project to water quality. These measures should be effective during the construction phase of the Project. During operations, containing aircraft de-icing fluids to prevent them from entering Grygar Lake nearby will also be important. A lined sump to collect glycol on the apron is listed in the planned civil works and could address this concern but is not included in the list of mitigation measures to protect water quality and fish habitat. The collection and containment of glycol should be considered as a mitigation measure.	The Project has the potential for impacts to water quality and subsequently fish and fish habitat from the following sources: Potential effects to surface water from: • airborne dust, erosion and sedimentation, resulting in deposition of sediments in surface water; • overall management of stormwater, fuels, chemicals, and other wastes; and • spills. Identify water bodies (streams, lakes, wetlands) that have the potential to be directly or indirectly affected by Project activities, including alternate runway orientations which are still under consideration (IPD, Appendix B section 5). Provide information on the Project's potential to cause direct or indirect effects on the identified water bodies during construction and operation.
ECCC-05		Wetlands	The potential direct and indirect effects of the Project on wetlands are to be determined. Activities associated with the construction and operation of an aerodrome may adversely affect wetlands and their ecological functions. Activities related to construction are likely to alter the existing hydrological regimes essential for maintaining wetlands and thus affect the quality or availability of habitat for migratory birds, species at risk, and other wildlife. The destruction and	Describe all potential effects, including direct and indirect effects, of Project components or activities, including changes to wetland functions. If not, then provide evidence to support the conclusion that the Project will not affect wetlands or wetland functions, even indirectly. If there is a potential for effects, then describe avoidance and mitigation measures to alleviate the effects as well as monitoring measures. Provide information regarding mitigation measures for surface water, groundwater, sedimentation, accidents and spills to mitigate potential indirect effects on wetlands or	Demonstrate that there are no wetlands (bogs, fens, marshes, swamps, and shallow water class wetlands) within the Project area, or hydrologically connected to the Project area, that could be directly affected by Project activities. Provide information on the Project's potential to cause indirect effects on wetlands or wetland functions.

			modification of wetlands is likely to have adverse effects on migratory birds and species at risk that use these areas for breeding, foraging, resting and migration. The Project is also likely to create introduction and dispersal pathways for invasive species. The spread of invasive species may pose a threat to wetlands in the vicinity of the disturbance area.	wetland functions. Finally, provide information on the potential for residual effects after mitigation measures are implemented.	
ECCC-06	Section 4.2.3	Species at Risk and their Habitat	The activities linked to the construction, operation, and decommissioning of the Project and associated infrastructure could have negative effects on terrestrial wildlife, including species at risk (e.g. amphibians, arthropods, birds, and mammals) listed on the *Species at Risk Act* (SARA), and their habitat (e.g. wetlands) and critical habitat. The nature of effects to species at risk and their habitat (including residences and critical habitat defined under the SARA) can vary based on a number of factors, including: Project location, duration, scale, and configuration; ancillary Project activities (e.g., land clearing); existing cumulative effects; the type of habitat that may be disturbed; and sensitivity of species found in the Project area. Specifically, construction of the Project and associated infrastructure will contribute to land clearing activities, which leads to destruction, disturbance, degradation, and fragmentation of habitat such as those used for foraging and breeding. In addition, species at risk could 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, and the operation of machinery and aircraft, as well as the presence of workers. The amount, 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 destruction, disturbance, degradation and fragmentation of habitat can affect the movement of terrestrial species at risk on the landscape (e.g., migration, foraging pathways). Specifically, the construction and operation of a 1,524 metre runway may act as a barrier to movement to adjacent habitats or force wildlife to move longer distances around the Project, creating connectivity issues in the area. The Project is located within the SK1 caribou critical habitat unit identified in the amended recovery strategy. For SK1, the amended recovery strategy identifies 40% undisturbed habitat in the range as the disturbance management threshold, which provides a measurable probability (71%) for the local population to be self-sustaining. This threshold is considered a minimum threshold because at 40% undisturbed habitat there remains a risk (29%) that the SK1 local population will not be self-sustaining. Habitat destruction and alteration activities from the Project could reduce the suitability of adjacent habitat, increase the risk of predation, and can act as barriers to caribou movement.	If the Project proceeds under the IAA, then the Agency will have obligations under s.79 of SARA to implement measures 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. 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.	The Proponent should identify all species at risk listed on Schedule 1 of the *Species at Risk Act* and any critical habitat 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, and how these measures will be implemented and effects monitored to ensure they are avoided or minimized. As best practice, the Proponent should also consider species assessed by COSEWIC, and that species may become listed by COSEWIC or SARA over the course of the Project.

ECCC-07	Section 4.2.3.2 Section 6.1.3	Migratory Birds and their habitat	The nature of effects to migratory birds and their habitat (including nests) can vary based on a number of factors, including: Project location, duration, scale, and configuration; ancillary Project activities (e.g., land clearing); existing cumulative effects; the type of habitat that may be disturbed; and sensitivity of species found in the Project area. The construction and operation of an aerodrome can cause the loss, fragmentation and alteration of habitat, and can negatively impact the reproduction, migration and wintering of affected species. Specifically, construction of the Project and associated infrastructure will involve land clearing which will remove habitat important for nesting, foraging, staging, and/or overwintering migratory birds. In addition, migratory birds could 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, and the operation of machinery and aircraft, as well as the presence of workers. The amount, duration, frequency, and timing of noise are important to understand potential effects. Sensory disturbance may make adjacent habitats unsuitable for use by migratory birds and cause avoidance effects in many species.	The Project footprint should be minimized to the extent possible to reduce the amount of habitat removed. Required lighting and noise production during the construction, operation and decommissioning of the Project should be controlled and minimized to avoid sensory disturbance to migratory birds.	The Proponent should describe sources of sensory disturbances (i.e., indirect habitat loss) including lighting and noise that might impact habitat use by migratory birds. Describe what measures will be taken to avoid or lessen the effects of sensory disturbances, and how these effects will be monitored to ensure they are avoided or minimized.
ECCC-08	Section 4.2.3 Section 6.1.3	Migratory Birds, Species at Risk and their mortality risk	Individual mortality and the destruction of nests and eggs of migratory birds or any other structure necessary for the reproduction and survival of species at risk could occur during all project phases, particularly during site preparation when vegetation is cleared, aircraft runway right-of-way maintenance, and project dismantling. Construction may also create temporary artificial habitat suitable for some migratory birds and species at risk, putting them at risk of mortality events. 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. The Proponent has identified Common Nighthawk (SARA Special Concern) as potentially occurring in the Project area. The Project proposes a graveled aircraft runway that may be attractive for nesting Common Nighthawks, putting their eggs at risk of destruction. Mortality in migratory birds and species at risk could also occur because of collisions with vehicles, aircrafts, or infrastructure related to the Project. The construction of the Project may promote further access to the region thereby increasing capacity to existing road networks. The increase in road traffic volume is likely to result in an increase in wildlife injury and mortality. Aircraft strikes for migratory birds may increase during periods of higher risk such as spring and fall migration. Artificial lighting from construction, operation and decommissioning activities may exacerbate the risk of collisions resulting in injuries or mortality by attracting migratory birds and species at risk to lit infrastructure or their vertical supports. Birds can also be disoriented while circling an artificial light source and may deplete their energy reserves and either die of exhaustion or drop to the ground where they are at risk of predation.	1) *The Migratory Birds Convention Act*, 1994 (MBCA) and the Migratory Bird 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). 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. 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. ECCC publishes a web site (https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html) to aid in the planning of activities in order to reduce the risk of detrimental effects to migratory birds, their nest and eggs, in accordance with the purpose of the MBCA. The Proponent has proposed to conduct vegetation and habitat clearing activities outside the migratory bird nesting season (Nesting Zone C7) to prevent the destruction of migratory birds and their eggs and nests to be compliant with the MBCA. ECCC notes that if the Proponent is moving nests, then a permit under the MBR 2022 may be required. In addition, the Proponent will need to apply for an airport permit under the MBR 2022 to request authorization to scare migratory birds with a firearm or aircraft, or to kill and take them, if those birds are within the perimeter of the airport and considered a danger to aircraft operations. 2) Lighting required for the construction, operation and decommissioning of the Project should be controlled and minimized to avoid adverse effects on migratory birds and species at risk. Other sources of collision risk should be identified and measures implemented to minimize those risks including posting of vehicle speed limits and deterring of migratory birds and species at risk from the aircraft runway.	1) It is the Proponent's responsibility to be aware of its obligations stemming from the MBCA and its regulations. The Proponent should also provide details and monitoring measures that will be completed for migratory birds that nest on human infrastructure or man-made features. 2) The Proponent should describe sources of light that may attract migratory birds and species at risk that could increase their risk of collision resulting in injury or mortality, as well as other sources of potential collision risk (e.g., vehicles, aircrafts). Describe measures to be taken to minimize collision risk and how these measures will be implemented and monitored for effectiveness. 3) The Proponent should describe sources and pathways of accidental deleterious substance release into the environment that could impact migratory birds and species at risk. Describe measures to be taken to minimize the risk and how these measures will be implemented and monitored for effectiveness.

			Accidental oil or chemical spills from machinery or aircraft could also have adverse effects if these substances make their way into the habitats frequented by migratory birds and species at risk. 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.	3) ECCC recommends the Proponent implement deleterious substance mitigation measures.	
ECCC-09		Environmental Emergencies	The proposed Project includes construction and operation of an aerodrome to support operations at the Big Bear Camp and surrounding area. The aerodrome will consist of an ~1,524 m gravel runway and supporting infrastructure including a taxiway, parking apron, lined sump for collection of waste glycol (from de-icing operations), storage tanks, and a terminal building. Construction will involve the use of diesel heavy construction equipment and gasoline pickup trucks. Operation of the aerodrome will involve use of glycol for aircraft de-icing (with used glycol to be collected in a lined sump for disposal), as well as storage and use of hydrocarbons including diesel, gasoline, and aviation fuels. There is potential for adverse environmental effects from accidents and malfunctions, such as spills of hydrocarbons during construction of the aerodrome and spills of glycol and hydrocarbons during operation of the aerodrome. Adverse effects to water quality, wildlife, wildlife habitat, migratory birds, or species at risk could result from the accidental release of glycol, hydrocarbons, or other contaminants to the land or surrounding waters.	Optimized spill prevention, preparedness and response measures and systems will be important during construction and operation of the aerodrome, given the risk of spills of hazardous substances to the environment, especially to nearby waterways and environmentally sensitive areas. 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 addressed 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. In the case of this Project, this may include (but is not limited to) aviation fuels, gasoline, and diesel.	Accidents and malfunctions arising from construction and / or operation of the aerodrome could result in releases of contaminants to the environment. The implementation of spill prevention, preparedness, and response measures and systems will be important to minimize this risk, and should be thoroughly documented in plans.

Please insert additional rows as necessary.

Table 2. Clarifications or additional information the Proponent could include 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 and comment number. *e.g.: IAAC-01*	*If the comment is related to a specific section of the Initial Project Description, please provide a reference.* *You may also choose to copy the relevant text here.*	*Provide a description of the issue, concern or uncertainty the Proponent could address in their response to Summary of Issues and, if IAAC requires it, in their Detailed Project Description that would give confidence that the issue will be addressed and managed, by clear measures, existing guidelines, regulatory processes or other existing tools, and thus be the subject of simplified information requests in the guidelines, or simply be removed.*	*Provide recommended clarification or additional information to be included in their response to the Summary of Issues and, if IAAC requires it, in their Detailed Project Description to address the issue, concern or uncertainty, for example:* • *Clarifications to elements of the Project description (e.g. components, activities, locations or alternatives);* • *Proposed Project design changes that could avoid effects;* • *Evidence that could be presented to demonstrate there is no effect, pathway of effect or that effects would 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.*	*For issues to be included in the Summary of Issues, provide a concise, plain language synopsis of the issue and of the question or direction for the Proponent.*
ECCC-01	Sections 4.2.6.2 and 6.5.3.3	Estimated Project emissions for GHG were provided in Section 6.5.3.3. However, an estimation of air contaminant emissions was not conducted. A similar estimation for air quality contaminants could be carried out, considering that most of the required input information was used for the GHG estimation. Estimating emissions of air contaminants during the construction and operation phases would provide an order of magnitude for the air quality impacts of the Project.	Provide estimated Project emissions for relevant air contaminants for the one year of construction and per year of operations. Provide an inventory and description of activities and all equipment, including the list of on-road and off-road vehicles, etc. (engine type, power, group (Tier 0, 2, 3, or 4)). Provide a comprehensive list of substances and air contaminants that will be generated by all components and activities of the Project	Provide estimated Project emissions for relevant air contaminants for the one year of construction and per year of operations.
ECCC-02	Sections 3.3.1, 6.3, and Appendix B	The IPD refers to a lined sump for collection of glycol, to be used for aircraft de-icing operations. No additional information is provided on the glycol itself. There are several types of fluid used for aircraft de-icing operations in Canada that could be referred to as glycol (i.e., ethylene glycol, diethylene glycol, or propylene glycol). It is unclear which of these would be used at the aerodrome.	Provide, if known at this time, then the type(s) of glycol that would be used at the aerodrome. This would enable ECCC to more accurately assess the types of hazardous substances that will be stored on site and that could potentially spill in the event of an accident or malfunction.	The specific type of glycol to be used at the aerodrome for de-icing operations is not stated in the IPD. ECCC requests that the Proponent provide this information if it is known at this time. Providing this information would enable a more accurate assessment of the potentially hazardous substances that will be on site during aerodrome operations.
ECCC-03	Section 6.7 Types of Waste and Emissions	Section 6.7.3 (Land) states that aviation fuel(s), diesel, and gasoline will be stored in approved double-walled storage tanks with secondary containment. No information is provided about how glycol will be stored, or whether any spill mitigation measures will be implemented.	Provide information on the storage systems that will be in use for the glycol, including any details of spill mitigation measures that may be in place (e.g., double-walled tanks, berms). This information will enable ECCC to assess the risk of spills and whether adequate mitigation measures have been put into place to reduce this risk.	The method of storage for glycol was not stated in the IPD. ECCC requests that the Proponent state how glycol will be stored at the aerodrome. This information will help inform ECCC on risk of spills and any mitigation measures that will be implemented.

Please insert additional rows as necessary.