

Reviewer Comments and Proponent Responses

Project: Km 251 Quarry Expansion - Dempster Hwy #8
Board: Gwich'in Land and Water Board
Organization: GNWT - INF (Infrastructure)

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response
Gwich'in Tribal Council - Department of Cultural Heritage - Kristi Benson				
1		The Department accepts the findings of the AIA, however, archaeological sites may still exist.	As with any application, if archaeological or heritage materials are encountered during the development within the Gwich'in Settlement Area, all work must cease immediately as required by law, and the DCH and the Prince of Wales Northern Heritage Centre in Yellowknife must then be contacted.	INF will notify the DCH and PWNHC if sites are encountered and cease work immediately

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response
Environment and Climate Change Canada (ECCC) - ECCC-EA ECCC-EA				
1	<p>Topic: Buffer Distance from Water Bodies</p> <p>Reference: - Site Specific Quarry Development Plan - Section 1.2: Quarry Design - Section 2.3: Surface Water and Hydrogeology</p>	<p>The Site-Specific Quarry Development Plan provides information related to the proposed buffer distance from site works to water bodies. However, there are inconsistent statements within the plan, with both 30m and 60m being referenced. For example:</p> <p>- Section 1.2 - "INF will be respecting the boundaries set by Lands for no work boundary for maintain visual esthetics, 30 meter water buffer and outside Gwich'in private lands." - Section 2.3 - "From the small pond located to the west, the first lift will maintain a 60 meter buffer from the edge of water."</p> <p>The buffer zone between site activities and water bodies should be clearly identified, with rationale, and consistent throughout the document.</p>	ECCC recommends the Proponent clarify the proposed buffer zone between site activities and water bodies.	INF will maintain a minimum of a 30 m buffer between water bodies. The 30m buffer allows better utilization of the bedrock deposit and allows for the most extraction of rock possible.
2	<p>Topic: Monitoring of Collected Runoff</p> <p>Reference: - Site Specific Quarry Development Plan - Section 2.10: Acid Rock Drainage and Metal Leaching</p>	<p>The Site-Specific Quarry Development Plan states that the quarry will be graded appropriately such that all runoff and drainage is designed to flow to the SE corner of the development area. Water collected at this location is intended to be dispersed over vegetated ground that drains to the Dempster Highway to the east. The plan also states, in related to metal leaching and acid rock drainage, that, "during mucking, INF will continuously monitor the drainage water." ECCC notes that this is the only reference to monitoring of drainage water and no further details are provided on the intended monitoring frequency or practices associated with the collected drainage water prior to discharge from the development area.</p>	ECCC recommends the Proponent provide additional information on proposed monitoring of water collected within the footprint of the development area, prior to discharge from the site. This should include frequency, monitoring parameters, and sampling techniques.	INF anticipates minimal runoff and drainage from the quarry activities. The main monitoring will be to ensure no ponding occurs in the quarry area and that it follows the proper drainage plan. Depending on the ML/ARD results, INF could be required to sample the water for metal concentration and ensure they are within the CCME guidelines for water discharge. ML/ARD testing is planned for this summer.
3	Topic: Species at Risk – SARA Missing and/or Effects and Measures Missing	Section 79 of SARA stipulates that where a project is likely to affect a listed species or its critical habitat, all adverse effects of the project must be identified and considered in the assessment of the project. Appropriate measures	As species are assessed and listed on a regular basis, ECCC recommends the Proponent: a) Consult the Species at Risk registry to maintain the most current information for their operations. b) Consult the Government of	INF has consulted the Species at Risk registry and has identified species likely to be affected and their critical habitat. Aside from migratory birds, Barren Ground Caribou, Boreal Caribou, and grizzly bears are the species

		<p>asures must be taken to avoid or lessen those effects and include monitoring. Measures should be consistent with applicable recovery documents. Section 79 applies to all listed species on schedule 1 of SARA including those listed as Special Concern, Threatened, Endangered, and Extirpated. As a matter of best practice, COSEWIC-assessed species should be assessed similar to those listed under SARA. The Proponent has not identified all species at risk that may be present in the project area, nor all adverse effects of the Project on identified species at risk.</p>	<p>f the Northwest Territories, and appropriate mitigation and monitoring measures to minimize project effects to species under their management responsibility. For more information on Species at Risk in the Northwest Territories, please refer to the booklet 'Species at Risk in the Northwest Territories (2020 edition)' (https://www.nwtspeciesatrisk.ca/sites/enr-species-at-risk/files/species_at_risk_in_the_nwt_2020.pdf) SAR Registry: http://www.registrelep-sararegistry.gc.ca/default.asp?lang=En&n=24F7211-B-1 ECCC recommends the Proponent: a) Identify adverse effects of the project on the species at risk likely to be affected and their critical habitat; b) Ensure that measures are taken to avoid or lessen those adverse effects and to monitor them. If the Proponent encounters species at risk, the primary mitigation measure should be avoidance. c) Mitigation and monitoring measures are consistent with applicable species at risk Recovery Strategies and Action Plans, or Management Plans. d) At a minimum, monitoring should include recording timing and location of observed species at risk, their behavior when encountered, and actions taken by the Proponent to avoid disturbance to the species, its habitat, and/or its residence. e) The Proponent submit monitoring reports to the appropriate regulators and organizations with management responsibility for that species.</p>	<p>are most likely to be in the area, and measures will be in place to avoid or lessen adverse effects and monitor them. It is not anticipated these species will be in the area as this is an operational quarry site and the expansion area ties into the current quarry. Before any vegetation clearing the area will be inspected prior to identify any species at risk that could be in the area. Monitoring will include recording timing and location of observed species, behaviour and any actions taken by INF to avoid disturbance. Monitoring reports will be submitted to appropriate regulators.</p>
4	<p>Topic: Project Activities (Clearing) Within Migratory Bird Habitat During Nesting Season</p> <p>Reference: -Quarry Development Plan -Draft Land Use Permit; Part C, Condition 46</p>	<p>The Proponent indicates that vegetation clearing, brushing, habitat alteration and disturbance may be required during the general nesting period as part of project activities.</p> <p>The project is located in Nesting Zone N9. In this area, migratory birds may be found nesting from mid-May to Mid-August.</p> <p>During this period, clearing or brushing of vegetation or activities that may disturb or alter nesting habitat may increase the risk of destruction of the nests and eggs of migratory birds. It is important to note that breeding periods may vary from year to year due to climatic conditions and some species may nest outside the dates provided if conditions are favourable.</p> <p>The Proponent is reminded that migratory bird species listed under the MBCA may nest on the ground, in ground cavities, in grasses, shrubs, cliffs, trees, tree cavities, and other sites, and that nest sites are often cryptic or camouflaged, making them difficult to locate.</p>	<p>ECCC recommends the Proponent avoid vegetation habitat disturbance during the general nesting period, which extends from mid-May to mid-August for this region. If avoidance of habitat disturbance activities during the general nesting season is not possible, ECCC recommends the Proponent confirm there are no nesting migratory birds in the area prior to clearing in accordance with ECCC's Guidelines to Reduce Risk to Migratory Birds (https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html): a) Proponents anticipate the potential for the presence of migratory birds or nests/eggs b) Proponents use non-intrusive search methods, conducted by a trained and experienced observer, to prevent disturbing migratory birds while they are nesting. The Proponent must consider options such as avoiding, adapting, rescheduling or relocating activities to avoid disturbance to nests. If nests containing eggs or young are located or discovered during operations: c) The Proponent must halt all disruptive activities in the nesting area until nesting is complete and the young have fledged. d) The Proponent must establish a protective buffer zone around the nests. The buffer zone must be determined by a setback distance appropriate for the species, the intensity of the disturbance, and the surrounding habitat until the young have naturally and permanently left the vicinity of the nest. Proponents are encouraged to consult ECCC at E</p>	<p>INF will have to remove vegetation during the general nesting period. INF has a Migratory Birds awareness for GNWT-INF and contractors training that all INF employees and contractors working outside are required to complete. This training has allowed INF staff and contractors a better understanding of mitigation measures and compliance with migratory birds. INF does anticipate potential for migratory birds or nests/eggs and will use non-intrusive search methods to prevent disturbing birds while nesting. INF will also follow ECCC recommendations for halting activities and establishing a buffer zone around nests.</p>

			ANorthNWT@ec.gc.ca to determine appropriate setback distances for migratory birds.	
5	<p>Topic: Project activities in Bank Swallow habitat within its range</p> <p>Reference: -Quarry Development Plan - Permit Application Form</p>	<p>The project falls within the breeding range of the Bank Swallow and may affect important habitat features for the species. The Bank Swallow, listed as Threatened under SARA, is a colonial species that nests in burrows dug into near vertical faces of exposed sand or soil. They also nest in aggregate pits, construction and/or mine sites on stockpiles of quarry materials, overburden, and exposed soil banks. The Bank Swallow exhibits high nest site fidelity and will reuse nesting sites and burrows. The residence description for the Bank Swallow is available on the SARA registry here: https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/residence-descriptions/bank-swallow.html. Excavation, construction activities, and application of erosion control measures in these areas during the nesting period can inadvertently kill or disturb bank swallows and other migratory birds.</p>	<p>ECCC recommends: a) The Proponent take precautions to avoid disturbance to nesting Bank Swallows and other migratory birds during project activities. b) Staff and contractors be made aware of potential presence and conservation status of the Bank Swallow. c) The Proponent prevent Bank Swallows from nesting in areas where operations will be carried out during the breeding season by contouring piles to have slopes of less than 70 degrees and by creating suitable nesting habitat in inactive areas with vertical faces of at least 70 degrees. d) The Proponent take particular care in selecting erosion prevention and control measures and implement those measures prior to the nesting season. Proponents are encouraged to consult the attached pamphlet and contact ECCC at EANorthNWT@ec.gc.ca for further advice.</p>	<p>INF has a Migratory Birds awareness for GNWT-INF and contractors training that all INF employees and contractors working outside are required to complete. This training has allowed INF staff and contractors a better understanding of mitigation measures and compliance with migratory birds. INF will also follow ECCC recommendations for preventing bank swallows from nesting, and selecting sediment and erosion control measures.</p>
6	<p>Topic: ECCC Contact Information</p> <p>Reference: -Permit Application Form</p>	<p>The Proponent has not identified a contact in the event of disruption or destruction of an individual or residence protected by the acts.</p>	<p>In the event of disruption or destruction of an individual or residence protected by the acts, the Proponent should notify ECCC's Canadian Wildlife Service (cwsnorth-scford@ec.gc.ca) and ECCC's Wildlife Enforcement Directorate {Yukon: david.irvine@ec.gc.ca or gordon.barker@ec.gc.ca; NT/NU: dalfnord-wednorth@ec.gc.ca}.</p>	<p>INF will notify ECCC Canadian Wildlife Service in the event of disruption and destruction of an individual or residence protected by the Acts</p>
7	Cover Letter	Cover Letter	N/A	