

Staff Report

Applicant: Rowe's Construction	
Location: NWT Highway #1, km 518	Application: MV2016Q0031
Date Prepared: January 5, 2017	Meeting Date: January 12, 2017
Subject: New Type A Land Use Permit	

1. Purpose/Report Summary

The purpose of this Report is to present to the Mackenzie Valley Land and Water Board (MVLWB/the Board):

- a) A new Land Use Permit (Permit) Application submitted by Rowe's Construction (Rowe's);
- b) Consider the preliminary screening;
- c) Consider the Spill Contingency Plan;
- d) Consider the Waste Management Plan; and
- e) Consider the Engagement Plan.

2. Background

- September 28, 2016 – Application received and deemed incomplete;
- October 25, 2016 – Additional information submitted;
- October 28, 2016 – Application deemed incomplete;
- November 28, 2016 – Additional information (#2) submitted;
- December 2, 2016 – Application deemed complete and review commenced;
- December 21, 2016 – Reviewer comments and recommendations due and received;
- December 29, 2016– Responses received; and
- **January 12, 2016 – Application presented to the Board for decision, and end of the 42-day timeline.**

3. Discussion

Submission Description

On September 28, 2016, Rowe's submitted an application for a new Permit MV2016Q0031 for a quarry located approximately 50 km northwest of Fort Simpson, NT (attached). This is a multi-user pit. The quarry operation includes use and storage of fuel, use of heavy equipment, stripping and stockpiling of overburden, and establishment of a temporary camp for up to 15 people. An existing access road will be used. Refueling will be done from tidy tanks but a larger Envirotank is planned to be brought to site.

Rowe's has been operating in this quarry pit for a number of years, beginning with Permit MV2007Q0051, followed by Permit MV2015Q0010. These previous Permits were for the same area; however, this Application is to expand the area. Board staff have drafted a preliminary screening for the Board's consideration (attached) as the location of the quarry has increased in size and the location of the camp and fuel storage has changed.

Management Plans

A Spill Contingency Plan, Waste Management Plan and Engagement Plan were included with the Application. A letter was provided to the Board from the Village of Fort Simpson stating that their Solid Waste Facility will be accepting the waste generated.

Eligibility

Rowe's is eligible as per subsection 18(a)(i) of the Mackenzie Valley Land Use Regulations (MVLUR) as they hold the right; this being a Quarry Permit from the Government of the Northwest Territories (GNWT) – Department of Lands (attached).

Fees

The required Application Fee and land use fees of \$150.00 were included with the Application (attached).

4. Comments

Triggers

The activities as described trigger a Type A Permit in accordance with paragraph 4(a) of the MVLUR:

- 4(a) No person shall, without a Type A permit, carry on any activity that involves
 - (a) on land outside the boundaries of a local government,
 - (iv) the use of a self-propelled motorized machine for moving earth or clearing land.

No water licence is triggered because there is no direct water use or deposit of waste.

5. Reviewer Comments

By December 21, 2016, comments and recommendations on the Application were received from 4 reviewers:

- Environment and Climate Change Canada;
- GNWT – ENR (Central Email);
- GNWT – Lands; and
- GNWT – Lands (Inspector).

Rowe's did not respond to the comments prior to the December 29, 2016 deadline. The reviewer comment summary table (attached) presents the concerns identified through the review of the Application. The draft Permit (attached) contains recommended conditions based on the standard Permit conditions list and reflects reviewer concerns and Board Staff recommendations. The conditions are also similar to those under MV2015Q0010.

6. Security

Board staff have completed the reclamation security worksheet and have calculated that the cost to remediate the site would be \$18,750.47. The GNWT – Inspector did not recommend security and Rowe's did not complete the security worksheet. The previous Permits MV2007Q0051 and MV2015Q0010 did not require any security.

7. Conclusion

The draft Permit conditions are based upon the standard conditions list, reviewer comments, and Board staff recommendations. Board staff conclude that the conditions contained within this draft Permit should mitigate the potential environmental impacts this development may have on the land and water.

8. Recommendation

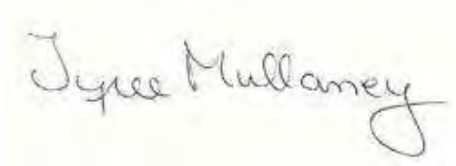
Board staff recommend the Board:

- a) Approve the preliminary screening;
- b) Approve of the Type A Land Use Permit and Reasons for Decision;
- c) Approve the Spill Contingency Plan as an interim submission and require the resubmission of a revised plan by February 9, 2017 in accordance with the comments made during this review, and written confirmation of conformity from Board staff;
- d) Approve the Waste Management Plan; and
- e) Approve the Engagement Plan.

9. Attachments

- Reviewer Comment Summary Table
- [Application](#)
 - [Engagement Log](#)
 - [Engagement Plan](#)
 - [Additional Information](#)
 - [Motion for Waste Disposal](#)
 - [Quarry Permit from GNWT-Lands](#)
- Draft Preliminary Screening
- [Fee Receipt](#)
- Security Estimate
- Draft Land Use Permit Cover Page
- Draft Land Use Permit Conditions
- Draft Reasons for Decision
- Draft Decision Letter from the Board

Respectfully submitted,

A handwritten signature in dark ink on a light yellow background. The signature reads "Tyree Mullaney" in a cursive, slightly slanted script.

Tyree Mullaney
Regulatory Officer

Review Comment Table

Board:	MVLWB
Review Item:	Rowes Construction - New LUP App - MV2016Q0031
File(s):	MV2016Q0031
Proponent:	Rowe's Construction
Document(s):	Application (11 MB) Engagement Log (1 MB) Engagement Plan (54 KB) Additional Information (9 MB) Motion for Waste Disposal (98 KB) Quarry Permit from GNWT - Lands (277 KB) Draft Conditions (55 KB)
Item For Review Distributed On:	Dec 2 at 15:20 Distribution List
Reviewer Comments Due By:	Dec 21, 2016
Proponent Responses Due By:	Dec 29, 2016
Item Description:	<p>Rowes Construction (Rowes) has submitted an application for a type A land use permit to the MVLWB. The purpose of this Application is for continued operation of a quarry at KM 518 of Highway #1.</p> <p>Reviewers are invited to submit questions, comments and recommendations using the Online Review System (ORS) by Wednesday December 21, 2016 at 1700h MST. Please provide comments and recommendations on the following (please note the three plans are included in the application document):</p> <ul style="list-style-type: none"> • Application; • Engagement Plan; • Waste Management Plan; • Spill Contingency Plan; and • Draft Land Use Permit (please clearly indicate which condition you are commenting on). <p>Please note that the draft Land Use Permit (Permit) has been developed using the current MVLWB's Standard Land Use Permit Conditions Template. The purpose of this draft Permit is to allow parties to comment on Board staff's suggested conditions. These draft materials are not intended to limit in any way the scope of parties' comments. The Board is not bound by the contents of the draft Permit and will make its decision at the close of the proceeding on the basis of all the evidence and arguments filed by all parties.</p> <p>Also, under the Preliminary Screening Requirement Regulations of the Mackenzie Valley Resource Management Act (MVRMA), the Board must conduct a preliminary screening for an application for a proposed development that requires a land use permit, unless it is exempt from Part 5 of the MVRMA. Reviewers are</p>

	<p>encouraged to provide comments and recommendations to assist with the completion of the preliminary screening.</p> <p>All documents that have been uploaded to this review are also available on our public registry. If you have any questions or comments about the ORS, please contact Board staff identified below.</p>
General Reviewer Information:	<p>In addition to the email distribution list, the following organizations received materials by fax</p> <p>Fort Liard Metis Local #67 Ernie McLeod President (867)770-4573;</p> <p>Fort Simpson Métis Local #52 Marie Lafferty President (867)695-2040;</p> <p>Hay River Metis Council Trevor Beck President (867)874-4472; hrmc@northwestel.net;</p> <p>Northwest Territory Métis Nation Garry Bailey c/o Tim Heron NWTMN IMA Coordinator (867)872-3586; rcc.nwtmn@northwestel.net;</p>
Contact Information:	<p>Jen Potten 867-766-7468</p> <p>Tyree Mullaney 867-766-7464</p>

Comment Summary

Environment and Climate Change Canada: Gabriel Bernard-Lacaille				
ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
4	General File	Comment (doc) ECCC Comment Cover Letter Recommendation		Noted.
5	General File	Comment (doc) ECCC Bank Swallow Brochure Recommendation		Noted.
1	ECCC 1 - Appendix B Emergency Contact List - Environment and Climate Change Canada (ECCC) Environmental Emergencies Contact	Comment In the Emergency Contact List, ECCC notes incorrect contact numbers for ECCC, i.e. 867-669-4710, 867-777-7520/7521. These numbers should be changed to the appropriate ones. Recommendation In the case of a spill or emergency, the 24 Hour Northwest Territories Spill Report Line should be contacted first by Rowe's Construction (the Proponent), who will then involve ECCC Emergencies when appropriate. For information relating to the environmental enforcement and reporting requirements under the Canadian Environmental Protection Act and the Fisheries Act please contact ECCC Environmental Enforcement at 867-669-4730. The ECCC National Environmental Emergencies Centre (NEEC) will provide technical and scientific environmental advice and assistance to the lead agency, in the event of an environmental emergency. A lead agency is described as the governmental authority that regulates or has authority over the activity from which the emergency originated. NEEC can be contacted at 1-866-283-2333.		The Board requires the Spill Contingency Plan be updated to include the correct phone number.

2	<p>ECCC 2- Migratory Birds. Environmental Information Report Section 4.0 Potential Impacts and Mitigation Measures - 4.1.6.2 Fauna</p>	<p>Comment ECCC agrees that impacts to fauna should be minimal because they are of short duration and localized. However, ECCC would like to remind the Proponent of their responsibilities regarding migratory birds and Incidental Take, as it is possible that migratory birds could nest in or near the quarry area . Environment Canada is responsible for implementing the Migratory Birds Convention Act (MCBA), which provides for the protection of migratory birds through the Migratory Birds Regulations, and to develop and implement policies and regulations to ensure the protection of migratory birds, their eggs and their nests. Paragraph 6(a) of the Migratory Bird Regulations states that no one shall disturb or destroy the nests or eggs of migratory birds. 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. The inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs is known as incidental take. Incidental take, in addition to 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.</p> <p>Recommendation ECCC recommends that If active nests are encountered during project activities, the nesting area should be avoided until nesting is complete (i.e., the young have naturally left the vicinity of the nest). For further information on how to protect migratory birds and their nests and eggs when planning or carrying out project activities, consult Environment Canada’s web page at: www.ec.gc.ca/paom-itmb/ for general guidance on avoidance of</p>		<p>The Board included the following condition in Section h of the Permit: The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation.</p>
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		incidental take of migratory birds and the linked fact sheet "Planning Ahead to Reduce the Risk of Detrimental Effects to Migratory Birds, and their Nests and Eggs".		
3	ECCC 3 - Bank Swallow	<p>Comment ECCC notes that the proposed project is in the range of Bank Swallows, but they are omitted in the Environmental Information Report. Bank Swallows, their nests and eggs are protected under the MCBA. In 2013, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed Bank Swallows as Threatened. Bank Swallows nest in burrows dug into exposed sand or soil Banks near water bodies and at some construction sites with similar features such as quarries. This is especially true of sand quarries, and Bank Swallow nest have been observed in quarry stockpiles in other areas of the Northwest Territories. Excavation or Construction activities conducted during the nesting season can inadvertently kill individuals or negatively impact their nesting success during breeding season which is from beggining of May to mid-August. The following nesting period is provided as general guidance to assist the Proponent in planning their field activities. 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>Recommendation ECCC recommends that the Proponent take precautions to avoid any disturbance to Bank Swallow or their habitat during project activities. The following measures should be adopted as mitigation measures to avoair incidental take of Bank Swallows: - Prevent Bank Swallows from digging burrows at the quarry excavation site including stockpile, during the breeding season, for example by flattening vertical</p>		<p>See also ECCC-2.</p> <p>The Board included a condition regarding migratory birds has been included in Section q of the Permit.</p>

		<p>surfaces to a slope of less than 70 degrees at the end of each day to prevent colonization; - Increase site surveillance frequency during spring to allow early detection of Bank Swallows; - Increase awareness of staff and contractors to potential presence and conservation status of the Bank Swallow; - Stop excavation activities if Bank Swallows colonize an active area, protect the area with a minimum buffer zone of 50m and notify all staff; - Consult the ECCC brochure "Bank Swallow in sandpits and quarries" that is provided with this submission. Please note that the breeding season indicated in this brochure should be ignored as it is not appropriate for the project location. Use the one provided in the comment section. - Consult ECCC (ec.eenordrpnno-eanorthpnrnwt.ec@canada.ca) for further mitigation measures and advice</p>		
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GNWT - ENR: Central Email GNWT

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
23	General File	Comment (doc) ENR Letter with Comments and Recommendations Recommendation		Noted.
1	Topic 1: Incineration and Solid, Liquid or Sewage Waste Disposal	<p>Comment If the proponents Waste Management Plan or methods of waste disposal indicate that project waste, or industrial waste, will be transported to community infrastructure for disposal, the proponent should not assume they may deposit industrial wastes, generated outside of community boundaries, in Northwest Territories community Solid and Liquid Waste Disposal Facilities.</p> <p>Recommendation 1) Should the proponent intend to deposit waste in an NWT community Solid and Liquid Waste Disposal Facility, ENR request that the proponent demonstrate in the Waste Management Plan, or to the Board, that the receiving communities Solid and</p>		Rowe's Construction Ltd. has received permission from the Village of Fort Simpson to deposit waste in their facility.

		Liquid Waste Disposal Facility holds a Water Licence that authorizes the disposal of wastes generated by the project, or the disposal of industrial waste streams, and that the community has been consulted and has consented in writing to the use of its infrastructure for disposal of the waste types and quantities in question, and the disposal of such wastes will not contravene the Waters Act, NWT Environmental Protection Act and related Regulations and Guidelines.		
2	None	<p>Comment None</p> <p>Recommendation 2) If open burning will be utilized during project activities, only those waste streams identified in the Municipal Solid Wastes Suitable for Open Burning document located on the GNWT ENR website may be open burned without the use of an approved incinerator. The document can be found at the following site. http://www.enr.gov.nt.ca/_live/documents/content/solid_wastes_suitable_open_burning.pdf</p>		Noted.
3	None	<p>Comment None</p> <p>Recommendation 3) At any time, or in the event that the proponent intends to incinerate any waste streams, the proponent should provide to the Board Incineration Management Strategies that demonstrate that the device and procedures selected are suitable to the waste stream intended for incineration. Otherwise, significant environmental impacts, including the production of toxic compounds, will likely result. Incineration strategies should meet the emissions limits established under the Canada-Wide Standards (CWS) for Dioxins and Furans (CCME 2001), CWS for Mercury Emissions (CCME 2000) and the NWT Ambient Air Quality Guidelines. The Incineration Management Strategies should also include: a) A description of waste streams intended for incineration;</p>		Rowe's Construction Ltd. has received permission from the Village of Fort Simpson to deposit waste in their facility. Incineration is not a component of any conditions in the proposed Permit.

		<p>b) Selected incineration technology and rationale for selection (the minimum requirement to accommodate complex waste streams should be a dual-chamber, controlled-air incinerator); c) A description of recycling and waste segregation plans that control waste entering the incinerator; d) Operator training and qualifications, and the use of trained and designated operators; e) Procedures for operation and maintenance, including record-keeping (i.e. completion of burn cycle and maintenance logs, and recording of the weight of each waste load charged to the incinerator); f) A reporting requirement to summarize the tracking and record-keeping component; and, g) Weigh scales to record the weight of each load charged to the incinerator; h) Details of emission measurement methods, where applicable.</p>		
4	None	<p>Comment None</p> <p>Recommendation 4) Residual ash from the incineration of non-segregated municipal waste must be tested prior to disposal to ensure that it meets the criteria specified in the NWT Environmental Guideline for Industrial Waste Discharges. Incineration ash can be contaminated with toxic compounds and by-products such as dioxins and furans and should therefore be tested to ensure that it is disposed of in an appropriate and approved manner.</p>		See GNWT-ENR-3.
5	Topic 2: Hazardous Waste Management	<p>Comment All proponents that generate hazardous wastes must be registered as a generator of hazardous waste in the NWT. The Guideline for the General Management of Hazardous Waste in the NWT defines hazardous waste and outlines the roles and responsibilities of generators, carriers, and receivers of hazardous waste in the NWT. The ENR, Environment Division (ED) registers generators, carriers, receivers, and tracks the disposal of hazardous waste</p>		Noted.

		<p>generated in the NWT to registered receiving facilities on hazardous waste movement documents (manifest). The definition of hazardous waste includes all waste materials that are 'dangerous goods' according to the Transportation of Dangerous Goods Regulations , and any additional waste of special concern that the ED has determined hazardous until proven otherwise, including but not limited to: a) incinerator waste and/or residuals (including bottom ash and fly ash); b) any liquid or solid wastes contaminated with refined petroleum products; c) bilge wastes; d) vehicle or vessel servicing wastes e) drilling wastes; f) produced fluids (Glycol / Hydrocarbon / Inorganic Mixtures); g) tailings; and h) any hydrocarbon, lead, mercury or other forms of contaminated soils.</p> <p>Recommendation 1) If the proponent is using or generating hazardous waste, they must register as a generator of hazardous waste in the NWT and track the disposal of hazardous waste from the site activities to registered receivers on hazardous waste movement documents provided by ENR. Please contact the Environment Division, ENR to register or for more information contact Mr. Gerald Enns, Hazardous Waste Specialist, ED by email (Gerald_Enns@gov.nt.ca) or by phone (867) 920-8044.</p>		
6	Topic 3: Fuel Storage and Spill Contingency Planning and Reporting	<p>Comment A Spill Contingency Plan must be written in accordance with the AANDC Spill Contingency Planning Guidelines (INAC 2007); The plan is not specific to fuel spills and must incorporate the potential for the unintentional release of other hazardous substances that may be present on-site (ie Glycol, vehicle fluids and additives). An example of reportable amounts of other hazardous substances can be found in the AANDC Spill Contingency Planning Guidelines (INAC 2007) as well as supported with the GNWT Spill</p>		The Board requires the Spill Contingency Plan be updated to include all appropriate information.

		<p>Contingency Planning and Reporting Regulations. In addition to the Spill Contingency Plan the proponent should also follow best practices for fuel storage and spill containment during project activities which may include the following recommendations.</p> <p>Recommendation 1) The proponent is required to develop a Spill Contingency Plan in accordance with the AANDC Spill Contingency Planning Guideline (INAC 2007) found here: http://www.aadnc-aandc.gc.ca/eng/1100100024236/1100100024253#aB3 In addition, supplemental information is provided in the EPA Spill Contingency Planning and Reporting Regulations found here: https://www.justice.gov.nt.ca/en/files/legislation/environmental-protection/environmental-protection.r2.pdf If clarification or further information is needed please contact the ENR, GNWT Environment Division directly to aid in the development of the Plan</p>		
7	None	<p>Comment None</p> <p>Recommendation 2) In accordance with the Spill Contingency Planning and Reporting Regulations Section 10, all spills in accordance with Schedule B must be reported immediately to the 24-hour Spill Report Line (867) 920-8130.</p>		The Board requires the Spill Contingency Plan be updated to include all appropriate information.
8	None	<p>Comment None</p> <p>Recommendation 3) With respect to the Environmental Protection Act Section 5 (1b) all spills regardless of amount must be cleaned up, and contaminated materials disposed of at an approved facility, or in an approved manner, and as per Section 5(1c) all reasonable efforts must be made to notify any parties affected or potentially affected by the spill.</p>		The Board requires the Spill Contingency Plan be updated to include all appropriate information.

9	None	Comment None Recommendation 4) Fuel storage areas should be greater than 100m distance from the ordinary high water mark of a water body and not located in a drainage channel.		The Board requires the Spill Contingency Plan be updated to include all appropriate information.
10	None	Comment None Recommendation 5) All fuel or storage vessels containing hazardous substances left for extended periods of time (including overnight in vehicles), should be stationed in an area that contains sufficient secondary containment (i.e. Drip pans, lined bermed areas, double walled enviro-tanks etc.).		The Board requires the Spill Contingency Plan be updated to include all appropriate information.
11	None	Comment None Recommendation 6) Spill kits should be provided. Personnel should be trained to ensure that in the event of a spill it is contained and remediated appropriately to industry accepted best practices and regulatory approval. In case refuelling takes place near water, in water spill planning should be considered to prevent in-advertent releases.		The Board requires the Spill Contingency Plan be updated to include all appropriate information.
12	None	Comment None Recommendation 7) ENR recommends for the operator convenience, and increased environmental protection, that all heavy equipment and refuelling vehicles carry portable spill kits that include items such as absorbent pads, containment booms and spill pool catchment receptacles. Readily available and fully stocked spill kits can effectively mitigate potential spills.		The Board requires the Spill Contingency Plan be updated to include all appropriate information.
13	Topic 4: Wildlife: NWT Listed and Pre-listed Species at Risk	Comment Section 76 and 77 of the Species at Risk Act (NWT) requires the Minister of Environment and Natural Resources to make a submission to the body responsible for assessing the potential impacts of a proposed development, or for considering a land use Permit or water Licence application, respecting the potential impacts of the proposed development, Permit or		The Board included the following condition: The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation.

		<p>Licence application on a NWT-listed or pre-listed species or its habitat. NWT-listed species are those that are on the NWT List of Species at Risk. Pre-listed species are those that have been assessed by the NWT Species at Risk Committee (SARC) but have not yet been added to the NWT List of Species at Risk. The Proponent should be aware that NWT-listed or pre-listed species at risk and their habitat may also be subject to protection under existing sections of the NWT Wildlife Act. As a best practice, ENR encourages the proponent to consider potential impacts, mitigation measures and monitoring requirements for species at risk listed under the federal Species at Risk Act, as well as those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that may occur in the project area, and the prohibitions that may apply to these species under federal legislation. The project area overlaps with the ranges of the following NWT-listed and/or pre-listed species : .</p> <p>Western Toad - listed as of Feb 2016, Threatened in the NWT . Northern Leopard Frog - listed as of Mar 2015, Threatened in t . Boreal Caribou - listed as of Feb 2014, Threatened in the NWT .</p> <p>Recommendation 1) Although the project overlaps with the range(s) of the species listed above, ENR is of the opinion that the nature] of the proposed project are such that the likelihood of impacts to NWT-listed or pre-listed species at risk is minimal.</p>		
14	Topic 5: Cumulative Effects	<p>Comment Keeping track of the disturbance footprint of development activities is an important component of tracking and informing the management of cumulative effects on wildlife and wildlife habitat.</p>		Coordinates were provided for the footprint of the operation; they can be found on the public registry.

		Recommendation 1) The proponent should submit the bounding coordinates, or geospatial data for the proposed project footprint and for the completed project footprint to the Land and Water Board for placement on the public registry. The MVLWB Standards for Geographic Information Systems (GIS) Submissions should be followed when submitting spatial data.		
15	Topic 6: Wildlife Abodes	<p>Comment Subject to sub-section 51(2) of the Wildlife Act, it is illegal to break into, destroy or damage a den, beaver dam or lodge, muskrat push-up or hibernaculum unless you have an Aboriginal or treaty right or a Permit to do so. Protection of dens, beaver lodges, muskrat push-ups, and hibernacula is essential to ensuring reproductive success and survival of both adults and young.</p> <p>Recommendation 1) The Proponent should conduct pre-activity surveys within 800m of the project footprint to identify active bear dens if project activities will occur between September 30 and March 30. Surveys should be conducted in the fall to detect freshly dug dens.</p>		The Board included the following condition: The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation.
16	None	<p>Comment None</p> <p>Recommendation 2) If an active bear den is detected, or suspected, the Proponent should implement and maintain an 800 m exclusion zone until the bear emerges in spring.</p>		The Board included the following condition: The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation.
17	None	<p>Comment None</p> <p>Recommendation 3) If the bear den and exclusion zone would result in the halt of part or the entire program, the Proponent should contact ENR to discuss alternative mitigation options. The location of active bear dens should be kept confidential between the developer and ENR until after emergence in the spring.</p>		The Board included the following condition: The Permittee shall take all reasonable measures to prevent damage to wildlife and fish Habitat during this land-use operation.

18	Topic 7: Wildlife Attractants and Waste Management	<p>Comment Subject to sub-section 66(1) of the Wildlife Act no person shall store food, waste, or other substances in a manner that may attract big game or other prescribed wildlife and put people, domestic animals or wildlife in danger. Subject to sub-section 65(1) of the Wildlife Act, it is illegal to intentionally feed big game, furbearers or other prescribed wildlife. Schedule A - Part 2 of the Wildlife General Regulations sets out the species prescribed as fur-bearers.</p> <p>Recommendation 1) The Proponent should utilize food and garbage handling and storage procedures that will minimize the attraction of wildlife.</p>	<p>The Board included of the following conditions:</p> <p>The Permittee shall keep all garbage and debris in a secure container until disposal.</p> <p>The Permittee shall dispose of all garbage, waste, and debris as described in the accepted application, unless otherwise authorized in writing by an Inspector.</p>
19	None	<p>Comment None</p> <p>Recommendation 2) The Proponent should store all food, waste, washed recyclables and debris that may attract wildlife within sealed animal proof containers until final disposal.</p>	<p>The Board included the following conditions:</p> <p>The Permittee shall keep all garbage and debris in a secure container until disposal.</p> <p>The Permittee shall dispose of all garbage, waste, and debris as described in the accepted application, unless otherwise authorized in writing by an Inspector.</p>
20	None	<p>Comment None</p> <p>Recommendation 3) The Proponent should ensure that sealed animal proof containers are cleaned once emptied to minimize the attraction of wildlife.</p>	<p>The Board included of the following conditions:</p> <p>The Permittee shall keep all garbage and debris in a secure container until disposal.</p>

				The Permittee shall dispose of all garbage, waste, and debris as described in the accepted application, unless otherwise authorized in writing by an Inspector.
21	None	Comment None Recommendation 4) The Proponent should ensure that all greywater (dishwater, showers, laundry, etc.) and black water (sewage) are treated and disposed of in a manner that will minimize the attraction of wildlife.		The Board included the following conditions: The Permittee shall keep all garbage and debris in a secure container until disposal. The Permittee shall dispose of all garbage, waste, and debris as described in the accepted application, unless otherwise authorized in writing by an Inspector.
22	None	Comment None Recommendation 5) The Proponent should remove all waste petroleum products including used oil filters, rags, scrap metal, discarded machinery, parts, drums, barrels, or plastics to an approved waste disposal facility.		All waste will be taken to the Solid Waste Facility of the Village of Fort Simpson.

GNWT - Lands: Charlene Coe

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
1	Formal letter	Comment (doc) Re: LUPA issuance Recommendation Recommend Permit be granted		Noted.

GNWT - Lands: Kyle Christiansen

ID	Topic	Reviewer Comment/Recommendation	Proponent Response	Board Response
1	Draft Conditions - Salvageable Timber	<p>Comment Inspectors with the Department of Lands noticed that there is no condition for Salvageable Timber found in the Draft Conditions.</p> <p>Recommendation Please add Condition: Salvageable Timber - The Permittee shall salvage all portions of trees cleared that are larger than 13 cm in diameter. Under 26(1)(n) Methods and Techniques for Debris and Brush Disposal.</p>		The Board included this condition as recommended by the Inspector.



December 15, 2016

Jen Potten
Regulatory Officer
Mackenzie Valley Land and Water Board
7th Floor – 4910 50th Avenue
P.O. Box 2130
Yellowknife, NT
X1A 2P6

Dear Ms. Potten,

**Re: Rowe's Construction
Land Use Permit Request – MV2016Q0017
Quarry Activities
Request for Comments**

The Department of Environment and Natural Resources, Government of the Northwest Territories has reviewed the request at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act* and provides the following comments and recommendations for the consideration of the Board.

Topic 1: Incineration and Solid, Liquid or Sewage Waste Disposal

Comment(s):

If the proponents Waste Management Plan or methods of waste disposal indicate that project waste, or industrial waste, will be transported to community infrastructure for disposal, the proponent should not assume they may deposit industrial wastes, generated outside of community boundaries, in Northwest Territories community Solid and Liquid Waste Disposal Facilities.

Recommendation(s):

- 1) Should the proponent intend to deposit waste in an NWT community Solid and Liquid Waste Disposal Facility, ENR request that the proponent demonstrate in the Waste Management Plan, or to the Board, that the receiving communities' Solid and Liquid Waste Disposal Facility holds a Water Licence that authorizes the disposal of wastes generated by the project, or the disposal of industrial waste streams, and that the community has been consulted and has consented in

writing to the use of its infrastructure for disposal of the waste types and quantities in question, and the disposal of such wastes will not contravene the Waters Act, NWT Environmental Protection Act and related Regulations and Guidelines.

- 2) If open burning will be utilized during project activities, only those waste streams identified in the *Municipal Solid Wastes Suitable for Open Burning* document located on the GNWT ENR website may be open burned without the use of an approved incinerator. The document can be found at the following site.

http://www.enr.gov.nt.ca/live/documents/content/solid_wastes_suitable_open_burning.pdf

- 3) At any time, or in the event that the proponent intends to incinerate any waste streams, the proponent should provide to the Board *Incineration Management Strategies* that demonstrate that the device and procedures selected are suitable to the waste stream intended for incineration. Otherwise, significant environmental impacts, including the production of toxic compounds, will likely result. Incineration strategies should meet the emissions limits established under the Canada-Wide Standards (CWS) for Dioxins and Furans (CCME 2001), CWS for Mercury Emissions (CCME 2000) and the NWT Ambient Air Quality Guidelines. The *Incineration Management Strategies* should also include:

- a) A description of waste streams intended for incineration;
- b) Selected incineration technology and rationale for selection (the minimum requirement to accommodate complex waste streams should be a dual-chamber, controlled-air incinerator);
- c) A description of recycling and waste segregation plans that control waste entering the incinerator;
- d) Operator training and qualifications, and the use of trained and designated operators;
- e) Procedures for operation and maintenance, including record-keeping (i.e. completion of burn cycle and maintenance logs, and recording of the weight of each waste load charged to the incinerator);
- f) A reporting requirement to summarize the tracking and record-keeping component; and,
- g) Weigh scales to record the weight of each load charged to the incinerator;
- h) Details of emission measurement methods, where applicable.

- 4) Residual ash from the incineration of non-segregated municipal waste must be tested prior to disposal to ensure that it meets the criteria specified in the *NWT Environmental Guideline for Industrial Waste Discharges*. Incineration ash can be contaminated with toxic compounds and by-products such as dioxins and furans

and should therefore be tested to ensure that it is disposed of in an appropriate and approved manner.

Topic 2: Hazardous Waste Management

Comment(s):

All proponents that generate hazardous wastes must be registered as a generator of hazardous waste in the NWT.

The Guideline for the General Management of Hazardous Waste in the NWTⁱ defines hazardous waste and outlines the roles and responsibilities of generators, carriers, and receivers of hazardous waste in the NWT. The ENR, Environment Division (ED) registers generators, carriers, receivers, and tracks the disposal of hazardous waste generated in the NWT to registered receiving facilities on hazardous waste movement documents (manifest). The definition of hazardous waste includes all waste materials that are 'dangerous goods' according to the Transportation of Dangerous Goods Regulationsⁱⁱ, and any additional waste of special concern that the ED has determined hazardous until proven otherwise, including but not limited to:

- a) incinerator waste and/or residuals (including bottom ash and fly ash);
- b) any liquid or solid wastes contaminated with refined petroleum products;
- c) bilge wastes;
- d) vehicle or vessel servicing wastes
- e) drilling wastes;
- f) produced fluids (Glycol / Hydrocarbon / Inorganic Mixtures);
- g) tailings; and
- h) any hydrocarbon, lead, mercury or other forms of contaminated soils.

Recommendation(s):

- 1) If the proponent is using or generating hazardous waste, they must register as a generator of hazardous waste in the NWT and track the disposal of hazardous waste from the site activities to registered receivers on hazardous waste movement documents provided by ENR. Please contact the Environment Division, ENR to register or for more information contact Mr. Gerald Enns, Hazardous Waste Specialist, ED by email (Gerald_Enns@gov.nt.ca) or by phone (867) 920-8044.

Topic 3: Fuel Storage and Spill Contingency Planning and Reporting

Comment(s):

A Spill Contingency Plan must be written in accordance with the AANDC *Spill Contingency Planning Guidelines* (INAC 2007);

The plan is not specific to fuel spills and must incorporate the potential for the unintentional release of other hazardous substances that may be present on-site (ie Glycol, vehicle fluids and additives). An example of reportable amounts of other hazardous substances can be found in the AANDC *Spill Contingency Planning Guidelines* (INAC 2007) as well as supported with the GNWT *Spill Contingency Planning and Reporting Regulations*.

In addition to the Spill Contingency Plan the proponent should also follow best practices for fuel storage and spill containment during project activities which may include the following recommendations.

Recommendation(s):

- 1) The proponent is required to develop a Spill Contingency Plan in accordance with the AANDC *Spill Contingency Planning Guideline* (INAC 2007) found here:

<http://www.aadnc-aandc.gc.ca/eng/1100100024236/1100100024253#aB3>

In addition, supplemental information is provided in the EPA *Spill Contingency Planning and Reporting Regulations* found here:

<https://www.justice.gov.nt.ca/en/files/legislation/environmental-protection/environmental-protection.r2.pdf>

If clarification or further information is needed please contact the ENR, GNWT Environment Division directly to aid in the development of the Plan

- 2) In accordance with the *Spill Contingency Planning and Reporting Regulations Section 10*, all spills in accordance with Schedule B must be reported immediately to the 24-hour Spill Report Line (867) 920-8130.
- 3) With respect to the *Environmental Protection Act Section 5 (1b)* all spills regardless of amount must be cleaned up, and contaminated materials disposed of at an approved facility, or in an approved manner, and as per *Section 5(1c)* all reasonable efforts must be made to notify any parties affected or potentially affected by the spill.

- 4) Fuel storage areas should be greater than 100m distance from the ordinary high water mark of a water body and not located in a drainage channel.
- 5) All fuel or storage vessels containing hazardous substances left for extended periods of time (including overnight in vehicles), should be stationed in an area that contains sufficient secondary containment (i.e. Drip pans, lined bermed areas, double walled enviro-tanks etc.).
- 6) Spill kits should be provided. Personnel should be trained to ensure that in the event of a spill it is contained and remediated appropriately to industry accepted best practices and regulatory approval. In case refuelling takes place near water, in water spill planning should be considered to prevent in-advertent releases.
- 7) ENR recommends for the operator's convenience, and increased environmental protection, that all heavy equipment and refuelling vehicles carry portable spill kits that include items such as absorbent pads, containment booms and spill pool catchment receptacles. Readily available and fully stocked spill kits can effectively mitigate potential spills.

Topic 4: Wildlife: NWT Listed and Pre-listed Species at Risk

Comment(s):

Section 76 and 77 of the *Species at Risk Act (NWT)* requires the Minister of Environment and Natural Resources to make a submission to the body responsible for assessing the potential impacts of a proposed development, or for considering a land use Permit or Water Licence application, respecting the potential impacts of the proposed development, Permit or Licence application on a NWT-listed or pre-listed species or its habitat. NWT-listed species are those that are on the NWT List of Species at Risk. Pre-listed species are those that have been assessed by the NWT Species at Risk Committee (SARC) but have not yet been added to the NWT List of Species at Risk.

The Proponent should be aware that NWT-listed or pre-listed species at risk and their habitat may also be subject to protection under existing sections of the *NWT Wildlife Act*.

As a best practice, ENR encourages the proponent to consider potential impacts, mitigation measures and monitoring requirements for species at risk listed under the federal *Species at Risk Act*, as well as those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that may occur in the project area, and the prohibitions that may apply to these species under federal legislation.

The project area overlaps with the ranges of the following NWT-listed and/or pre-listed species:

- [Western Toad](#) – listed as of Feb 2016, Threatened in the NWT
- [Boreal Caribou](#) – listed as of Feb 2014, Threatened in the NWT

Recommendation(s):

- 1) Although the project overlaps with the range(s) of the species listed above, ENR is of the opinion that the nature of the proposed project are such that the likelihood of impacts to NWT-listed or pre-listed species at risk is minimal.

Topic 5: Cumulative Effects

Comment(s):

Keeping track of the disturbance footprint of development activities is an important component of tracking and informing the management of cumulative effects on wildlife and wildlife habitat.

Recommendation(s):

- 1) The proponent should submit the bounding coordinates, or geospatial data for the proposed project footprint and for the completed project footprint to the Land and Water Board for placement on the public registry. The MVLWB's "Standards for Geographic Information Systems (GIS) Submissions" should be followed when submitting spatial data.

Topic 6: Wildlife Abodes

Comment(s):

Subject to sub-section 51(2) of the *Wildlife Act*, it is illegal to break into, destroy or damage a den, beaver dam or lodge, muskrat push-up or hibernaculum unless you have an Aboriginal or treaty right or a Permit to do so.

Protection of dens, beaver lodges, muskrat push-ups, and hibernacula is essential to ensuring reproductive success and survival of both adults and young.

Recommendation(s):

- 1) The Proponent should conduct pre-activity surveys within 800m of the project footprint to identify active bear dens if project activities will occur between September 30 and March 30. Surveys should be conducted in the fall to detect freshly dug dens.

- 2) If an active bear den is detected, or suspected, the Proponent should implement and maintain an 800 m exclusion zone until the bear emerges in spring.
- 3) If the bear den and exclusion zone would result in the halt of part or the entire program, the Proponent should contact ENR to discuss alternative mitigation options. The location of active bear dens should be kept confidential between the developer and ENR until after emergence in the spring.

Topic 7: Wildlife Attractants and Waste Management

Comment(s):

Subject to sub-section 66(1) of the *Wildlife Act* no person shall store food, waste, or other substances in a manner that may attract big game or other prescribed wildlife and put people, domestic animals or wildlife in danger.

Subject to sub-section 65(1) of the *Wildlife Act*, it is illegal to intentionally feed big game, furbearers or other prescribed wildlife. Schedule A – Part 2 of the *Wildlife General Regulations* sets out the species prescribed as fur-bearers.

Recommendation(s):

- 1) The Proponent should utilize food and garbage handling and storage procedures that will minimize the attraction of wildlife.
- 2) The Proponent should store all food, waste, washed recyclables and debris that may attract wildlife within sealed animal proof containers until final disposal.
- 3) The Proponent should ensure that sealed animal proof containers are cleaned once emptied to minimize the attraction of wildlife.
- 4) The Proponent should ensure that all greywater (dishwater, showers, laundry, etc.) and black water (sewage) are treated and disposed of in a manner that will minimize the attraction of wildlife.
- 5) The Proponent should remove all waste petroleum products including used oil filters, rags, scrap metal, discarded machinery, parts, drums, barrels, or plastics to an approved waste disposal facility.

Comments and Recommendations Directed to the Proponent

The following comments are directed to the applicant of the Land Use Permit and are provided based on ENR's mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act*. The following comments and recommendations are for the information, consideration and appropriate action of the Proponent and as applicable to project activities.

Legislative and Regulatory Requirements

Topic 1: Forest Management

Recommendation(s):

- 1) In order to comply with the *Forest Protection Act* (Section 10 and 19(1)), the proponent should adhere to the *Forest Fire Prevention and Suppression Guidelines*. The intent of the Guidelines is threefold. First, industrial operations must be conducted so that they do not contribute to the fire load. Second, industrial operations must be able to control and extinguish any fires that occur as a result of their operations. Finally, industrial operations must be able to respond to wildfires that may affect human life and other property as a result of their operations. The guidelines may be accessed at the following website:

http://forestmanagement.enr.gov.nt.ca/fire_management/fire_docs/guidelines_for_forest_fire_prevention_and_suppression.pdf

- 2) The *Forest Management Act* and *Regulations* prohibits anyone from cutting, using or transporting timber, or damaging standing timber unless:
 - Authorized with a Timber Permit;
 - Authorized by license; or
 - Exempted from holding a Permit or license.

The proponent is requested to contact the local/regional ENR office for further information on obtaining a Forest Management Authorization, if required.

- 3) If the proponent plans to burn brush or other materials during the official fire season (May 01 – September 30), they will require a Permit to Burn from ENR, as per the *Forest Protection Act* (Section 10(1) and 21).
- 4) The proponent should be aware of Part 1 Clause 18 of the *Exemption List Regulations* under the *Mackenzie Valley Resource Management Act* in which a

burn authorized under a Permit to Burn is exempt from Preliminary Screening if it is not greater than an area of 25 m².

- 5) If the site brush and tree cover is not merchantable then it should be piled up accordingly (and not mixed with soil) so that it can be burned or spread out at a later date. If merchantable wood is involved; either merchantable firewood or saw timber, it should be cleanly set to one side of the operation and made available for recovery. The proponent should contact the local ENR office to determine what forest management authorization will be required, if any.

Topic 2: Wildlife Abodes

Comment(s):

Subject to sub-section 51(2) of the *Wildlife Act*, it is illegal to break into, destroy or damage a den, beaver dam or lodge, muskrat push-up or hibernaculum unless you have an Aboriginal or treaty right or a Permit to do so.

Protection of dens, beaver lodges, muskrat push-ups, and hibernacula is essential to ensuring reproductive success and survival of both adults and young.

Recommendation(s):

- 1) Contact ENR prior to start-up of project activities to determine if there are any known dens, push-ups, lodges, beaver dams or hibernacula within the project area.
- 2) Prior to start-up of project activities, conduct surveys of lakes or other water bodies proposed to be used for water withdrawal or winter access roads to determine the presence of muskrat push-ups, beaver lodges or beaver dams. If one or more of these features is found contact ENR to discuss mitigation options.
- 3) Further guidance on different setback distances and timing windows for wildlife abodes are provided in Table 6 of the Northern Land Use Guidelines: Northwest Territories Seismic Operations Vol.9 (a) at:

<http://www.lands.gov.nt.ca/en/northern-land-use-guidelines>.

Developers should also check whether there are setback distances and timing restrictions for wildlife abodes within the regional land use plan for their project area.

Topic 3: Advice for NWT Listed and Pre-listed Species at Risk

Comment(s):

Section 76 and 77 of the *Species at Risk Act (NWT)* requires the Minister of Environment and Natural Resources to make a submission to the body responsible for assessing the potential impacts of a proposed development, or for considering a land use Permit or water Licence application, respecting the potential impacts of the proposed development, Permit or Licence application on a NWT-listed or pre-listed species or its habitat. NWT-listed species are those that are on the NWT List of Species at Risk. Pre-listed species are those that have been assessed by the NWT Species at Risk Committee (SARC) but have not yet been added to the NWT List of Species at Risk.

The Proponent should be aware that NWT-listed or pre-listed species at risk and their habitat may also be subject to protection under existing sections of the *NWT Wildlife Act*.

As a best practice, ENR encourages the Proponent to consider potential impacts, mitigation measures and monitoring requirements for species at risk listed under the federal *Species at Risk Act*, as well as those designated as at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) that may occur in the project area, and the prohibitions that may apply to these species under federal legislation.

The project area overlaps with the ranges of the following NWT-listed and/or pre-listed species:

- [Western Toad](#) – listed as of Feb 2016, Threatened in the NWT
- [Boreal Caribou](#) – listed as of Feb 2014, Threatened in the NWT

Recommendation(s):

1) For information on NWT species at risk in the project area please consult:

- <http://www.nwt-speciesatrisk.ca/SpeciesAtRisk>
- <http://www.nwt-speciesatrisk.ca/ToolsForDevelopers>
- [Species at Risk in the NWT - 2016 Edition](#)

2) The Proponent should be aware of the prohibitions that may apply to the species that occur in your area. Check the *Species at Risk (NWT) Act* regulations webpage (<http://www.nwt-speciesatrisk.ca/ToolsForDevelopers>) to see if there are any applicable regulations or agreements with land owners that must be followed for NWT-listed or pre-listed species at risk.

- 3) For information and legislative requirements related to federally-listed species at risk, consult the Species at Risk Public Registry (www.sararegistry.gc.ca) or contact Environment and Climate Change Canada and the Department of Fisheries and Oceans.
- 4) Ensure that employees and contractors are aware of the species at risk that might occur in the project area. This includes species that are pre-listed or listed under the *Species at Risk (NWT) Act*, species listed under the federal *Species at Risk Act*, and species designated as at risk by COSEWIC.
- 5) If species at risk are encountered during project undertakings, the primary mitigation measure should be avoidance. The Proponent should avoid contact with or disturbance to each species, its habitat and/or its residence.
- 6) Monitoring should be undertaken by the Proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, monitoring should include recording the locations and dates of any observations of species at risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the Proponent to avoid contact with or disturbance to the species, its habitat, and/or its residence.
- 7) Submit sightings of species at risk and monitoring information to ENR's Wildlife Management Information System (WMIS) at WMISTeam@gov.nt.ca and to other appropriate regulators and organizations with management responsibility for the species. Further information on the WMIS can be found at:

<http://www.enr.gov.nt.ca/programs/wildlife-research/wildlife-management-information-services>

Topic 4: Cumulative Effects

Comment(s):

Keeping track of the disturbance footprint of development activities is an important component of tracking and informing the management of cumulative effects on wildlife and wildlife habitat.

Recommendation(s):

- 1) The proponent should submit the bounding coordinates, or geospatial data for the proposed project footprint and for the completed project footprint to the

Land and Water Board for placement on the public registry. The MVLWB's "Standards for Geographic Information Systems (GIS) Submissions" should be followed when submitting spatial data.

Topic 5: Nesting Birds

Comment(s):

- Conducting activities involving vegetation clearing, ground disturbance or demolition of buildings and other structures during the nesting season increases the risk of contravening paragraph 51(1)(a) of the *Wildlife Act* which prohibits destroying, disturbing or taking the eggs of a bird, or a nest when it is occupied by a bird or its eggs, or destroying, disturbing or taking the nest of a prescribed bird at any time.
- Protection of nests is essential to ensuring reproductive success and survival of both adults and young.
- The Canadian Wildlife Service of Environment and Climate Change Canada is the responsible management authority for migratory birds protected under the Migratory Birds Convention Act, 1994.

<https://ec.gc.ca/nature/default.asp?lang=En&n=496E2702-1>

- GNWT is responsible for the management of non-migratory birds including raptors.
- Critical breeding periods for NWT raptors can start as early as the 1st week of April and last up until 3rd week of September, depending on the species and location.

Recommendation(s):

- 1) Follow Environment Canada's *Avoidance guidelines related to incidental take of migratory birds in Canada* available at:

<http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=AB36A082-1>)

- 2) Consult Environment Canada's *General nesting periods of migratory birds in Canada* for current information on general nesting periods of federally protected migratory birds that occur within the NWT. Available at:

<http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1>

- 3) Contact GNWT ENR Wildlife Division for information on critical breeding periods for raptors and/or known raptor nest sites in the project area.
- 4) Conduct vegetation clearing and any new ground disturbance outside of the nesting season for birds in the project area.
- 5) If active nests are encountered during project activities implement protective buffer zones described in the regional land use plan, Table 6 of the Northern Land Use Guidelines – Seismic (<http://www.lands.gov.nt.ca/en/northern-land-use-guidelines>), or Environment Canada’s recommended *Buffer zones and setback distances*. Available at:

http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=8D910CAC-1#_03_1_1

Topic 6: Wildlife Disturbance and Harassment

Comment(s):

Unless authorized by a Licence or Permit, paragraphs 52(a) and (b) of the *Wildlife Act* prohibit engaging in an activity that is likely to result in significant disturbance to big game or other prescribed wildlife, or to unnecessarily chase, fatigue, disturb, torment or otherwise harass game or other prescribed wildlife.

Schedule A – Part 1 of the *Wildlife General Regulations*, sets out the species prescribed as big game, and Schedule B sets out prescribed wildlife for the purpose of paragraph 52(a) and (b) of the *Wildlife Act*.

Disturbance to wildlife from sources such as noise, light, vibrations, and human presence can result in energetic stress, avoidance of key habitat, loss of reproductive fitness, injury or mortality of wildlife. Activities that may cause sensory disturbance to wildlife include vehicle traffic, stationary machinery, noise from blasting, excavation, crushing, seismic testing, vegetation clearing, and lighting or flaring.

Recommendation(s):

- 1) The proponent should be aware that no wildlife should be disturbed, chased, or harassed by human beings on foot, in a motorized vehicle, or by aircraft. Unless authorized by a Licence or Permit, paragraphs 52(a) and (b) of the *Wildlife Act* prohibit engaging in an activity that is likely to result in significant disturbance to big game or other prescribed wildlife, or to unnecessarily chase, fatigue, disturb, torment or otherwise harass game or other prescribed wildlife. However, subject to section 55 of the *Wildlife Act* a person may chase wildlife away from a camp or work site if doing so is necessary to prevent injury or death to a person or damage to property.

- 2) Consult the setback distances, flight altitude guidelines and timing windows for wildlife provided in Table 6 and Table 7 of the Northern Land Use Guidelines: Northwest Territories Seismic Operations Vol.9 (a) as they are applicable to variety of land use activities:

<http://www.lands.gov.nt.ca/en/northern-land-use-guidelines>

- 3) Consult the approved Land Use Plan, if applicable, that applies to the project area for further guidance on setback distances and timing windows to minimize disturbance to wildlife.
- 4) Wildlife shall be given the right of way at all times.
- 5) Suspend activities temporarily if one or more individuals of a big game species are spotted within five hundred (500) metres of the work site.

Topic 7: Reporting Wildlife Sighting

Comment(s):

Developers are encouraged to record wildlife sightings and to submit these records to ENR's Wildlife Management Information System (WMIS). Wildlife sightings data provides useful information for assessing changes in species distribution and the timing and location of different life history events such as migration, denning, nesting, calving, etc.

Recommendation(s):

- 1) Submit information about wildlife sightings (species, date, time, location, number of individuals, sex, behavior, etc.) to ENR's Wildlife Management Information System (WMIS) at WMISTeam@gov.nt.ca. For further information on the WMIS consult:

<http://www.enr.gov.nt.ca/programs/wildlife-research/providing-wildlife-observations-wmis>.

- 2) Contact the regional ENR office to obtain blank wildlife sightings forms.

Topic 8: Reporting Wildlife Defence/Property Kills and Wildlife Incidents

Comment(s):

Subject to paragraph 57(a) of the *Wildlife Act*, any big game or other prescribed wildlife that is killed to prevent injury or death to a person or damage to property must be reported to ENR as soon as is practicable. Section 7 of the Wildlife General Regulations describes what information must be included in the report.

Subject to section 58 of the *Wildlife Act* and sub-section 8(1) of the Wildlife General Regulations, any person who accidentally kills or seriously wounds big game or other prescribed wildlife with a motorized vehicle on a highway must report the event to an officer within 24 hours after the incident.

Recommendation(s):

- 1) Report all sightings of bears in and around the project location to your local ENR office. Any defence of life and property kills must be reported to the appropriate ENR office immediately. Please contact the following Regional Office as required:
 - Fort Simpson Wildlife Emergency Line at (867) 695-7433
 - Fort Smith Wildlife Emergency Line at (867) 872-0400
 - Hay River Wildlife Emergency Line at (867) 875-7640
 - Inuvik Wildlife Emergency Line at (867) 678-0289
 - Norman Wells Wildlife Emergency Line at (867) 587-2422
 - Yellowknife Wildlife Emergency Line at (867) 873-7181
- 2) Ensure all field personnel have completed a bear safety training course to decrease the risk of attracting bears to work sites and threats to human safety, learn how to respond to bear encounters, and decrease the risk of wildlife mortality resulting from kills in defence of life and property.
- 3) Consult the “Safety in Grizzly Bear and Black Bear Country” brochure, available at:

http://www.enr.gov.nt.ca/sites/default/files/web_pdf_wd_bear_safety_brochure_1_may_2015.pdf
- 4) Report to an ENR officer as soon as is practicable any wildlife that is killed to prevent injury or death to a person or damage to property.
- 5) Report to an ENR officer any big game or other prescribed wildlife that is killed or seriously wounded by a motorized vehicle on a highway within 24 hours after the incident.

- 6) Reports must include at minimum the name of the person who killed or injured the wildlife, an explanation of the incident, the time, date and location of the incident, the species or quantity involved, and any other information requested by the wildlife officer.
- 7) Contact the regional ENR office to obtain blank wildlife incident forms.

Topic 9: Wildlife Attractants and Waste Management

Comment(s):

Subject to sub-section 66(1) of the *Wildlife Act* no person shall store food, waste, or other substances in a manner that may attract big game or other prescribed wildlife and put people, domestic animals or wildlife in danger.

Subject to sub-section 65(1) of the *Wildlife Act*, it is illegal to intentionally feed big game, furbearers or other prescribed wildlife. Schedule A – Part 2 of the *Wildlife General Regulations* sets out the species prescribed as fur-bearers.

Recommendation(s):

- 1) Waste being stored on site prior to being transported to a municipal landfill site, or disposed by other methods, must not be stored in a manner that minimizes the attraction of wildlife, as it is a violation of *Section 66(1) of the Wildlife Act*. An animal proof, sealed container must be used for storing waste onsite to minimize wildlife being attracted to odours. For reference please refer to the following guidance document “Safety in Grizzly and Black Bear Country”

<http://www.nwtwildlife.com/Publications/safetyinbearcountry/safety.htm>

- 2) Project personnel should not intentionally feed wildlife or purposefully encourage wildlife to habituate to human presence.

Topic 10: Spill Contingency Planning

Recommendation(s):

- 1) In accordance with the *Spill Contingency Planning and Reporting Regulations Section 10*, all spills in accordance with Schedule B must be reported immediately to the 24-hour Spill Report Line (867) 920-8130.
- 2) With respect to the *Environmental Protection Act Section 5 (1b)* all spills regardless of amount must be cleaned up, and contaminated materials disposed

of at an approved facility, and as per *Section 5(1c)* all reasonable efforts must be made to notify any parties affected or potentially affected by the spill.

- 3) ENR recommends, for increased environmental protection, that all heavy equipment and refuelling vehicles carry portable spill kits that include items such as absorbent pads, containment booms and spill pool catchment receptacles. Readily available and fully stocked spill kits can effectively mitigate potential spills.

ENR reminds the proponent that references to applicable statutes and regulations are to be considered as advice only, and should not be construed as permission to contravene any other applicable statutes and regulations not mentioned in this letter.

Comments and recommendations were provided by ENR technical experts in Environment Division, Wildlife Division, and the Dehcho Region and were coordinated and collated by the Environmental Impact Assessment Section, Conservation, Assessment and Monitoring (CAM).

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at (867) 767-9233 Ext: 53096 or email patrick.clancy@gov.nt.ca.

Sincerely,



Patrick Clancy
Environmental Regulatory Analyst
Environmental Impact Assessment Section
Conservation, Assessment and Monitoring Division
Department of Environment and Natural Resources
Government of the Northwest Territories

ⁱ Government of the Northwest Territories, 1998. Guideline for the General Management of Hazardous Waste in the NWT. Available online at:

http://www.enr.gov.nt.ca/live/pages/wpPages/Waste_Management_Program_publications.aspx

ⁱⁱ Transport Canada, Transportation of Dangerous Goods Regulations. Available on-line at:

<http://www.tc.gc.ca/eng/tdg/clear-menu-497.htm>



December 19, 2016

Tyree Mullaney
Mackenzie Valley Land and Water Board (MVLWB)
7th Floor, 4910-50th Ave
YELLOWKNIFE, NT X1A 2P6

Dear Ms. Mullaney:

Land Use Permit Application: MV2016Q0031 – Rowe's Construction Ltd.

Type of Operation: Quarrying

Location: Km 518, Highway No. 1

The Government of the Northwest Territories (GNWT) reviewed Land Use Permit Application MV2016Q0031 and recommends that the permit be granted.

On December 15, 2016, our Inspector Kyle Christiansen, provided his comments and recommendations for your consideration, via the LWB Online Review System.

Comments received from Territorial Lands Administration and the Mining Recorder's Office indicates no concerns.

Thank you for the opportunity to comment on this application. Should you have any questions or concerns regarding our comments, please contact our Inspector, Kyle Christiansen, at (867) 695-2626 ext. 206.

Sincerely,

Clint Ambrose
Acting Regional Superintendent
North Slave Region

c. Dehcho Region (Fort Simpson), Department of Lands, GNWT

cac



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Environmental Protection Operations Directorate
Prairie & Northern Region
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

December 21, 2016

ECCC File: 5300 000 046 /002
MVLWB File: MV2016Q0031

Jen Potten
Regulatory Coordinator
Mackenzie Valley Land and Water Board
7th Floor, 4922 48th Street
P.O. Box 2130
Yellowknife, NT X1A 2P6

Via online submission

RE: MV2016Q0031 – Rowe's Construction – Quarry on Highway #1 km 518 – Type A Land Use Permit Application

Attention: Jen Potten

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Mackenzie Valley Land and Water Board regarding the above-mentioned land use permit application. ECCC's specialist advice is provided based on our mandate, in the context of the *Canadian Environmental Protection Act*, the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

Should you require further information, please do not hesitate to contact me at (867) 669-4746 or Gabriel.Bernard-Lacaille@canada.ca.

Sincerely,

Gabriel Bernard-Lacaille
Environmental Assessment Coordinator

Attachment(s): ECCC Comments Excel Sheet
Bank Swallow in Sandpits and Quarries Brochure

cc: Georgina Williston, Head, Environmental Assessment North (NT and NU)

Did you know?

The Bank Swallow is a declining migratory bird species that has lost 98% of its Canadian population over the last 40 years.

This insectivorous bird is particularly drawn to sandpits, quarries, stock piles of sand and soil, and sandy banks along water bodies and roads. **Bank Swallows generally dig their burrows in near-vertical banks (slopes of at least 70 degrees) that are more than 2 metres high.** In Quebec, Bank Swallows typically use their nesting sites from mid-April to late August. This is the sensitive period during which the risk of harming the birds is especially high. The absence of the birds in August is a good indicator that the breeding season is over.



The best way to minimize the possibility of contravening the *Migratory Birds Convention Act, 1994* and its regulations is to fully understand the impact that your activities could have on migratory birds and their nests and eggs and to take reasonable precautions and appropriate avoidance measures. In fact, under the Act and its regulations, it is an offence for anyone to kill, hunt, capture, injure or harass a migratory bird or to damage, destroy, remove or disturb its nest or eggs without a permit.

The sand and gravel industry can play a major role in the conservation of Bank Swallows by adopting operating practices that do not harm the species.

www.ec.gc.ca/paom-itmb

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Photos: Bank Swallow © Photos.com

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Aussi disponible en français

What you can do

Before the breeding season (generally before mid-April)

- Prevent Bank Swallows from nesting in areas where operations will be carried out during the breeding season by contouring your piles to have a slope of less than 70 degrees and by creating suitable nesting habitat in inactive areas with vertical faces of at least 70 degrees.
- Install scaring devices to deter Bank Swallows from establishing colonies in active areas.

During the breeding season (generally from mid-April to late August)

- Avoid intense activity near the colony. You can prevent disturbance by marking off a protective buffer zone around the colony and notifying all employees of its existence.
- Generally speaking, there is a particularly high risk of disturbing nesting when noisy activities or vibrations occur within 50 metres of the bird colony. This protective radius is only a rough guideline and must be adjusted after an assessment of the risk factors. In some cases, where operating activities are intense, a larger protective radius may be needed to minimize the risk of disturbance.
- Spend a few minutes flattening vertical faces in active areas at the end of the day to prevent Bank Swallows from digging burrows in them overnight or on weekends.
- Stop excavation work if Bank Swallows colonize a bank in an active area. Activities cannot resume until the birds leave at the end of the breeding period.
- Do not use scaring devices once the colony is established as they may interfere with ongoing Bank Swallow breeding activities.

After the breeding season (generally after late August)

- If a nesting site needs to be excavated after the birds leave, compensate by providing an alternate site that can support nesting in the following year. To be suitable for nesting, the bank must have a slope of at least 70 degrees.

Notify your employees of the restrictions and techniques that can be implemented to prevent detrimental effects on the species.

Thank you for participating in the conservation of Bank Swallows.

L'HIRONDELLE DE RIVAGE

(Riparia riparia)

dans les sablières et les gravières



L'Hirondelle de rivage est un oiseau migrateur en déclin dont la population canadienne a chuté de 98 % au cours des 40 dernières années.

Cet oiseau insectivore est très attiré par les sablières et les gravières, les amas de sable et de terre, et les talus sablonneux en bordure des plans d'eau et des chemins. **En général, les Hirondelles de rivage creusent leur terrier dans des fronts de talus presque verticaux (pente d'au moins 70 degrés) à plus de 2 m de hauteur.** Au Québec, les Hirondelles de rivage utilisent généralement les sites de nidification de la mi-avril à la fin d'août. Il s'agit de la période sensible durant laquelle le risque de nuire aux oiseaux est particulièrement élevé. L'absence des oiseaux en août est un bon indicateur de la fin de la nidification.



La meilleure approche afin de réduire au minimum la possibilité d'enfreindre la *Loi de 1994 sur la convention concernant les oiseaux migrateurs* et ses règlements consiste à bien comprendre le risque d'incidence potentiel de vos activités sur les oiseaux migrateurs, leurs nids et leurs œufs, et à prendre des précautions raisonnables et des mesures d'évitement appropriées. En effet, selon la Loi et ses règlements, quiconque tue, chasse, capture, blesse ou harcèle un oiseau migrateur ou endommage, détruit, enlève ou dérange leurs nids ou leurs œufs sans permis commet un délit.

L'industrie des sablières et des gravières peut jouer un rôle important dans la conservation de l'Hirondelle de rivage en adoptant des pratiques d'exploitation qui ne nuisent pas à l'espèce.

www.ec.gc.ca/paom-itmb

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Also available in English

Avant la période de nidification (en général avant la mi-avril)

- Évitez que des Hirondelles de rivage nichent dans les zones qui seront exploitées durant la période de nidification en profilant vos talus avec une pente inférieure à 70 degrés, et en créant des zones propices à la nidification dans des zones non exploitées, avec des talus dont la pente est d'au moins 70 degrés.
- Installez des dispositifs d'effarouchement pour dissuader les Hirondelles de rivage d'établir une colonie dans les zones exploitées.

Pendant la période de nidification (en général de la mi-avril à la fin d'août)

- Évitez les activités intenses à proximité de la colonie. Vous pouvez empêcher le dérangement en délimitant une zone de protection autour de la colonie et en informant tous les employés de l'existence de cette zone.
- En général, le risque de déranger la nidification est particulièrement élevé si des activités bruyantes ou des vibrations ont lieu à moins de 50 m de la colonie d'oiseaux. Cette distance de protection ne constitue qu'un ordre de grandeur et doit être ajustée après évaluation des facteurs de risque. Dans certains cas, lorsque les activités d'exploitation sont intenses, une plus grande distance de protection peut être nécessaire afin de réduire au minimum le risque de dérangement.
- Prendre quelques minutes à la fin de la journée pour supprimer les talus verticaux afin d'éviter que des Hirondelles de rivage ne commencent à creuser des nids durant la nuit ou durant les fins de semaine.
- Cessez toute activité d'excavation si des Hirondelles de rivage colonisent un talus dans une zone exploitée, et ce jusqu'au départ des hirondelles à la fin de la période de nidification.
- N'utilisez pas de dispositifs d'effarouchement une fois la colonie établie, tant et aussi longtemps que cela peut interférer avec les activités courantes de nidification des Hirondelles de rivage.

Après la période de nidification (en général après la fin d'août)

- Si un site de nidification doit être exploité après le départ des oiseaux, en guise de compensation, voyez à fournir un site de remplacement pouvant soutenir la nidification l'année suivante. Pour être propice à la nidification, le talus doit avoir une pente d'au moins 70 degrés.

Informez vos employés des interdictions et des techniques qui peuvent être mises en œuvre pour éviter les effets néfastes sur l'espèce.

Merci de participer à la conservation de l'Hirondelle de rivage.

BANK SWALLOW (*Riparia riparia*)

in sandpits and quarries



Land Use Permit Security Worksheet

Application Number: MV2016Q0031

Input
Amount Multiplier

Camp (C1)

Temporary Structures

DRAFT

Input number of tent frames or weatherhaven (3.5m x 4.2m)	0	\$200.00	\$0.00
Input number of trailers (3.5m x 15.2m)	3	\$300.00	\$900.00
Input total square metres of other temporary structures (i.e. core shacks)	0	\$2.50	\$0.00

Fixed Structures

Input total square metres of fixed structures	0	\$25.00	\$0.00
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Solid Waste

COPY

For non-burnable material, input # of person days per season	300	\$1.00	\$300.00
For burnable material, input # of person days per season	300	\$0.50	\$150.00

Total C1 \$1,350.00

Regulated / Hazardous Materials (R1)

Based upon on site volume

Explosives; up to 500 kg (~pallet) dry explosives input 1, if none, input 0	0	\$500.00	\$0.00
Additional Explosives; input total kg >500	0	\$0.50	\$0.00
Drilling Muds (oil based); enter number of 63 m ³ (or equivalent) containers	0	\$1,000.00	\$0.00
Used Oil, Lubes and Antifreeze: enter number of pieces of heavy equipment	4	\$500.00	\$2,000.00
Other;			

Total R1 \$2,000.00

Hydrocarbon Storage and Transfer (H1)

Based upon on site volume

Gasoline and Diesel

Enter total volume of gasoline&diesel <25,000 L	25000	\$0.50	\$12,500.00
Enter total volume of gasoline&fuel > 25,000 L	65000	\$0.25	\$16,250.00
			Total Gasoline and Diesel
			\$28,750.00
When fuel is within bermed site or has other safety feature, enter 1, otherwise enter 0	1	25%	-\$7,187.50

Aviation Fuel

Enter total volume of aviation fuel < 25,000 L	0	\$0.50	\$0.00
Enter total volume of aviation fuel > 25,000 L	0	\$0.25	\$0.00
			Total Aviation Fuel
			\$0.00
When fuel is within bermed site or has other safety feature, enter 1, otherwise enter 0	0	25%	\$0.00

Total H1 \$21,562.50

Land Disturbance (L1)

Disturbed Surface Area

(Developed surface area that may require restoration through the use of scarification, reseeding, fertilizing or other similar techniques)

Enter number of hectares disturbed	3	\$1,000.00	\$3,000.00
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Other Land Disturbances

Creek Crossings; enter number of creek crossings	0	\$500.00	\$0.00
Off-Road Activities; if any activities are likely, enter 1	1	\$500.00	\$500.00
Sump Factor; enter total area occupied by sumps in m ²	0	\$10.00	\$0.00
Well Factor; enter number of wells.	0	\$25,000.00	\$0.00

Total L1 \$3,500.00

Land Use Permit Security Worksheet (continued)

Application Number: MV2016Q0031

**Input
Amount Multiplier**

Equipment (E1)

Based upon type of equipment

Enter number of pieces of heavy equipment (i.e. dozer, forklift, large gensets)	1	\$1,000.00	\$1,000.00
Enter number of drills	0	\$1,000.00	\$0.00
Enter number of light vehicles (trucks, atvs, snowmobiles, boats)	0	\$250.00	\$0.00
Enter number of small generators or pumps	0	\$100.00	\$0.00
Enter number of empty fuel storage tanks	0	\$500.00	\$0.00

Total E1

\$1,000.00

Security Calculation

Preliminary Calculation

Enter amount from C1		\$1,350.00
Enter amount from R1		\$2,000.00
Enter amount from H1		\$21,562.50
Enter amount from L1		\$3,500.00
Enter amount from E1		\$1,000.00
Preliminary Calculation, total of above	A	\$29,412.50

Multipliers

Site Access Multiplier. If the project has all weather road access enter 1, if ice road access enter 1.5, if air access enter 2	B	1
Performance Multiplier. If applicant has successfully completed the terms of a LUP enter 0.85, otherwise enter 1	C	0.85
Environmental Risk Factor. If location has high environmental value or unusual environmental risk enter 2. If location is previously disturbed enter 0.75. Otherwise enter 1.	D	0.75

Calculated Security

Multiply preliminary calculation (A) by performance multipliers (B, C and D)	E	\$18,750.47
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Existing Securities

List existing associated permits and amount of overlapping security

Permit:		
Permit:		
Permit:		
Permit:		
Overlapping Securities, total of above	F	\$0.00

Final Security Determination

Subtract overlapping securities (F) from calculated security (E)		\$18,750.47
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Comments
