

November 28<sup>th</sup>, 2019

Mr. Bruce Eddy  
Hammond River Holdings Limited  
210-65 Regent Street  
Fredericton, NB  
E3B 7H8

Mr. Eddy:

**RE: Upham East Gypsum Quarry Project - Environmental Protection Plan for Construction (Phase 1 – Preliminary Site Preparation).**

The Department of Environment and Local Government (DELG) has reviewed the Environmental Protection Plan for Construction (Phase 1—Preliminary Site Preparation) dated November 2019, for the above-noted project. The EPP is hereby approved, subject to the following conditions:

Conditions:

1. The following mitigation measures must be added to the EPP:
  - Nests in complex habitat are difficult to locate. Adult birds avoid approaching their nests in a manner that would attract predators to their eggs or young. Except when the nests searched are known to be easy to locate without disturbing them, active nest searches are not recommended since they have a low probability of locating all nests and are likely to cause disturbance to nesting birds. In many circumstances, incidental take is likely to still occur during industrial or other activities even when active nest searches are conducted prior to these activities. It is recommended that all vegetation clearing be completed outside of the migratory bird breeding season (April 1 to August 28).” Nest searches are not recommended during the bird nesting season in order to avoid impacts to nests; however, breeding bird surveys may be used to identify the presence of potentially nesting birds in an area.
  - Furthermore, some species of migratory birds, including the threatened Common Nighthawk, may be attracted to cleared areas for nesting. Should there be a delay between clearing and operational activities, ground-nesting birds may be attracted to previously cleared areas for nesting. In such a case, nest surveys must be carried out successfully by skilled and experienced observers using appropriate methodology. Should any nests or unfledged chicks be discovered, these must be protected by an appropriate-sized buffer. The proponent must contact ECCC/CWS and DNRED to discuss buffer requirements.



- Canada Warbler and Olive-sided Flycatcher are known to use vegetated wetlands, these species were detected in the vicinity of such habitats within the project area. Vegetation conditions of forested wetlands removed or altered by the project will not be re-established for the life of the project, and will result in a loss of wetland habitat function. As a measure to compensate for the lost habitat function for passerine species at risk (SAR) in instances where such habitat cannot be avoided, conservation allowances are the preferred form of the compensation step in the mitigation hierarchy of avoidance, minimization, and compensation.
- Buffers or setbacks must be established for landbird SAR during the breeding season. Appropriate setback distances are determined on a case-by-case basis dependant on: distance at which nesting birds react to human disturbance and expert opinion, which is often used to supplement scientific data. There are two benchmark measurements to determine an effective setback distance.
  - 1) *Alert distance*: the distance at which the bird adopts an alert posture or emits alarm calls. Birds usually perceive humans as potential predators. They may leave their nests in response to being approached, or abort nesting because of stressful situations.
  - 2) *Flush distance*: the distance at which a bird: takes flight or moves away from a threat, performs distraction displays (such as feigning a broken wing or sitting down on a non-nesting site to draw attention away from the nest), and actively defends the nest.
- Setback distances should be adjusted to the activities causing the greater amounts of disturbance. Significant sources of disturbance include:
  - removal of vegetation and/or soil operations
  - drilling, loud noise, vibration (e.g., seismic blasting from operations)
  - regular approach by humans or vehicles
  - noise exceeding 10 decibels (dB) above ambient noise levels in the natural environment
  - noise greater than about 50 dB

A higher minimum setback distance is required in some circumstances: rural or natural habitats compared to urban backyards, most waterfowl nests compared to nests of songbirds and other small birds, and presence of sensitive species or species at risk. For guidance regarding seabird and waterbird colonies, please refer to [Guidelines to avoid disturbance to seabird and waterbird colonies in Canada](#). Please note that vegetation clearing, blasting, drilling activities, etc. associated with this project must be considered, at a minimum, medium disturbance (i.e. recommended 150m buffer). The following buffers must be established for landbird SAR during the breeding season:

- Low disturbance activities—50 m
- Medium disturbance activities—150 m
- High disturbance activities—300 m

If a SAR landbird is discovered during the breeding bird season, the proponent must contact ECCC/CWS and DNRED to discuss buffer requirements.

2. As per Appendix F of the EPP, the proponent must implement a monitoring program to assess pre-construction and post-construction changes in conditions in the project development area (PDA) for species listed under the *Species at Risk Act* (SARA) and/or designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The monitoring plan must include at least three breeding point count surveys, one of which must be located in forested wetland habitat. As a result of the access road which runs through the property, it is recommended to include a transect survey (in addition to the breeding bird surveys) to fill in any gaps that may be missed during the point count surveys. Once information regarding the exact dates of point count surveys are known, the date information must be sent to ECCC/CWS and DNRED. Baseline monitoring must be conducted prior to construction and again in years 1, 3, and 5 following construction. Following year 3 of the monitoring program, the proponent may apply to the Director, EIA Branch, DELG to determine if continuance in year 5 is warranted.
3. During the Phase 1 preliminary site preparation activities, surface water samples must be collected weekly and during precipitation events. Surface water samples must be collected in the Hammond River, upstream and downstream of the confluence of WC3, as well as the outfall from the settling pond. Parameters that must be monitored are pH, specific conductivity, dissolved oxygen, water temperature, turbidity, calcium, potassium, magnesium, sulphate, chloride, sodium, hardness, total dissolved solids, total suspended solids and alkalinity. Monthly reports must be sent to the Director of the NBDELG's Authorizations Branch with a copy to the Director of the EIA Branch.
4. The total suspended sediments (TSS) must not exceed 25 mg/L above background levels.
5. The proponent must follow all recommendations outlined in the Upham East Gypsum Quarry Archaeological Impact Assessment 2019 Field Evaluation Upham, New Brunswick, Final Report.
6. In addition to contacting the Archaeological Services Branch, New Brunswick Department of Tourism, Heritage and Culture, the proponent must also contact the Wolastoqey Nation in New Brunswick (WNNB) if it is suspected that archaeological resources are discovered.
7. The description of Indigenous Monitor roles and responsibilities must be removed from the EPP.
8. The following topics must be added to the First Nation's Engagement Strategy:
  - Consultation regarding the *Fisheries Act Authorization* and impacts to watercourse and wetlands;
  - Discussion regarding the Indigenous Monitor roles and responsibilities;
  - Consultation regarding the Wetland Compensation Plan and SAR monitoring plan;
  - Archeological resources and WNNB's *Chance Finds Protocol*;
  - Clarity and consultation regarding the energy dissipation pool.
9. Please note that the Groundwater Monitoring Plan (GMP) must include baseline testing of general chemistry, total suspended solids, trace metals, and turbidity for private wells within 2km of the blasting site. Baseline testing for private wells within 1km of the blasting site must also include microbiological parameters.



10. The Water Management Plan (Appendix E) addresses the Department of Transportation and Infrastructure's (DTI) comments regarding the no net increase to DTI infrastructure. However, a copy of the eastern stormwater management plan must be submitted to DTI once it becomes available.

11. No work shall occur within Wetland 2 (WL2) during the Phase 1 preliminary site preparation activities.

Please submit a digital copy of the appropriately revised EPP to DELG before December 5<sup>th</sup>, 2019. It must be ensured that all developers, contractors, and operators associated with the construction of the project are made aware of the most recent version of the EPP and conditions of this approval letter.

Furthermore, all other conditions of the *Certificate of Determination* for this project must still be followed. These conditions include, among other things, the submission of documents for review and approval prior to the start of the construction phase 2 and the operational phase of this project.

Should you have any questions, please feel free to contact Cassandra Colwell at (506) 457-6747.

Sincerely,



Paul Vanderlaan, P.Eng.  
Director, Environmental Impact Assessment Branch

C. Cassandra Colwell, DELG  
Justin Chase, DELG  
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Technical Review Committee