

Glenvale TRC Comments and Responses: Round 2

Comments Received: March 29, 2023

Responses Submitted: May 26, 2023

No.	Category	Comment / Response
1	Birds	<p><u>Comment:</u></p> <p>The Proponent should clarify which bird groups it was targeting with surveys conducted on May 10 and July 22. Breeding season surveys for landbirds are normally conducted in June to early July in New Brunswick.</p> <ul style="list-style-type: none"> • May 10 is too early for a comprehensive breeding bird survey, as many birds are still migrating through, and others have not even yet arrived back from the wintering areas. Early breeders (i.e. non-neotropical migrants), will be on nest and territories by May 10, so the timing may be good species such as chickadees, juncos, grosbeaks, crossbills, etc. However, since not all species would be settled on territories by May 10, “breeding” bird surveys on this date would likely not be representative. • July 22 is too late for breeding bird surveys. Birds sing to attract a mate and defend a territory. By early to mid-July, many landbird species start to go quiet (or at least less vocal) and are therefore less likely to be detected, as the breeding period is at its latter stages for the most part. <p><u>Response:</u></p> <p>Thank you for the information No specific bird groups were being targeted. Dates were chosen to fall within nesting calendar C3. A survey will be conducted in mid-June to mid-July 2023 targeting landbirds, as well as nightjars (PRID-1494).</p>
2	Birds	<p><u>Comment:</u></p> <p>The Proponent does not appear to have conducted any surveys for nightjars.</p> <p>The Proponent should conduct breeding season surveys for landbirds, including surveys for nightjars, at the appropriate time of year. The Proponent should submit detailed landbird and nightjar survey methodologies, results of these surveys, as well as any additional mitigation measures resulting from these surveys, to the Technical Review Committee for review.</p> <p><u>Response:</u></p> <p>Thank you for the information. A survey for nightjars will be conducted between June 15th and July 15th during the full moon phase, breeding bird surveys will be conducted during this time period as well. A report detailing methodologies, results, and any mitigation will be provided to the TRC for review.</p>
3	SAR	<p><u>Comment:</u></p> <p>A map showing locations of surveys in relation to current habitats and proposed project infrastructure should be provided. A similar map should be provided clearly showing the locations where each species at risk (SAR) and species of conservation concern (SOCC) was detected, with a distinct icon for each species. These maps should be provided at an appropriate scale. It should be noted that Figure 5.6.1, which</p>

		<p>includes the 5km Atlantic Canada Conservation Data Centre (ACCDC) study area, and where each icon ends up overlapping with >100 m of the map, does not present a fine enough scale to be useful for the review.</p> <p><u>Response:</u></p> <p>Thank you for the information. Please see attached for a map (Figure 5.6.1B) of the requested information.</p>
4	Birds	<p><u>Comment:</u></p> <p>The Proponent observed Pileated Woodpeckers at 2 point count locations on July 22, 2022. However, it does not appear that any surveys were conducted for Pileated Woodpecker nesting cavities. The Pileated Woodpecker is one of the species listed on Schedule 1 of the amended Migratory Birds Regulations (2022), and as such, the nesting cavities of this species are protected year-round, including when they are not occupied by a migratory bird or viable eggs. In the event that a Pileated Woodpecker nesting cavity is ultimately abandoned, and a proponent wishes to destroy this unoccupied nest, they must submit a notification through the Abandoned Nest Registry, and if the nest remains unoccupied by Pileated Woodpeckers and other migratory bird species for 36 months, it may at that point be destroyed by cutting down the tree.</p> <p>The Proponent should conduct a survey for Pileated Woodpecker nesting cavities. The Proponent should submit its proposed survey methodology, results of surveys, as well as any additional mitigation measures resulting from these surveys to the Technical Review Committee for review. *See attached document for links to Pileated Woodpecker Cavity ID Guide and Other information on Migratory Bird Regulations, 2022.</p> <p><u>Response:</u></p> <p>Thank you for the information. A survey for Pileated woodpecker nesting cavities will be conducted during the breeding bird surveys. A report detailing the results of this and other biophysical surveys conducted in 2023 will be submitted to the TRC.</p>
5	Birds	<p><u>Comment:</u></p> <p>Bird Species of Conservation Concern:</p> <p>An agitated Killdeer was observed during the July 22 point counts in the Project Area, and Spotted Sandpiper was observed incidentally in the Local Assessment Area.</p> <p>The Proponent should provide the following:</p> <ul style="list-style-type: none"> • a map clearly showing where these species were observed in relation to proposed project infrastructure; • measures to avoid/minimize effects on these ground-nesting species, including their highly mobile chicks; and • a monitoring plan. <p><u>Response:</u></p> <p>Thank you for the information. Please find attached a map (Figure 5.6.1A) with the requested information. A monitoring plan for bird observations and measures to avoid/minimize effects on these ground-nesting species, including their highly mobile chicks will be provided in the Environmental Protection Plan for Construction and in the Environmental Management Plan for Operation.</p>

6	Birds	<p><u>Comment:</u></p> <p>On page 40, the Proponent states that while clearing activities will be conducted outside the general nesting period for the region “to the extent possible” and “Should clearing be required within this season, these areas will be surveyed to determine if nesting is occurring within these areas, and nests flagged for avoidance until the young have fledged.” Such nest searches are also mentioned on page 146.</p> <p>Nests in complex habitat are difficult to locate and adult birds avoid approaching their nests in a manner that would attract predators to their eggs or young. Therefore, except for Pileated Woodpecker nesting cavities, CWS does not recommend nest searches in vegetation. Activities that may result in incidental take of nests or eggs should be scheduled to occur outside the migratory bird nesting period.</p> <p>(continued in response #7, below)</p> <p><u>Response:</u></p> <p>Thank you for the information. Clearing of vegetation will occur outside the migratory bird nesting period.</p>
7	Birds	<p><u>Comment:</u></p> <p>[Continued from PRID-1498]</p> <p>In some cases (i.e. simple habitats), nest surveys may be carried out successfully by skilled and experienced observers using appropriate methodology, where only a few likely nesting spots or a small community of migratory birds are expected. Examples of simple habitats include:</p> <ul style="list-style-type: none"> • An urban park consisting mostly of lawns with a few isolated trees; • A vacant lot with few possible nest sites; • A previously cleared area where there is a lag between clearing and construction activities (and where ground nesters may have been attracted to nest in cleared areas or in stockpiles of soil, for instances); or • A structure such as a bridge, a beacon, a tower or a building (often chosen as a nesting spot by robins, swallows, phoebes, Common Nighthawk, gulls and others). <p><u>Response:</u></p> <p>Thank you for the information. Clearing of vegetation will occur outside the migratory bird nesting period.</p>
8	Birds	<p><u>Comment:</u></p> <p>The Proponent is expected to comply with the Migratory Birds Convention Act and associated regulations and to avoid incidental take of nests, eggs and birds during all Project phases and for all activities. Furthermore, in the event that active nests of birds (e.g. ground nesters) are be detected, appropriate-sized buffers would need to be implemented. While buffers to protect nests from disturbance may be flagged, nests should never be marked using flagging tape or other similar material as this increases the risk of nest predation.</p> <p><u>Response:</u></p>

		Thank you for the information. Hammond River Holdings will comply with the <i>Migratory Birds Convention Act</i> . Clearing of vegetation will occur outside the migratory bird nesting period.
9	Birds	<p><u>Comment:</u></p> <p>On page 247, the Proponent states that “If a SAR is encountered, contact will be made to a Species at Risk Biologist at NBDNRED at (506) 453-5873 or by email.” The Proponent should be reminded that Environment and Climate Change Canada’s Canadian Wildlife Service is responsible for migratory birds, including migratory bird SAR.</p> <p><u>Response:</u></p> <p>Thank you for the information. Hammond River Holdings will also notify CWS if a SARA listed SAR is encountered.</p>
10	SAR	<p><u>Comment:</u></p> <p>For Federal Impact Assessments, ss. 79(2) of the Species at Risk Act (SARA) requires that persons responsible for an environmental assessment “must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them.” These measures must:</p> <ul style="list-style-type: none"> • be consistent with best available information including any Recovery Strategy, Action Plan, or Management Plan in a final or proposed version; and • respect the terms and conditions of the SARA regarding protection of individuals, residences, and critical habitat of Extirpated, Endangered, or Threatened species. <p>It is best practice to consider species that are not yet listed under SARA, but have been assessed and designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), as though they were listed under SARA. While there is no federal environmental assessment for this project, we advocate a similar approach for the provincial environmental assessment.</p> <p><u>Response:</u></p> <p>Thank you for the information. There is no federal impact assessment required for this Project, nor are we aware of any critical habitat for Species at Risk in the Local Assessment Area. However, we have defined species of conservation concern in the EIA registration to address specifically the issue being raised by the TRC in this regard, so that rare species that do not have legal protection provincially or federally are also avoided or effects to them are mitigated.</p>
11	Birds	<p><u>Comment:</u></p> <p>Eastern Wood-pewee:</p> <p>Eastern Wood-pewee is a species of Special Concern listed on Schedule 1 of SARA, and was detected at 3 point count locations in July 2022, as well as incidentally. However, it is not clear where this species was observed within the proposed project (see previous comment (PRID-1495) regarding what was detected in relation to the Figure 5.6.1) and no specific measures to avoid adverse effects to this species have been proposed. Further details should be provided. Furthermore, post-construction monitoring is generally recommended to verify predictions.</p>

		<p>Environment and Climate Change Canada's Canadian Wildlife Service generally recommends buffers for landbird SAR as follows during the breeding season:</p> <ul style="list-style-type: none"> • Low disturbance activities – 50 m • Medium disturbance activities – 150 m • High disturbance activities – 300 m <p><u>Response:</u></p> <p>Thank you for the comment. Please see attached for a revised map (Figure 5.6.1B) showing the 3 point count locations of the Eastern Wood-pewee. Details of mitigation of impacts to this species will be included in the Environmental Protection Plan for construction and in the Environmental Management Plan for Operation. While the nature of a quarry does not lend itself well to establishing buffers for bird SAR, Hammond River Holdings will consider the impact of its operations in relation to breeding bird seasons, and minimize these impacts where possible. Examples may include reduced frequency of blasting, avoiding noisy activities during early mornings and early evenings, avoiding operations after dark, and other potential noise avoidance measures.</p>
12	SAR	<p><u>Comment:</u></p> <p>Black Ash:</p> <p>While not yet listed on Schedule 1 of SARA, Black Ash has been assessed as Threatened by COSEWIC. On page 128 of the EIA, it is stated that "... 25 specimens of black ash (<i>Fraxinus nigra</i>) were encountered in the field along WC1, with a diameter at breast height (DBH) ranging between 5 and 30 cm. There was a stand of 20 specimens, along with other sporadic individuals." Further information should be provided:</p> <ul style="list-style-type: none"> • Where was this species identified? Figure 5.5.2B shows icons with locations where "Species of Conservation Concern, Vascular Plant, Field Identified" were identified, but does not distinguish between species. • How many individuals would potentially be affected by the project? • What measures are proposed to avoid or lessen effects to this species? • How would impact predictions and adequacy of mitigation measures be monitored? <p><u>Response:</u></p> <p>Thank you for the comment. Please see updated figure (Figure 5.5.2C) indicating the location of the identified Black Ash. As stated in the EIA registration document, Indigenous communities will be offered to harvest black ash species prior to the onset of construction activities. It is expected the 1 identified specimen in the stockpile area will be impacted. Follow-up vegetation surveys as recommended in the Environmental Protection Plan for construction and in the Environmental Management Plan for Operation will determine impact predictions and effectiveness of mitigation efforts.</p>
13	Wildlife	<p><u>Comment:</u></p> <p>Monarch:</p>

		<p>The Monarch is a species of Special Concern, listed on Schedule 1 of SARA, and has been reassessed as Endangered by COSEWIC. In Section 5.6.2.3, the Proponent states that “During the 2022 field surveys, one SAR, a monarch (<i>Danaus plexippus</i>), was observed in the fallow field habitat within the PDA.” It is not clear whether milkweed or nectar sources for Monarch are present in the Project Area, as Appendix C – Vegetation Species List contains the list of bird species detected in Square 20LR28 during field work for the 2nd Maritimes Breeding Bird Atlas, rather than a list of plants detected in the project area. The Proponent should clarify whether milkweed and/or nectar sources for Monarch are present in the Project area, and if so, whether these would be affected by the Project. The Proponent should clarify what measures are proposed to avoid or lessen effects to Monarch, and how impact predictions and adequacy of mitigation measures would be monitored.</p> <p><u>Response:</u></p> <p>Thank you for the comment. Milkweed was not in the master plant list for caterpillars to feed on. However, some nectar source plants for adult monarchs were on the master plant list (in old field and riparian wetland habitat): white meadowsweet, common yarrow, goldenrods, and clovers. There are mitigation measures in the EPP for Wildlife and SAR (including monarchs).</p>
14	Birds	<p><u>Comment:</u></p> <p>Birds and Lights:</p> <p>Bird collisions at lit and floodlit structures are a known problem. Attraction to lights may result in collision with lit structures or their support structures, or with other birds. Disoriented birds are prone to circling a light source and may deplete their energy reserves and either die of exhaustion or drop to the ground where they are at risk of predation.</p> <p>It is recommended that proponents avoid or restrict the time of operation of exterior decorative lights such as spotlights and floodlights whose function is to highlight features of buildings, or to illuminate an entire building. Especially on humid, foggy or rainy nights, their glow can draw birds from far away. It would be best for the birds if these lights were turned off, at least during the migratory season, when the risk to birds is greatest and also during periods when Leach’s storm-petrels would be dispersing from their colonies.</p> <p>Lighting for the safety of the employees should be shielded to shine down and only to where it is needed, without compromising safety.</p> <p>Street and parking lot lighting should also be shielded so that little escapes into the sky and it is directed where required. LED lighting fixtures are generally less prone to light trespass and should be considered.</p> <p><u>Response:</u></p> <p>Thank you for the comment. Hours of operation during the bird breeding season will be in daylight, and therefore it is not expected lighting will be required. Lighting may be required during the winter months, when less daylight is available. Lighting will only be used to where is necessary. Dusk to dawn will not be employed for this project.</p>
15	Wildlife	<p><u>Comment:</u></p> <p>Wildlife Response:</p> <p>The Proponent should ensure that provisions for wildlife response are identified in emergency prevention & response plans. The following information should be included:</p>

		<ul style="list-style-type: none"> • Mitigation measures to deter migratory birds from coming into contact with polluting substance (e.g. oil); • Mitigation measures to be undertaken if migratory birds and/or sensitive habitat becomes contaminated; • The type and extent of monitoring that would be conducted in relation to various spill events. <p><u>Response:</u></p> <p>Thank you for the comment. Mitigation measures and monitoring, as described in the comment, will be included in the Environmental Protection Plan for construction and in the Environmental Management Plan for Operation.</p>
16	Birds	<p><u>Comment:</u></p> <p>Since even small spills of oil can have serious effects on migratory birds, every effort should be taken to ensure that no oil spills occur. The Proponent should ensure that all precautions are taken by staff to prevent fuel leaks from equipment, and contingency plans in case of oil spills should be prepared.</p> <p><u>Response:</u></p> <p>Thank you for the comment. Staff will be trained on how to take precautions to prevent fuel leaks from equipment, and will have spill kits readily available should a leak occur. A limited volume of fuel and lubricants will be properly stored on site in order to keep the equipment operational. Storage details will be provided in the Environmental Protection Plan for construction and in the Environmental Management Plan for Operation.</p>
17	Birds	<p><u>Comment:</u></p> <p>If there is ultimately a need to decommission a building or structure used for nesting by migratory birds, ECCC-CWS should be consulted in a timely manner in advance of any proposed decommissioning activities for species-specific considerations.</p> <p><u>Response:</u></p> <p>Thank you for the comment. ECCC-CWS will be contacted should the need for decommissioning of infrastructure, that is used for nesting by migratory birds, is required. There are no permanent buildings or structures associated with the project – only a mobile trailer to serve as an office.</p>
18	Reclamation	<p><u>Comment:</u></p> <p>ECCC-CWS recommends that a variety of species of plants native to the general project area be used in revegetation efforts. Should seed mixes for herbaceous native species for the area not be available, it should be ensured that plants used in revegetation efforts are not known to be invasive.</p> <p>ECCC-CWS also recommends that measures to diminish the risk of introducing invasive species be developed and implemented. These measures could include:</p> <ul style="list-style-type: none"> • cleaning and inspecting construction equipment prior to transport from elsewhere (not limited to out of province equipment) to ensure that no plant matter is attached to the machinery (e.g. use of pressure water hose to clean vehicles prior to transport); and

		<ul style="list-style-type: none"> regularly inspecting equipment prior to, during and immediately following construction in wetland areas and in areas found to support Purple Loosestrife to ensure that plant matter is not transported from one construction area to another. <p><u>Response:</u></p> <p><u>Response:</u></p> <p>Thank you for the comment. Details of revegetation efforts will be outlined in the Mine and Reclamation Plan. Hammond River Holdings will implement the recommended measures to reduce the risk of introducing invasive species as noted in the comment, to the extent possible.</p>
19	Birds	<p><u>Comment:</u></p> <p>Certain species of migratory birds (e.g. Bank Swallows) may nest in large piles of soil left unattended/unvegetated during the most critical period of breeding season (April 15th through August 15th). To discourage this, the proponent should consider measures to cover or to deter birds from these large piles of unattended soil during the breeding season. If migratory birds take up occupancy of these piles, any industrial activities (including hydroseeding) will cause disturbance to these migratory birds and inadvertently cause the destruction of nests and eggs. Alternate measures will then need to be taken to reduce potential erosion, and to ensure that nests are protected until chicks have fledged and left the area. For a species such as Bank Swallow, the period when the nests would be considered active would include not only the time when birds are incubating eggs or taking care of flightless chicks, but also a period of time after chicks have learned to fly, because Bank Swallows return to their colony to roost.</p> <p>See also for example the attached guidance concerning beneficial management practices that should be considered for implementation when designing mitigation measures for Bank Swallows, as well as guidance provided at https://www.canada.ca/en/environment-climate-change/services/migratory-bird-conservation/publications/bank-swallow-riparia-sandpits-quarries.html .</p> <p><u>Response:</u></p> <p>Thank you for the comment and information. Details of reclamation will be provided in the Mine and Reclamation Plan, which has yet to be conceived. However, Hammond River Holdings is under the opinion that progressive reclamation will be completed on site features once they are no longer in use. As such, when stockpiling overburden has been completed, reclamation of the stockpile will begin. Details of what this reclamation will include (hydroseeding, planting of shrubs and trees, etc.) will be provided in the Mine and Reclamation Plan.</p>
20	Birds	<p><u>Comment:</u></p> <p>Certain species of migratory birds may nest on the sides of buildings, bridges, or other pieces of infrastructure. Additionally, some species may nest on equipment, if they are left unattended/idle for long periods of time. ECCC-CWS recommends the following beneficial management practices:</p> <ul style="list-style-type: none"> The proponent should ensure that project staff are aware of the potential of migratory bird nests on infrastructure, buildings, and bridges, if applicable. If a nest is discovered, the proponent should conduct no activities around the nest that may cause the nest to be abandoned or destroyed. Activities should be suspended until the chicks have fledged and left the area.

		<ul style="list-style-type: none"> • If the proponent anticipates that birds may nest on infrastructure, the proponent should install anti-perching and nesting exclusion devices (e.g. mesh netting, chicken wire fencing, etc.) before any nest attempts are made. <p><u>Response:</u></p> <p>Thank you for the comment. Given the straightforward nature of the Project, the only building on-site will be a portable office trailer and equipment on-site will be limited to heavy mobile equipment, a truck scale, and a portable crusher, all of which will be in active use daily with little potential for use by nesting birds. That stated, mitigation measures to prevent migratory birds from nesting on project equipment or infrastructure will be included in the Environmental Protection Plan for construction and in the Environmental Management Plan for Operation.</p>
21	Wetlands	<p><u>Comment:</u></p> <p>The Federal Policy on Wetland Conservation:</p> <p>The Federal Policy on Wetland Conservation (FPWC) is applicable to any Federal Departments exercising a power, duty, or function that would permit the carrying out of the project or associated activities. The policy recognizes the importance of wetlands to the environment, the economy and human health, and promotes a goal of no-net-loss of wetland functions. In support of this goal, the FPWC and related implementation guidance identify the importance of planning, siting, and designing a project in a manner that accommodates a consideration of mitigation options in a hierarchical sequence – avoidance, minimization, and as a last resort, compensation.</p> <p>For those potentially affected wetlands where the FPWC would be applicable, and avoidance is deemed not possible, a detailed description of potential effects, and of the reasons why avoidance and minimization of impacts were determined to not be possible should be provided. The mitigation measures and monitoring plan, as well as a proposed compensation plan, should be consistent with those proposed for other projects in Atlantic Canada.</p> <p>A copy of the FPWC can be found at http://publications.gc.ca/pub?id=9.686114&sl=0.</p> <p><u>Response:</u></p> <p>Thank you for the information. A wetland compensation plan will be provided for the impacted wetlands, consistent with the provincial Wetlands Conservation Policy and related <i>Watercourse and Wetland Alteration Regulation</i>. We are not aware of any power, duty, or function to be exercised by the federal government in respect of this project.</p>
22	Birds	<p><u>Comment:</u></p> <p>The Migratory Birds Convention Act (MBCA) protects most bird species in Canada however, some families of birds are excluded. A list of species under MBCA protection can be found at</p> <p>https://www.canada.ca/en/environment-climate-change/services/migratory-birds-legal-protection/list.html.</p> <p>Under Section 5(1) of the Migratory Birds Regulations (MBR), it is forbidden to capture, kill, take, injure or harass a migratory bird; or damage, destroy or take a nest or egg of a migratory bird, excluding under the exceptions listed in 5(2) of the MBRs, or under the authority of a permit. It is important to note that under the current MBR, no permits can be issued for the harm of migratory birds caused by development projects or other economic activities.</p>

		<p>Furthermore, Section 5.1 of the MBCA describes prohibitions related to deposit of substances harmful to migratory birds:</p> <p>“5.1 (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area. (2) No person or vessel shall deposit a substance or permit a substance to be deposited in any place if the substance, in combination with one or more substances, results in a substance — in waters or an area frequented by migratory birds or in a place from which it may enter such waters or such an area that is harmful to migratory birds.”</p> <p><u>Response:</u></p> <p>Thank you for the information.</p>
23	Birds	<p><u>Comment:</u></p> <p>It is the responsibility of the proponent to ensure that activities comply with the MBCA and regulations. In fulfilling its responsibility for MBCA compliance, the proponent should take the following points into consideration:</p> <ul style="list-style-type: none"> • Information regarding regional nesting periods can be found at https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods.html. Some species protected under the MBCA may nest outside these timeframes. • Most migratory bird species construct nests in trees (sometimes in tree cavities) and shrubs, but several species nest at ground level (e.g., Common Nighthawk, Killdeer, sandpipers), in hay fields, pastures or in burrows. Some bird species may nest on cliffs or in stockpiles of overburden material from mines or the banks of quarries. Some migratory birds (including certain waterfowl species) may nest in head ponds created by beaver dams. Some migratory birds (e.g., Barn Swallow, Cliff Swallow, Eastern Phoebe) may build their nests on structures such as bridges, ledges or gutters. [continued in question 24] <p><u>Response:</u></p> <p>Thank you for the information. Activities that will take place at the proposed Glenvale Gypsum Quarry will comply with the MBCA and regulations.</p>
24	Birds	<p><u>Comment:</u></p> <p>[continued from question 23]</p> <ul style="list-style-type: none"> • One method frequently used to minimize the risk of destroying bird nests consists of avoiding certain activities, such as clearing, during the regional nesting period for migratory birds. • The risk of impacting active nests or birds caring for pre-fledged chicks, discovered during project activities outside the regional nesting period, can be minimized by measures such as the establishment of vegetated buffer zones around nests, and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area. It is incumbent on the proponent to identify the best approach, based on the circumstances, to complying with the MBCA. <p>Further information can be found at https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html</p>

		<p><u>Response:</u></p> <p>Thank you for the information. Activities that will take place at the proposed Glenvale Gypsum Quarry will comply with the MBCA and regulations.</p>
25	SAR	<p><u>Comment:</u></p> <p>Species at Risk Act:</p> <p>The Species at Risk Act (SARA) "General prohibitions" apply to this project. In applying the general prohibitions, the proponent, staff and contractors, should be aware that no person shall:</p> <ul style="list-style-type: none"> • kill, harm, harass, capture or take an individual; • possess, collect, buy, sell or trade an individual, or any part or derivative; • damage or destroy the residence of one or more individuals. <p>General prohibitions only apply automatically:</p> <ul style="list-style-type: none"> • on all federal lands in a province, • to aquatic species anywhere they occur, • to migratory birds protected under the Migratory Birds Convention Act (MBCA) 1994 anywhere they occur. <p><u>Response:</u></p> <p>Thank you for the information. Hammond River Holdings acknowledges the SARA General Prohibitions apply to the Project.</p>
26	SAR	<p><u>Comment:</u></p> <p>Section 33 of SARA prohibits damaging or destroying the residence of a listed threatened, endangered, or extirpated species. For migratory birds species at risk (SAR), this prohibition immediately applies on all lands or waters (federal, provincial, territorial and private) in which the species occurs.</p> <p>For project assessments, SARA requires that:</p> <p>79 (1) Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted, and every authority who makes a determination under paragraph 82(a) or (b) of the Impact Assessment Act in relation to a project, must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.</p> <p>(2) The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans.</p>

		<p>For species which are not yet listed under SARA, but are listed under provincial legislation only or that have been assessed and designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), it is best practice to consider these species in EA as though they were listed under SARA.</p> <p><u>Response:</u></p> <p>Thank you for the information. Though Eastern Wood-Pewee was identified within the PDA, we are not aware of any SAR that will be directly affected by this Project. Activities that will take place at the proposed Glenvale Gypsum Quarry will comply with the MBCA and SARA regulations. If a SAR is discovered, we will notify CWS as soon as practicable and every effort will be made to avoid direct effects to SOCC.</p>
27	Water Quality	<p><u>Comment:</u></p> <p>Water Quality:</p> <p>Pollution prevention and control provisions of the Fisheries Act are administered and enforced by ECCC. Subsection 36(3) of the Fisheries Act prohibits “anyone from depositing or permitting the deposit of a deleterious substance of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter such water”.</p> <p>It is the responsibility of the proponent to ensure that activities are managed so as to prevent the release of substances deleterious to fish. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters. Additional information on what constitutes a deposit under the Fisheries Act can be found here: https://www.canada.ca/en/environment-climate-change/services/managing-pollution/effluent-regulations-fisheries-act/frequently-asked-questions.html</p> <p><u>Response:</u></p> <p>Thank you for the information. A limited volume of fuel and lubricants will be properly stored on site in order to keep the equipment operational. The only liquid effluent from the project will be treated runoff from the settling pond, which is not expected to contain any contaminants other than possible suspended sediments. Mitigation measures will be implemented to reduce the risk of deleterious substances (such as fuels and lubricants contained in heavy equipment) being released to the surrounding environment. Details on mitigation measures will be provided in the Environmental Protection Plan for construction and in the Environmental Management Plan for Operation.</p>
28	Accidents and Malfunctions	<p><u>Comment:</u></p> <p>Accidents and Malfunctions:</p> <p>Hazardous materials (e.g. fuels, lubricants, hydraulic oil) and wastes (e.g. waste oil) should be managed so as to minimize the risk of chronic and/or accidental releases. For example, the proponent should encourage contractors and staff to undertake refueling and maintenance activities on level terrain, at a suitable distance from environmentally sensitive areas including watercourses, and on a prepared impermeable surface with a collection system.</p>

		<p>The proponent is encouraged to prepare contingency plans that reflect a consideration of potential accidents and malfunctions and that take into account site-specific conditions and sensitivities. The Canadian Standards Association publication, Emergency Preparedness and Response, CAN/CSA-Z731-03, reaffirmed 2014), is a useful reference.</p> <p>All spills or leaks, such as those from machinery or storage tanks, should be promptly contained and cleaned up (sorbents and booms should be available for quick containment and recovery), and reported to the 24-hour environmental emergencies reporting system (Maritime Provinces 1-800-565-1633).</p> <p><u>Response:</u></p> <p><u>Response:</u></p> <p>Thank you for the information. A limited volume of fuel and lubricants will be properly stored on site in order to keep the equipment operational. Contingency plans will be provided in the Environmental Protection Plan for construction and in the Environmental Management Plan for Operation.</p>
29	Water Quality	<p><u>Comment:</u></p> <p>In the response to comment 9 in Round 1 (PRID-1372), the proponent anticipates that the pit lake that will be created at mine closure will be similar in water composition and ecological characteristics to the Gypsum Mine Lake in NS or the former Lafarge quarry. Is the proponent able to provide any basic water quality information for these two example lakes, particularly pH? Do either of these lake support fish now?</p> <p><u>Response:</u></p> <p>Thank you for the comment. We are unaware of the pH or presence/absence of fish in Gypsum Mine Lake, Nova Scotia or the former Lafarge Quarry. However, a water sample was collected from the settling pond at the Upham East gypsum quarry, which is expected to be of similar conditions to those of the pit lake. The pH as measured by RPC was 7.4.</p>
30	Surface Water Management Plan	<p><u>Comment:</u></p> <p>This is a reminder that in the proponent response PRID 1420 in the previous review iteration, the proponent deferred the required Stormwater Management Plan. Please attach to your response to this comment if available, otherwise set the response status to "Deferred".</p> <p><u>Response:</u></p> <p>The <i>Surface Water Management Plan</i> was submitted during the previous round of TRC questions. The details in the document covers the details that would be discussed in a Stormwater Management Plan. As such, a specific document titled <i>Stormwater Management Plan</i> will not be submitted. Please refer to the Surface Water Management Plan dated March 6, 2023 for further information on stormwater and runoff management.</p>
31	Surface Water Management Plan	<p><u>Comment:</u></p> <p>DTI has reviewed the Surface Water Management Plan and we have no concerns.</p>

		<p>When the Storm Water Management Plan is provided, please note that the system capacity should be based on the maximum projected future rainfall events over the expected lifespan of the project.</p> <p><u>Response:</u></p> <p>As stated in the Surface Water Management Plan, the system is designed such that it can handle the additional rainfall without overtopping the banks of the pond and ditches, based on the future climate rainfall period of 2023 – 2073. Given the operational period for the site is expected to be in the order of 10 years, the preliminary design is thought to be highly conservative.</p>
32	Setbacks	<p><u>Comment:</u></p> <p>Regarding proponent responses 7 and 29 (PRID-1370 & 1458), the Quarry Siting Standards will apply for the Glenvale quarry. The Approval to Operate will be issued in accordance with the Quarry and Aggregate Processing Sector Standard likely with the addition of a few site-specific conditions. If the setbacks cannot be met and permission from the owners of the receptors cannot be obtained, the department may consider some deviation from some setbacks with proper mitigation or monitoring proposed by the proponent. Settling ponds are also included in the Final Operational Perimeter in addition to the areas outlined previously (open pit, stockpile areas, and equipment footprints).</p> <p><u>Response:</u></p> <p>As previously stated, Hammond River Holdings has the understanding that the Quarry Siting Standards do not apply as the project is under the rigorous EIA process. However, below are each of the setbacks stated in the Quarry Siting Standards and how the project addresses each one that are applicable.</p> <ul style="list-style-type: none"> A. 30 metres of the right-of-way of a public highway. Project features and activities will be greater than 30 m from the right-of-way from a public highway. B. 10 m of an existing road or trail. Project features and activities will be greater than 10 m from an existing road or trail. C. 100m of any public highway structure. Project features and activities will be greater than 100 m from public highway structures. D. 60 m of the bank or ordinary high water mark on any watercourse or regulated wetland. A WAWA permit is currently in preparation for developing site features that will impact site watercourses and wetland. Hammond River Holdings will follow the stipulations outlined in the WAWA permit. E. 30m of a Protected Natural Area. Project features and activities will be greater than 30 m from a Protected Natural Area. F. 100 m of foundation of residential, industrial, institutional, or commercial structure. Project features and activities will be greater than 100 m from foundation of residential, industrial, or commercial structures. G. 30 m of wellfield. Project features and activities will be greater than 30 m from a wellfield H. 30 m Protected Area B. Project features and activities will be greater than 30 m from Protected Area B. I. 30 m from adjacent residential property.

		<p>The quarry footprint will be approximately 6 m from adjacent properties on the western, northern, and eastern side of the quarry, as dictated by the <i>Mining Act</i>. A 30 m setback from adjacent properties will significantly limit the resource. Further, the nearest residence on adjacent properties is approximately 300 m from the quarry footprint. As such, we respectfully request a variance of this 30 m setback specified in the Guideline and that the 6 m setback from the <i>Mining Act</i> be used instead, given that the Project will be regulated under that act.</p> <p>J. 30 m of any non-residential property. The quarry footprint will be approximately 6 m from adjacent properties on the western, northern, and eastern side of the quarry, as dictated by the <i>Mining Act</i>. A 30 m setback from adjacent properties will significantly limit the resource. Further, the nearest non-residential infrastructure on adjacent properties is greater than 300 m from the quarry footprint. As such, we respectfully request a variance of this 30 m setback specified in the Guideline and that the 6 m setback from the <i>Mining Act</i> be used instead, given that the Project will be regulated under that act.</p> <p>K. 600 m from any drinking water supply well. Given that the nearest owner occupied house is located approximately 300 m from the quarry footprint, Hammond River Holdings is not able to meet this setback and is therefore requesting a variance from this 600 m setback specified in the Guideline. Instead, Hammond River Holdings has committed to periodic sampling of potable wells located within 600 m of the quarry, as outlined in its recently submitted Groundwater Monitoring Plan; please refer to the Groundwater Monitoring Plan for further details.</p>
33	Blast Monitoring Plan	<p><u>Comment:</u> Prior to issuing an Approval to Operate, the proponent will need to develop a blast monitoring plan to submit to the department for review. The plan will outline actions to be taken prior to each blast at the Facility, including but not limited to monitoring for vibrations and air blast, locations of each monitor, public notification procedures, and audible blast warning procedures.</p> <p><u>Response:</u> Thank you for the information. The Blast Monitoring Plan will be submitted for the TRC's review.</p>
34	Groundwater Monitoring Plan	<p><u>Comment:</u> Regarding the Groundwater Monitoring Plan:</p> <p>1) How were the locations of the monitoring wells determined, what criteria were used?</p> <p><u>Response:</u> The monitoring well locations to the north and west sides of the quarry were chosen to be in the same geological unit as potable wells would be located north of the quarry. The monitoring wells to the east and south were chosen due to their proximity to nearby houses.</p> <p>2) Does there need to be monitoring in the SW corner of the property (south of the open pit and gypsum stock piling area) in order to evaluate any potential impacts to residential properties to the SW?</p> <p><u>Response:</u> Groundwater flow is anticipated to be to the east, towards the North River. Therefore, the monitoring wells located to the south of the quarry are expected to be a sufficient early warning indicator for houses south of the project site. However, after careful consideration,</p>

		Hammond River Holdings has decided to add a nested pair of monitoring wells in the southwest corner. A revised Groundwater Monitoring Plan, with the updated locations, is attached.
35	Surface water management plan	<p><u>Comment:</u></p> <p>Regarding the surface water management plan, it is recommended that if pit water levels are high, the proponent should take the weekly grab sample after pumping to ensure surface water quality of the watercourse will not be impacted.</p> <p><u>Response:</u></p> <p>Thank you for the information. A Surface Water Monitoring Plan will be submitted for the TRC's review, which will include details of frequency of sampling.</p>
36	Water Quality	<p><u>Comment:</u></p> <p>In the baseline monitoring information from the EIA Registration document, no date was given for when the samples were collected (assuming it was one of the fish survey days in July). For future reference, please include the date and time of sample collection when reporting water quality results.</p> <p><u>Response:</u></p> <p>Thank you for the information. Dates will be provided for future sampling. Note, the date for Water quality in-situ sampling in the EIA Registration Document was on July 20-21, 2022.</p>
37	Water Quality	<p><u>Comment:</u></p> <p>For future reports, DELG recommends the use of mg/L not % DO for reporting and interpretation of DO results.</p> <p><u>Response:</u></p> <p>Thank you for the information. DO results will be provided in mg/L in the future.</p>
38	Site layout	<p><u>Comment:</u></p> <p>Regarding the proponent response to review comment 49 from round 1 (PRID-1479), there appears to be suitable upland habitat on the property for the proposed developments. Specifically, to the south of the watercourse in the forested area on the property. Could this area be utilized further? Is it feasible to redesign to avoid developing proposed structures in delineated wetland habitat?</p> <p><u>Response:</u></p> <p>If the stockpile were to be moved south of its current location, the stockpile would be on a slope, causing stability concerns. Further, the stockpile would be on the opposite side of the settling pond, meaning drainage and runoff from the stockpile would enter the stream directly instead of being directed to the settling pond. Finally, two roads would have to be created (one for highway trucks and one for rock trucks) through the wetlands and watercourses to get to the area in question. As such, the chosen location for the stockpiles is strategic from an operational point of view, as well as from an environmental perspective.</p>

39	Surface water management plan	<p><u>Comment:</u></p> <p>Please provide a site plan which includes the proposed drainage channels for the stormwater management.</p> <p><u>Response:</u></p> <p>Thank you for the comment. Please see site plan attached, which was Figure 1 in the Surface Water Management Plan with the proposed drainage channels.</p>
40	Wetland	<p><u>Comment:</u></p> <p>What is the footprint (square metres) of permanently impacted wetland proposed as per the latest site plan, 2.3.1_WatercourseImpacts.pdf? Please provide an updated number any time the proposed site plan is updated.</p> <p><u>Response:</u></p> <p>Thank you for the comment. The area of the impacted wetland is 27,500 square metres.</p>
41	Wetland compensation plan	<p><u>Comment:</u></p> <p>We understand a Wetland Compensation Plan will be developed at a later date. What is the proposed method of wetland compensation at this time?</p> <p><u>Response:</u></p> <p>The proposed approach is to work with Ducks Unlimited Canada to have them carry out a wetland restoration on behalf of Hammond River Holdings. A wetland compensation plan will be submitted for the TRC's review.</p>
42	Site layout	<p><u>Comment:</u></p> <p>Please note that if the new channel of the watercourse or its 30 metre buffer zone is not entirely on the proponent's property, consent from the affected adjacent landowner(s) will be required as the regulated area may impact their properties and their requirements to obtain WAWA permits in the future.</p> <p><u>Response:</u></p> <p>Thank you for the comment. At this time, proposed activities will not occur within buffers that would impact adjacent properties.</p>
43.	PDA / LAA	<p><u>Comment:</u></p> <p>In some places, the Local Assessment Area (LAA) is referred to as being a 2 km radius (e.g. Figure 5.8.2 – Land Use in the LAA) around the PDA, and in others as being a 3 km radius (e.g. Fig. 5.7.1 & Fig. 5.7.2). Please explain or correct this discrepancy.</p> <p>What radius (2 km vs 3 km) will be applied in the communication plan for blasting activities?</p> <p><u>Response:</u></p> <p>The LAA can be viewed as the zone of influence of the Project for each VC, and it naturally varies from one VC to another based on the extent of that zone of influence. For example, fugitive dust and noise normally attenuate to near background levels at approximately</p>

		<p>1-2 km from the source, so a 2 km LAA was selected for the atmospheric environment VC, whereas the zone of influence on agricultural land and livestock was selected as 3 km to offer a level of conservatism. This is normal practice in environmental assessment.</p> <p>Though agricultural land VC radius logically should be the same as land use, we decided that was 3 km was more appropriate to factor in that livestock may be more sensitive to effects of the project.</p> <p>For clarity, we offer direct notification of blasting activities to residents within a 2 km radius from the quarry boundaries. However, notifications will be posted to the project website for anyone to view.</p>
44.	Blasting Notification	<p><u>Comment:</u></p> <p>Comment 37 response 1466 – The proponent’s response states: “Notification will be provided prior to blasting so that appropriate preparation by local residents and farmers can be made.” How and when (how much in advance) will this notification be provided? Will notification be provided prior to every blasting event?</p> <p><u>Response:</u></p> <p>Notification will be given at least 24 hours prior to blasting events. Notifications will be provided through email (to those who wish to provide their email) as well as on the Project’s website. Notification will be provided prior to every blasting event.</p>