MINISTÈRE DE L'ENVIRONNEMENT, DE LA LUTTE CONTRE LES CHANGEMENTS CLIMATIQUES, DE LA FAUNE ET DES PARCS

REQUEST FOR VERIFICATION OF EXEMPTION FOR QUARRY OPENINGS AND THE USE OF MOBILE ASPHALT CONCRETE PLANTS AS PART OF THE 2023/2024 REHABILITATION AND MAINTENANCE WORK ON THE BILLY-DIAMOND HIGHWAY AND CHISASIBI ROAD

QUESTIONS AND ANSWERS DOCUMENT

NOVEMBER 2023 CONFIDENTIAL

WSP REFERENCE: 211-10477-00



SIGNATURES

PREPARED BY

Gino Beauchamp Project Manager Earth & Environment November 30, 2023

Date

Jocelyn Bonin, Eng. M.Sc.A (OIQ No.: 111974)
Project Manager

Road and Infrastructure Engineering Abitibi-Témiscamingue and Northern Quebec

Date

November 30, 2023

LIMITATIONS

WSP Canada Inc ("WSP") has prepared this report solely for its addressee, Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs, in accordance with the consultant agreement between the parties. In the event that a consultant agreement has not been executed, the parties agree that WSP's General Terms and Conditions as Consultant will govern their business relationship, which were provided to you prior to the preparation of this report.

This report is intended to be used in its entirety. No extract can be taken as representative of the results of the assessment.

The conclusions presented in this report are based on work carried out by technical, trained and professional personnel, in accordance with their reasonable interpretation of current and accepted engineering and technical practices at the time the work was carried out.

The contents and opinions expressed in this report are based on observations and/or information available to WSP at the time of its preparation, applying investigative techniques and engineering analysis methods consistent with those customarily used by WSP and other engineers/technicians working under similar conditions, and subject to the same time, financial and physical constraints applicable to this type of project.

WSP denies and disclaims any obligation to update this report if, after the date of this report, conditions appear to differ materially from those presented in this report; however, WSP reserves the right to amend or terminate this report on the basis of additional information, documents or evidence.

WSP makes no representation as to the legal significance of its conclusions.

Disclosure of any information contained in this report is the sole responsibility of the recipient. If any third party uses, relies upon, or makes any decision or takes any action based upon this report, such third party shall be solely responsible therefor. WSP accepts no responsibility for any damages that any third party may suffer as a result of the use of this report or for any damages that may result from any decision or action taken based on this report.

WSP has performed its services offered to the recipient of this report in accordance with the consultant agreement agreed upon by the parties while exercising the degree of care, skill and diligence customarily exercised by members of the same profession in providing the same or comparable services with respect to projects of a similar nature under similar circumstances. It is understood and agreed between WSP and the recipient of this report that WSP makes no warranty, express or implied, of any kind. Without limiting the generality of the foregoing, WSP and the recipient of this report agree and understand that WSP makes no representations or warranties as to the sufficiency of its scope of work for the purpose intended by the recipient of this report.

In preparing this report, WSP has relied in good faith on information provided by third parties, as indicated in the report. WSP has reasonably assumed that the information provided is correct, and WSP cannot therefore be held responsible for the accuracy or completeness of such information.

The survey monuments and benchmarks used in this report are intended primarily to establish differences in relative elevation between sampling locations, and are not to be used for any other purpose. In particular, they may not be used for grading, excavation, construction, planning, development, etc., purposes.

The original electronic file transmitted to you will be retained by WSP for a minimum period of ten years. WSP assumes no responsibility for the integrity of the file transmitted to you which is no longer under WSP's control. Thus, WSP assumes no responsibility for any changes made to the electronic file following its transmission to the recipient.

These limitations are considered an integral part of this report.



TABLE OF CONTENTS

Introd	uction1
QC-1	1
QC-2	3
QC-3	5
QC-4	6
QC-5	7
QC-6	7
QC-7	8

Appendices

- 1 Cree Consultation Report Phase 2 of the Billy-Diamond Road and Chisasibi Road Rehabilitation Project
- 2 Consultation reports
 - 2a Wemindji
 - 2b Chisasibi
- 3 Operating lease for Pk 454 quarry issued by the MRNF
- 4 Preliminary technical note Summary biophysical characterization of five potential quarry sites along the Billy-Diamond and Chisasibi roads
- 5 Quote 185

Introduction

On May 18, 2023, the Société de développement de la Baie-James received questions regarding the abovementioned project. Enclosed are the answers to these questions, sent by its consultant WSP Canada Inc.

The information request questions are presented in full, in bold type, for easy distinction in the text from the answers provided¹.

QC-1

No mitigation measures are presented by the proponent to limit the impacts of quarry operations on land users and nearby residents. The proponent must present the impacts of quarry operations, particularly in terms of safety, for the various users of the territory, including users of the Billy-Diamond Road, the Chisasibi Road and nearby homeowners. It must also present the mitigation measures it plans to put in place to alleviate these impacts.

Answer:

Impacts of quarrying operations

The anticipated impacts of quarrying operations were presented at each consultation activity with interested parties concerned by the Billy-Diamond Road and Chisasibi Road rehabilitation and maintenance project - Phase II. Cree tallymen affected by the quarries under study and other active land users, as well as the Chiefs and Councils of the Cree nations of Wemindji and Chisasibi, were duly informed. The main anticipated impacts are related to safety and nuisances (mainly noise and vibration) generated by activities associated with workers' camps, the contractor's work and storage area, paving plants, and the development and operation of borrow pits, sand pits and quarries (blasting and crushing). The PowerPoint presentation used during these consultation activities is available on request. Detailed minutes of these meetings are appended to the technical notes accompanying this document.

Current mitigation measures

It should be reminded that the operation of these quarries will be governed by the *Cahier de charges et devis généraux* (CCDG) and the *Normes -Ouvrages routiers* collection of the Ministère des Transports et de la Mobilité durable du Québec (MTMD) (Tomes I to VIII). The selected contractor(s) is (are) obliged to comply with all applicable laws and regulations. To this end, article 11.14.1 of the CCDG stipulates:

At all times, the contractor must comply with the Environment Quality Act (PLRQ, chapter Q-2), the Regulation respecting quarries and sandpits and the Regulation respecting occupational health and safety in mines.

Questions received from the government are free translations. If any discrepancy is observed with the French version, the latter has precedence since it is the original version. Any questions regarding the accuracy of the translation should be directed to the MELCCFP.

For example, application of the Regulation respecting sand pits and quarries requires compliance with standards that minimize impacts on land users and nearby residents:

- Location standards:
 - art. 14: Water withdrawal areas;
 - art. 18: Distance of 35 m from Billy-Diamond and Chisasibi roads;
 - art. 19: Minimum distance of 10 m from any property owned by another person.
- Operating standards.
- Contaminant release standards and control measures:
 - Noise (art. 24, 25);
 - Discharged water (art. 26 to 29);
 - Vibrations (art. 30 to 32).

It is also planned to provide signage to identify quarry entrances during the operating period, thus minimizing any negative impact on user safety. In addition, a fence will be installed around the perimeter at the top of the rocky ridge when the quarries are restored. This type of marking will prevent users from driving close to the rocky notches. Finally, Chapter 8 of the regulation sets out all the measures to comply with as for quarry redevelopment and restoration.

Specific mitigation measures

In addition to the standard mitigation measures mentioned above, tallymen and land users proposed specific mitigation measures during consultation activities. Most of these measures have been adopted by SDBJ, while some require further analysis of their feasibility. In these cases, SDBJ is committed to maintaining discussions with the tallymen and land users concerned. SDBJ is also committed in offering the commercial timber harvested following site preparation to tallymen where such harvesting will take place. The specific mitigation measures adopted are presented below. Details of these mitigation measures are presented in the consultation reports available in Appendix 2a (Wemindji) and Appendix 2b (Chisasibi).

Wemindji:

- Improving road signage
- Regular communication and collaboration with tallymen for rehabilitation of operating site
- Reduced demobilization time for temporary infrastructures
- Reducing culvert height

Chisasibi:

- Information on Chisasibi Road rehabilitation and maintenance schedule
- Temporary suspension of work during the hunting season
- Regular communication and collaboration with tallyman for rehabilitation of operating site
- Adjustment of the work schedule

QC-2

The proponent must report on the concerns raised by participants during consultations held in 2022 with the communities of Chisasibi, Wemindji and Waskaganish, and must specify whether any adjustments were made to its project in response to these concerns.

More specifically, for the quarry located at km 37 of the Chisasibi Road, which is partly located on Category IB and Category II lands, the proponent must report on the consultations held with the Chisasibi Band Council to this effect, and specify their expectations regarding the opening and operation of this quarry. The proponent must submit its quarry project located at km 37 of the Chisasibi Road to the Regional Administrator of Section 22 of the James Bay and Northern Quebec Agreement (JBNQA) (Cree Nation Government) for a request of exemption from the environmental and social impact assessment and review procedure.

Answer:

Consultations in 2022

As part of the Billy-Diamond Road rehabilitation project, six of the nine Cree communities will be affected by the work: the Cree Nations of Waskaganish, Nemaska, Eastmain, Wemindji and Chisasibi, which rely on the Billy-Diamond Road for their supplies of goods and food, and the Cree Nation of Waswanipi, which uses the road for its traditional activities.

Requests for meetings were sent to each of these communities to present the work planned for Phase II of the project and to hear their concerns. Members of the Cree Nation of Chisasibi pointed out that they consider the Chisasibi Road to be in poor condition, and would like to see the planned rehabilitation work carried out as soon as possible. Members of Cree Nation of Wemindji, for their part, consider the work to be satisfactory overall. Members of the Cree Nation of Waskaganish also consider the work to be adequate in general.

Appendix 1 presents the Cree consultation report for Phase II of the Billy-Diamond Road rehabilitation project, which details the consultation activities that have been held and upcoming consultations with the Cree Nations of Eastmain and Waswanipi, consultation methods, perceptions of users of the Billy-Diamond and Chisasibi roads, concerns regarding Phase II work, and needs and expectations. In this regard, members of the Cree Nation of Chisasibi expressed a need for shoulder widening. They also want parking areas like those at km 135 on the Billy-Diamond Road, where they can stop for a break. Members of the Cree Nation of Waskaganish are asking for signage to be put up for Cree campsites, both on the Billy-Diamond Road and on their access road. Members of the Cree Nation of Wemindji are asking that certain access roads to their hunting camps along the Billy-Diamond Road be repaired. A number of commitments have been made in response to these concerns. More specifically, with regard to quarrying and borrow pits, mitigation measures will be taken to address any negative impacts on granular material sites that may affect nearby communities. The Société de développement de la Baie-James (SDBJ) will contact the communities concerned before the beginning of work, and will present its program for the operation and restoration of the quarries and sand pits it plans to use. At a meeting held with the Cree Nation of Chisasibi in January 2022, community members mentioned that they might be interested in obtaining granular materials (MG-20, gravel and others) that could be manufactured as part of the project. However, the terms and conditions of SDBJ's supply of materials to the Cree Nation of Chisasibi will have to be negotiated. At another meeting held in Waskaganish, it was asked whether the borrow pit at km 323 would be used as part of the work, and whether restoration work would be carried out when the borrow pit was closed. SDBJ representatives replied that they were not yet in a position to confirm which borrow pits will be used as part of the project. However, it was made clear that restoration work will be carried out to secure the sites used and to ensure drainage and revegetation of the affected areas.

Consultations in 2023

A second round of consultations was held in 2023 by SDBJ and its consultant WSP with the Cree Nations of Chisasibi and Wemindji and the Cree tallymen affected by the quarries under study at km 37 and km 65 of the Chisasibi Road, and at km 454 of the Billy-Diamond Road. Minutes of all consultation meetings are appended to the consultation reports that accompany this document.

With regard to the quarry located at km 37 specifically, on Category 1B and II lands, two presentations were made to the Chief and Council of the Cree Nation of Chisasibi (CNC) on June 26, 2023 and September 12, 2023 respectively, in which the Chief indicated that the SDBJ should consult the CH33 tallyman affected by the quarry under study. On September 21, 2023, WSP conducted a consultation interview with the tallyman in person in Chisasibi. The tallyman is in favour of the Chisasibi Road rehabilitation and maintenance project, since he considers the inconveniences caused by the quarry work and operations to be temporary. Moreover, he believes that the rehabilitation and maintenance work will benefit the entire community. He points out that he and the users of his trapline will be able to continue practising their traditional activities despite the quarry operations. He considers it possible to temporarily relocate their activities for the duration of the work. During the consultation meeting, the tallyman shared suggestions for measures he felt would mitigate the impact of the work on his trapline.

The suggested measures are as follows:

- That the access road leading to their camp could benefit from maintenance work, given that the necessary machinery and equipment will be on site.
- That a fence be installed at the entrance to the camp, located in the human environment study area, to prevent access by unknown land users.
- That the SDBJ award them a contract for wood cutting and brush clearing on the quarry site.

The SDBJ is currently studying the possibility of responding to the tallyman's first two requests. With regard to the awarding of a contract for wood cutting and brush clearing, the SDBJ will ensure that the tallyman is contacted by the subcontractor to offer to carry out this work. In addition, the SDBJ undertakes to offer timber cut on site to the tallyman, land users or to the Cree Nation of Chisasibi. These measures will also apply to the tallyman of trapline CH35, affected by the quarry site at km 65.

Finally, the SDBJ will ensure that tenders for various works are offered to the local communities affected by the rehabilitation and maintenance work.

QC-3

Given the proximity of the Billy-Diamond Road quarry at km 454 and the quarry at km 453.5 (Ca-06), the proponent must justify opening two quarries rather than one, insofar as the available rock and local geology allow.

Answer:

The SDBJ wants to give the contractor the option of using one of the two quarries. The reason for this is that both rock masses will have to be field-tested for rock quality by the chosen contractor. The contractor will then select the quarry with the best rock quality and ease of operation. To date, an operating lease for the Pk 454 quarry has been issued by the MRNF (Appendix 3).

QC-4

The proponent must consult the Centre des données sur le patrimoine naturel du Québec (CDPNQ) to confirm the presence of plant species that are threatened or vulnerable, or likely to be so designated or rare, in the study area or in the vicinity of each proposed quarry.

It must also verify with the CDPNQ if any wildlife species in a precarious situation, threatened or vulnerable, or likely to be so designated, are present at the proposed sites.

Following this verification, it is strongly recommended that a thorough site visit be carried out prior to the start of activities to confirm the presence of sensitive plant and wildlife species. In the event of the presence of such species (fauna and flora), the proponent must present the measures it intends to put in place to limit potential impacts on them.

Answer:

A consultation on the CDPNQ website was carried out to determine the presence of threatened or vulnerable flora and fauna species or species likely to be designated in the proposed quarry sectors. No mention was made on the CDPNQ's online site (see Appendix 4). In addition, a field visit was made from October 11 to 14, 2022 to check, among other things, whether any plant or wildlife species could be identified (see technical note; Appendix 4). No observations were identified in the field.

It should be noted that Specification 185 (Appendix 5) governs the presence of sensitive environments (e.g. species of flora or fauna with special status). Article 12.2 of the specification requires the contractor to mark out the area to be protected with a fence to prevent any encroachment.

In addition, consultations with the tallymen concerned in the summer and fall of 2023 provided an opportunity to obtain the opinion of traditional knowledge holders on the issue. The presence of no endangered, threatened or vulnerable species of flora or fauna was reported. The information gathered during these land-use interviews does, however, allow us to confirm the presence of wildlife habitats in the vicinity of the proposed quarries.

At km 454 of the Billy-Diamond Road, fish spawning grounds have been identified near the quarry site under study. The fish identified by land users are walleye, cob, whitefish, white sucker and lake trout.

With regard to the quarry studied at km 37 of the Chisasibi Road, the tallyman indicated the presence of a bustard pond at km 38, as well as a fish spawning area in a lake to the west of the human environment study area at km 34.

Finally, concerning the quarry studied at km 65 of the Chisasibi Road, the tallyman indicated the presence of beaver and bustard habitats in the vicinity of the quarry under study. He also indicated the presence of trout in the lake west of the study area, between km 60 and 61 of the road.

QC-5

On the Ca-06 quarry location map in Appendix 1 of the preliminary information, the proponent mentions the presence of potential chiropteran shelters near the right-of-way of the quarrying and extraction area (Ca-06) located at km 453.5 of the Billy-Diamond Road. The source of this information remains unknown and it is expected that this data will be communicated (photo-interpretation or acoustic inventory or habitat characterization) in order to confirm the use of this site by bats prior to carrying out the work. If their presence is confirmed, the current site will have to be reconfigured to avoid this area, an alternative site will have to be considered, or work will have to be carried out during specific periods.

Data available to the MELCCFP also confirms the presence of the little brown bat near the proposed quarry site at km 65 of Chisasibi Road. The status of this species monitored by the CDPNQ is currently in the process of being changed to threatened at the provincial level. It is designated as endangered at the federal level under the Species at Risk Act (S.C. 2002, c. 29). The general breeding season for bats is from mid-May to mid-August. Consequently, the proponent must confirm that clearing will be carried out outside this period to avoid any destruction or disturbance of their habitat during this sensitive period.

Answer:

The potential presence of chiropteran habitat in the northeast sector of the Ca-06 quarry is based on visual information only. In fact, the presence of fractured rock could present habitat potential, but no specific inventory has been carried out in the area. In fact, several rock masses in the area have similar habitats. After consultation with avian experts, the potential site is too far north for a chiropteran hibernacula, but is probably usable by bats in summer. However, the quarry boundaries have been redesigned to avoid this area and minimize impacts. As for the planned quarry site at km 65 of the Chisasibi Road, we plan to carry out clearing outside the breeding season to avoid any negative impact.

On the other hand, the tallyman at CH35 made no mention of this species during the two interviews on land use.

QC-6

The proponent must describe the restoration work planned for each of the proposed quarries. It must also indicate whether this work will be carried out progressively, when it will be done and by whom.

Answer:

Restoration of quarry sites will be carried out at the time of closure, in compliance with the Regulation respecting sand pits and quarries. The SDBJ has undertaken to inform the tallymen concerned in advance of the restoration work to be carried out. They will also be invited to collaborate with the SDBJ on the redevelopment of the sites, so that they can share their suggestions and expectations.

The restoration will be carried out by contractors appointed by the SDBJ. The main restoration measures will be as follows:

- Work areas will be cleaned up at the end of operations. Any debris, unusable material, machinery parts or similar clutter will be collected and disposed of in accordance with applicable regulations.
- Soil collection and decontamination will be carried out whenever petroleum products are spilled. Contaminated soils will be managed in accordance with the *Politique de protection des sols et de réhabilitation des terrains* contaminés.
- The final vertical cut should not exceed 10 m. If several vertical cuts are present, they should be interspersed by horizontal landings at least 4 m wide. If necessary, the quarry wall to be backfilled should be prepared with blasted rock. The slope of the backfill should be built up to the existing quarry platform, with a minimum gradient of 1.5 in 1.
- Replacing planted soil and excavated earth previously stockpiled on the reclaimed surfaces, to facilitate the growth of vegetation in uncovered areas and enable planting.

In addition, as mentioned above, the access road to each quarry will be dismantled and reforested. Finally, barriers or visual markers will be installed at the top of rocky ridges to ensure the safety of land users.

QC-7

The proponent must indicate whether archaeological and cultural verifications have been carried out for each of the proposed quarries. In this regard, the proponent must contact the holders of traditional knowledge, in particular the communities concerned and the Cree Aanischaaukamikw Cultural Institute. A summary of the communications must be presented, along with any new information obtained. In addition, the proponent must indicate whether mitigation measures are required and, if so, describe them. Finally, the proponent must also indicate what measures will be put in place in the event of an incidental discovery.

Answer:

The SDBJ verified with the Ministère de la Culture et des Communications (MCC) to find out whether any special arrangements had to be made under the Cultural Heritage Act. A representative of this ministry told us that this type of project (opening and operation of a quarry or sandpit) is not subject to the Cultural Heritage Act, except in the case of an accidental discovery. In such cases, section 74 applies. This section stipulates that anyone who discovers an archaeological property or site must notify the Minister without delay. This obligation applies whether or not the discovery is made in the context of archaeological excavations and research.

At the same time, a verification was carried out with the tallymen and land users of the Cree Nations concerned, as well as the Cree Aanischaaukamikw Cultural Institute.

During interviews with Cree land users, including tallymen from areas VC19, CH35 and CH33, no archaeological or cultural features were identified in the planned quarrying areas under study. However, two cultural heritage elements (burial sites) have been identified, one in the human environment study areas of quarries CA-06 and Pk 454 of the Billy-Diamond Road (trapline VC19) and the other at km 65 of the Chisasibi Road (CH35).

The VC19 tallyman and land users have identified a burial site (grave) in the CA-06 and Pk 454 quarry human environment study areas. This site is located just over two kilometers from the proposed quarry sites, near Lake Kawawiyaskumikach (see Map 2 of the Land User Consultation Report - Wemindji, available in Appendix 2a). No particular concerns were shared about the burial site identified during the consultation interview.

A burial site (grave) was also identified by the tallyman of trapline CH35 at the follow-up meeting held on October 25, 2023. This site is located near three camps belonging to land users who are members of the tallyman's family. Although located within the human environment study area, this site is located outside the proposed quarry site at km 65, more than three kilometers away as the crow flies (see Map 3 of the Land User Consultation Report - Chisasibi, available in Appendix 2b). No particular concerns were expressed about the burial site identified at the follow-up meeting.

Detailed accounts of the land-use interviews are available in the appendices to the consultation reports accompanying this document (Appendix 2).

As a complement to the consultation activities, WSP and the SDBJ have approached the Cree Aanischaaukamikw Cultural Institute to verify whether archaeological data exists for each of the proposed quarries on lots A to D. The Institute recommends that the project initiator carry out voluntary archaeological potential studies to ensure that no potential exists. The MCC's Direction de l'Outaouais, de l'Abitibi-Témiscamingue et du Nord-du-Québec also recommends that an archaeological potential study be carried out on the proposed lots. The complete e-mail exchange with representatives of the Cree Aanischaaukamikw Cultural Institute is available upon request.

Following consultation with the land users and tallymen concerned, it can be stated that the quarrying areas at km 37 and km 65 of the Chisasibi Road (lot A) and km 454 of the Billy-Diamond Road (lot D) present a low risk of archaeological and cultural discoveries. The archaeological potential study on lots A and D will therefore not be carried out. However, the SDBJ is taking this recommendation into consideration and will ensure that archaeological potential studies are undertaken on subsequent lots of its Chisasibi and Billy-Diamond roads rehabilitation and upgrading project - Phase 2.

Nevertheless, the SDBJ will ensure that contractors are informed of the procedure governed by section 74 of the Quebec Cultural Heritage Act, which stipulates that:

Anyone who discovers an archaeological property or site must notify the Minister without delay. This obligation applies whether or not the discovery is made in the context of archaeological excavations and research.

The SDBJ will ensure that contractors comply with this procedure, and that any discoveries are communicated to them so that they can inform the Minister without delay and appropriate action can be taken. Furthermore, in the event of a chance discovery, the SDBJ will contact the Cree Cultural Institute Aanischaaukamikw and the Cree Nation Councils of Wemindji and Chisasibi to inform them of the discovery and the measures implemented by the SDBJ and the contractor following the discovery.