



Responses to the request for information on July 25, 2025 –
Complementary information for the Change Notice to the
Whabouchi Mining Project dated January 25, 2025

ENV0514-1525-00

Whabouchi Mine – Nemaska Lithium
April 10, 2026



James Bay, Québec

ANSWERS TO QUESTIONS AND COMMENTS

**RESPONSES TO THE REQUEST FOR INFORMATION ON JULY 25, 2025
COMPLEMENTARY INFORMATION FOR THE CHANGE NOTICE TO THE WHABOUCHI MINING PROJECT
DATED JANUARY 25, 2025**

ENV0514-1525-00



GCM Reference No.: 22-1331-0514

Prepared by: **Signature provided on the original document (in French)**
Olivier Bouffard, Eng., OIQ No.: 6042029
GCM Consultants

Verified by: **Signature provided on the original document (in French)**
Mélanie Côté, Eng. OIQ No.: 133767
GCM Consultants

Revision
00_EN

Issuance
FINAL

Date
2026.04.10

IMPLEMENTATION TEAM – GCM CONSULTANTS

Mélanie Côté, Eng.	Project Director, Revision
Olivier Bouffard, Eng.	Writing
France Thibeault	Publishing
Josée Zalewski	Editing

IMPLEMENTATION TEAM – NEMASKA LITHIUM

Denis Isabel	Vice-President, Sustainable Development
Vincent Perron	Director, Environment and Stakeholder Relations
Jean-Pierre Gaye-Diop	Environment Superintendent

REVISION HISTORY

Revision					Comments (reason for revision)
Rev.	Prepared by	Verified by	Date	Revised sections	
PA	O. Bouffard	M. Côté	2025.09.08	–	For comment
00	O. Bouffard	M. Côté	2025.09.17	2.1, 2.3, 3.1, 5.2 Appendix 2	Final
00_EN	O. Bouffard	M. Côté	2026.04.10	-	Final translated in English for consultations

TABLE OF CONTENTS

1.0 INDIGENOUS PEOPLE – CREE CAMPS 1

1.1 Development Plan 1

2.0 INDIGENOUS PEOPLES – HEALTH OF INDIGENOUS PEOPLES 1

2.1 Communication Plan 1

2.2 Fish Monitoring Study 2

2.3 Atmospheric Contaminant Measures and Monitoring 3

2.4 Noise Modelling Study 7

3.0 FISH AND FISH HABITAT – ACTIVITIES, INFRASTRUCTURES AND DESCRIPTION OF THE WORK 8

3.1 Water Management during the Work 8

3.2 Container Storage Area 10

3.3 Layout at Pond BC-16 12

3.4 Layout at Stream F 13

4.0 FISH AND FISH HABITAT – ENCROACHMENT INTO FISH HABITAT 13

4.1 Loss of fish habitat 13

5.0 FISH AND FISH HABITAT – MITIGATION MEASURES 16

5.1 Water Protection Measures During the Work 16

5.2 Communication Plan for the Exclusion Zone 19

LIST OF FIGURES

Figure 1. Type of container that will be used to store the concentrate of Nemaska Lithium 11

Figure 2. Modelling of the planned storage area for concentrate containers 12

Figure 3. Virtual model of the residue silo and the emergency stockpile 17

APPENDICES

- 1) Maps and Plans
 - A. Whabouchi Site Development Plan (GCM, 2025)
 - B. Mining Title and Occupancy Lease Plan
- 2) Modelling Results at Sensitive Receptors, CCME Method (Hatch, 2025)
- 3) Notice Concerning Differences Observed in the Hydrogeological Study (WSP, 2025)
- 4) Map of Whabouchi Site Safety Zone (Roche, 2015)

1.0 **INDIGENOUS PEOPLE – CREE CAMPS**

1.1 **Development Plan**

The Whabouchi development plan, which appears in Appendix A of the Answers to Questions and Comments (GCM Consultants, 2025) only shows two Cree camps on the banks of Lac des Montagnes, while Figure 9 of the Impact Assessment Report (2015) shows many Cree camps, including the Bible Camp, which was a site valued by the community and hosted groups of children for cultural visits in the summer.

- i) *Clarify why all the camps in Figure 9 do not appear in the figure in Appendix A. If necessary, provide an updated figure that includes all the Cree camps.*

Answer:

Figure 9 and the development plan, the updated version of which is provided in Appendix 1, are not on the same scale. The camps do not appear in the new maps because they are located further to the west of the provided view. The scale used for the development plan shows most of the details subject to the notice. The mining title map provided in Appendix 1 is on a larger scale and shows the location of the Cree camps near the site.

2.0 **INDIGENOUS PEOPLES – HEALTH OF INDIGENOUS PEOPLES**

2.1 **Communication Plan**

Section 3.2.2.6 of the Monitoring Program (GCM Consultants, 2024) states that, as required in Condition 6.4 of the amendment of the federal Decision Statement (IAAC, 2023), Nemaska Lithium will inform the Cree Nation of Nemaska when the concentrations of metals measured in the flesh and liver of fish exceed the Canadian Food Inspection Agency (CFIA) guidelines on chemical contaminants in fish and fish products in Canada. Nemaska Lithium will propose additional mitigation measures to put in place, and will discuss these with the Cree Nation.

However, Condition 6.4 does not provide for conditional communication when a threshold is exceeded. This conditional communication should only be retained if it is explicitly agreed with the Cree Nation of Nemaska in the communication plan.

Furthermore, it should be noted that the CFIA guidelines are archived and no longer in effect. The appropriate reference is Health Canada's "maximum acceptable concentrations" in food.¹ However, these "maximum acceptable concentrations" were developed for commercial foodstuffs. Although they can serve as guides, they may not be suitable in the context of traditional, subsistence or sports fishing. Health Canada's guidelines on traditional foods (2023)² provide other recommendations for the development of appropriate references.

- ii) *Clarify and validate the communication plan for the results of metal monitoring in fish flesh and liver, taking into account the proposed changes in minewater management, in accordance with Condition 6.4 with the Cree Nation of Nemaska.*

¹ Health Canada (HC), 2024. List of Contaminants and Other Adulterating Substances in Foods [\[Online\]](#)

² Health Canada (HC), 2023. Guidance for Evaluating Human Health Effects in Impact Assessment: COUNTRY FOODS [\[Online\]](#)

Answer:

Nemaska Lithium (NLI) has taken note of the archiving of the CFIA's Guidelines and the new Health Canada Guidelines. NLI will consider these in the analysis of the results of metal monitoring in fish flesh and liver set out in their Environmental and Social Monitoring Program (ESMP).

The results of the monitoring carried out under the NLI ESMP are presented annually to the Whabouchi Mine Environment Committee, the members of which include representatives of the Cree Nation Government and the Cree Nation of Nemaska, including tallymen and other land users.

The annual monitoring report is also available in the office of the NLI liaison officer, which is located in the heart of the Cree community of Nemaska.

Finally, the main monitoring results are also presented to members of the Cree Nation of Nemaska at the annual Land and Environment Conference, which is held jointly by NLI and the Nation's administrative staff. It is important to mention that more than one third of the population of Nemaska attends this two-day conference. The presentation of the results of metal monitoring in fish flesh and liver, provided for in the NLI ESMP, holds an important place at the conference because of the sensitivity of this topic for the Cree.

2.2 Fish Monitoring Study

Section 3.2.2.2 (GCM Consultants, 2024) does not mention longnose sucker or lake sturgeon, even though these species are identified in Condition 6.3.3 of the amendment of the federal Decision Statement (2023).

It is recommended that all foods that could contribute significantly to chemical contaminant exposure in members of the Cree Nation of Nemaska be taken into consideration. If the longnose sucker and lake sturgeon are among these foods, it would be preferable to add them to the chemical contaminant monitoring program (because they contribute significantly to the consumers' exposure to contaminants).

These fish species can be excluded from the monitoring program with a justification by the promoter, if, for example, these species are not consumed by the local population who use the sites affected by the project for fishing or if these species are not available for harvesting at sites affected by the project.

iii) Include all species that contribute to chemical contaminant exposure in the monitoring program or justify their exclusion, if applicable.

Answer:

The lake sturgeon was excluded from the NLI ESMP triennial monitoring for heavy metal concentrations in fish flesh and liver because this species does not inhabit the water of sites affected by the project. In inventories conducted for the environmental and social impact study, lake sturgeons were not inventoried in Lac des Montagnes, Lac du Spodumène or the portion of the Nemiscau River affected by the project. In the first NLI ESMP triennial monitoring for heavy metal concentrations in fish flesh and liver, carried out in 2018, no lake sturgeons were captured. However, it is important to note that an isolated lake sturgeon was captured in 2021 near the Lac des Montagnes outfall in the second monitoring effort, after an extensive fishing effort (22 net-days). This sturgeon is the only individual to have been captured in over 10 years of inventory in the Whabouchi Mine sector.

The fact that lake sturgeons do not inhabit Lac des Montagnes, Lac du Spodumène and the portion of the Nemiscau River affected by the project has been corroborated by the Cree land users and tallymen consulted. According to them, no fishing for this species is carried out by the Cree in these bodies of water. It is important to add that a study to detect the environmental DNA of various species, including lake sturgeon, was carried out by the INRS in 2022. The results of this study confirmed that lake sturgeons do not inhabit these waters.

Furthermore, when NLI reached out to provincial authorities to obtain an SEG licence to fish lake sturgeons, the authorities responded, in writing, that such a licence would not be issued because lake sturgeons are a special status species.

It is, therefore, on the basis of many ichthyological inventories, traditional Cree knowledge and the abovementioned matter of the SEG licence that the lake sturgeon was not added to the species subject to the triennial monitoring for heavy metal concentrations in fish flesh and liver set out in the NLI ESMP.

With regard to the longnose sucker, this species inhabits all three bodies of water subject to the NLI ESMP triennial monitoring for heavy metal concentrations in fish flesh and liver. According to the tallymen and land users consulted, this is not a species they value or consume. Furthermore, to consider this monitoring effort in 2024, the specialized firm that performed it for NLI reported that, based on the 2018 catches, it would be difficult to capture enough individuals to validate the monitoring effort, unless the number of fishing days was increased, which would lead to enormous walleye mortalities. For these reasons, NLI does not intend to add the longnose sucker to the species subject to the triennial monitoring for heavy metal concentrations in fish flesh and liver set out in its ESMP.

Clause 6.3.3 of the Decision Statement should therefore be amended to remove the lake sturgeon and longnose sucker from the species subject to monitoring.

2.3 Atmospheric Contaminant Measures and Monitoring

The report (GCM Consultants, 2024) does not specify the corrective measures planned to reduce emissions in the event that the air quality standards are exceeded due to the proposed changes (for example, new permanent worker camp added and mining plan revised to include the mine's total mineral production and the expansion of the pit).³

The promoter states that “no exceedance of the standards was calculated at the sensitive receptors (Bible Camp and Cree camps).” However, the provincial standards in the *Clean Air Regulation* (CAR) could be exceeded for total particulate matter (TPM) and PM_{2.5}, although the latter are “infrequent” and “probably overestimated,” according to the promoter.

Furthermore, the modelling results for NO₂ and SO₂ were only compared to the standards established in the CAR (Schedule K).

Considering the Canadian Ambient Air Quality Standards (CAAQs), which are more stringent than the provincial standards (24-hour PM_{2.5}: 27 µg/m³ compared to 30 µg/m³), it is possible that the frequency of exceedance will be higher than estimated by the promoter. Likewise, the CAAQs impose stricter thresholds for NO₂: the provincial standard for NO₂ is 414 µg/m³ over one hour, while it is 79 µg/m³ under the CAAQs. For the annual period, the provincial standard is 30 µg/m³ and the CAAQs is 23 µg/m³. As for SO₂, the maximum annual concentration is approximately 20 µg/m³, higher than the 10 µg/m³ threshold under the CAAQs.

Therefore, if the PM_{2.5}, NO₂ and SO₂ results were compared to the CAAQs, exceedances would be observed for both hourly and annual concentrations.

Predictions modelled on the strictest federal, provincial or territorial standards that apply to the region should be compared. In many cases, the CAAQs will represent the strictest levels for the main atmospheric pollutants. For substances without effect thresholds (e.g., PM_{2.5}, NO₂), for which health effects may occur regardless of exposure level, the modelled concentrations of the air quality values based on health protection should be compared. Atmospheric pollutants should be monitored when it is expected that air quality criteria, standards or guidelines will be exceeded or nearly exceeded.

iv) *Specify the nature of the corrective measures that will be put in place to reduce the emission of contaminants using the CAAQs.*

Develop the communication plan for relaying air quality monitoring results to the Cree Nation of Nemaska in the event of an exceedance of the Canadian Council of Ministers of the Environment Canadian Ambient Air Quality Standards or the Clean Air Regulation, whichever threshold is stricter.

Confirm that NO₂ and SO₂ will be added to the contaminant monitoring program. Otherwise, justify their non-inclusion.

³ Environment and Climate Change Canada (ECCC), 2025. Changes to the project and impacts on existing mitigation measures and monitoring requirements included in the Decision Statement.

Answer:

The results of the dispersion model were extracted to compare the air quality objectives. The results of the R2 sensitive receptor are presented because these are the maximums obtained at a sensitive receptor.

Table 1: Modelling Results at Sensitive Receptors, CCME Method (Hatch, 2025)

Contaminant	Type of limit value	Period	Limit value ($\mu\text{g}/\text{m}^3$)	Initial conc. ($\mu\text{g}/\text{m}^3$)	Proj. max. R2	Cumul. max. R2	R2 %LV	Results of other receptors, see Appendix 2
Fine particulate matter (PM _{2.5})	CCME	24 h	27	15	1.59	16.59	61%	
Fine particulate matter (PM _{2.5})	CCME	1 year	8.8	0.0	0.21	0.21	2%	
SO ₂	CCME	1 h	186 (65 ppb)	21	17.37	38.37	21%	
SO ₂	CCME	1 year	11 (4 ppb)	2	0.22	2.22	19%	
NO ₂	CCME	1 h	86 (42 ppb)	50	62.11	112.11	130%	
NO ₂	CCME	1 year	25 (12 ppb)	10	0.99	10.99	45%	

- Item Meaning
- Conc. : Maximum concentration
- Proj. max. : Maximum concentration – Project contribution only
- Cumul. max. : Maximum concentration of Project + Initial concentration
- %LV: % of limit value

- Note 1 In the absence of data, the initial concentration for PM_{2.5} over one year is set at 0 $\mu\text{g}/\text{m}^3$. There would be no exceedance even if an initial concentration of 8 $\mu\text{g}/\text{m}^3$ was considered.
- Note 2 The 24-hour PM_{2.5} results represent the five-year average of the annual 98th percentile of the average daily concentrations over 24 hours.
- Note 3 The initial concentration for SO₂ was calculated based on the MELCCFP initial concentration over 4 minutes and the formula in Schedule H of the *Clean Air Regulation*.
- Note 4 The one-hour SO₂ results represent the five-year average of the annual 99th percentile of the daily maximums of the average SO₂ concentrations over one hour.
- Note 5 The one-hour NO₂ results represent the five-year average of the annual 98th percentile of the daily maximums of the average NO₂ concentrations over one hour.
- Note 6 The one-hour and one-year NO₂ results were evaluated by calculating the conversion of NO_x into NO₂ using the ozone-limiting method (OLM).

The results at all sensitive receptors were significantly under the CCME objectives for PM_{2.5}, SO₂ and one-year NO₂. The one-hour objective for NO₂ is exceeded over one year. However, it should be noted that the initial concentration of 50 $\mu\text{g}/\text{m}^3$ that was considered is not representative (too high) for comparing the project’s results with the CCME objectives. In the absence of data, the MELCCFP’s initial value for northern projects was considered, and added to the project’s contribution. This concentration is considered to be representative and conservative when added to the project’s contribution to be compared to the Québec standard for one-hour NO₂, specifically 414 $\mu\text{g}/\text{m}^3$. However, the Québec standard applies to the first hourly maximum modelled over five years. The CCME objective is based on the three-year average of the annual 98th percentile of the daily one-hour maximums. Simply put, the 2% of time when the dispersion conditions are the worst in each year are withdrawn from the calculations. The initial value of 50 $\mu\text{g}/\text{m}^3$ is therefore overestimated, which implies that the total concentration is also overestimated.

In accordance with the Decision Statement issued for the Whabouchi Mine, air quality measurement equipment was installed at the Bible Camp (station QA-3) and the Cree camp most likely to be affected (station QA-2). These have been in operation since May 2024. They measure total suspended particulates (TSP) and fine particles, that is, particles with a diameter of less than 2.5 microns (PM_{2.5}), in accordance with the results of the contaminant dispersion modelling updated in 2018, indicating the risk of exceeding the standards in effect for these two parameters. This study was transmitted to the provincial and federal authorities in 2018.

As part of the process for obtaining provincial approvals for the construction and operation of the optimized Whabouchi mining site, the atmospheric dispersion of contaminants was modelled again. This study, carried out in accordance with the new provincial requirements and covering a wider array of contaminants than in the 2018 update, still shows sporadic and infrequent exceedances of the standards for dust (TSP and PM_{2.5}) at the boundary of the 300-m buffer zone around the Whabouchi Mine. This result confirms the importance of monitoring these two parameters at stations QA-2 and QA-3.

It is important to note that no exceedance for any of the parameters modelled was observed at the various Cree camps located near the Whabouchi Mine.

Using the calculation methods set out in the MELCCFP *Guide de la modélisation de la dispersion atmosphérique* for the NO₂ and SO₂ parameters, the modelling does not demonstrate any exceedance of Québec's ambient air quality standards for these two parameters, either at the boundary of the Whabouchi mining site buffer zone or at the various Cree camps located near the mine. For this reason, monitoring these two parameters is not included in the NLI ESMP.

Given the initial value of 50 ug/m³ proposed by the MELCCFP, the modelling reveals situations of exceedance or near-exceedance of the CCME's air quality objectives in terms of NO₂ (one hour). This is why NLI is proposing to carry out an NO₂ sampling and monitoring campaign in its first year of operation. If the campaign results suggest that exceedances are likely or actual, NLI will add NO₂ permanently to the monitoring processes.

Since the monitoring equipment at stations QA-2 and QA-3 was launched, the TSP and PM_{2.5} monitoring results have been presented quarterly to the members of the Whabouchi Mine Environment Committee and are available at the office of the NLI liaison officer in Nemaska. They are also presented to the members of the Cree Nation of Nemaska at the Environment and Land Conference, which is held annually in Nemaska, before Goose Break, to maximize the participation of the nation's members. Finally, the results are published in the annual ESMP report, which is also available for consultation in the office of the NLI liaison officer in Nemaska.

It has been agreed that the members of the Environment Committee will be informed immediately in writing in the event of a major exceedance of the ambient air quality standards for TSP and PM_{2.5} at stations QA-2 and QA-3. The results of the analysis of the cause of the exceedance must follow, in writing, and as soon as possible, as well as the corrective measures put in place to rectify the situation.

In accordance with section 6.3.2 of the Decision Statement, NLI will consider the Canadian Council of Ministers of the Environment *Canadian Ambient Air Quality Standards* in the presentation of the air quality results stipulated by the Whabouchi Mine ESMP.

Mitigation measures are already in place at the site, including the use of recent machinery with high-performance, well maintained anti-pollution systems, the surface sprinkling plan and the use of dust filters to limit emissions at fixed sources.

In the event of an exceedance of provincial and federal standards, NLI will examine the implementation of additional measures or the modification of existing measures, for example, sprinkling that is more frequent or targeted to locations identified in the analysis of the cause.

2.4 Noise Modelling Study

The document (GCM Consultants, 2024) does not follow the approach adopted by Health Canada (2023),⁴ which considers a variation of 6.5% or more of the percentage of highly annoyed people(%HA) as a significant sound impact indicator and as a threshold beyond which noise mitigation measures should be considered.

Table 3.3 of the acoustic study document diverges from the approach proposed by Health Canada and does not specify how the criteria related to %HA were determined.

Furthermore, section 3.2.2 of the document indicates the absence of the federal criterion concerning blasting activities likely to generate sound vibrations: “To date, no criteria concerning vibration or air pressure noise during a blast have been established at the federal level.”

- v) *Provide details about the methodology used to establish the %HA criteria presented in Table 3.3. It is also suggested that the sound impact assessment be harmonized with the Health Canada guidelines (2023), particularly with regard to the variation threshold of 6.5% of %HA.*

Section 6.4.4 of the Health Canada noise guidelines (2023), which provides specific advice related to blasting activities, should also be consulted.

Answer:

The percentage of the population that is highly annoyed (%HA) is calculated based on the equation presented in section 3.2.1 of the modelling report (Yockell, 2024), consistent with ISO standard 1996-1: 2003. This indicator is used by Health Canada to characterize the sound impact of a project. Table 3.3 of the sound impact study presents a classification or description of the intensity of the environmental effect in four categories, based on both the change in %HA and the total Ldn level, the method used by the US Department of Transportation (Harris Miller Miller & Hanson, Transit Noise and Vibration Impact Assessment. April 1995, Report DOT-T-95-16).

This classification is not at odds with the variation threshold of 6.5% of %HA established by Health Canada, which corresponds, according to Table 3.3, with the intensity of an environmental effect described as high.

However, all the anticipated Ldn levels are lower than 55 dBA, and the maximum observed increase in the %HA criterion is 0.4%. This value below 2% allows the intensity of the environmental effect to be described as low, according to Table 3.3. The upper limit of the “low” qualifier is itself below the threshold of 6.5% of HA.

⁴ Health Canada (HC), 2023. Guidance for Evaluating Human Health Effects in Impact Assessment: NOISE [[Online](#)]

Concerning noise during blasting, according to *Guidance for Evaluating Human Health Effects in Impact Assessment: NOISE* (Health Canada, 2023), to estimate the risk of sleep disturbance on a given night, the WHO establishes a threshold that corresponds to an indoor sound level that cannot exceed 30 dBA. However, the sound modelling study assesses the noise level at about 30 dBA outdoors. Consequently, it is reasonable to expect that the noise level is lower than that indoors. It should also be noted that blasting activities in the pit will only take place during the day.

3.0 **FISH AND FISH HABITAT – ACTIVITIES, INFRASTRUCTURES AND DESCRIPTION OF THE WORK**

3.1 **Water Management during the Work**

Concerning the permanent camp, section 2.1.1.1 (GCM Consultants, 2024) states that “runoff water during its implementation and operation is not likely to have an effect on the surface water, as collected wastewater will be sent to the mine’s water treatment plant.” Section 2.1.1.2 states, however, that “during the construction period and if necessary, the runoff and drainage water will be directed to settling ponds for this purpose or to vegetation areas located at least 20 meters from water environments.” This measure requires clarification concerning its application and the fact that the discharge of runoff water without mitigation or monitoring measures is likely to impact the quality of the water in the receiving environment.

- vi) *Specify in what situations or conditions the runoff and drainage water will be directed toward the settling ponds or vegetation buffer zones.*

Describe the management of the water that accumulates in the settling ponds, where necessary.

Answer:

The situations where runoff water will be directed to vegetation zones correspond to situations of natural runoff that has not been in contact with the work areas and that is diverted to prevent it from entering the activity zone. This reduces the volumes of water to be managed.

The water from work or mining activity zones will be collected in settling ponds for treatment. In terms of pond water management, the water will be used by priority as a dust control agent to maintain roads. Ultimately, depending on the volume, this water will be pumped into Pond BC-11 and discharged into the environment, in accordance with the requirements, by the effluent of the temporary treatment plant at BC-10 or by the final effluent from the treatment plant for the mining effluent, depending on the construction phases. For ponds located north of the Route du Nord, if a pond’s water quality meets the discharge requirements, but there are issues channelling it to one of the discharge points mentioned above, a temporary discharge point could be registered and the water quality would be monitored, in accordance with the requirements.

Concerning the permanent camp, the promoter states in section 3.1.1.2 (GCM Consultants, 2024) that “If need be, additional sediment transport retention and control structures (sediment barriers, straw bales, check dam, etc.) will be installed to limit the transport of sediment toward waterways and bodies of water,” without, however, providing any more details.

- vii) *Specify the situations in which additional sediment transport retention and control structures (sediment barriers, straw bales, check dam, etc.) will be installed to limit the transport of sediment toward waterways and bodies of water.*

Answer:

The retention and control structure to prevent the transport of additional sediment will be used if runoff carrying particles is observed or highly likely in the work zone. Typically, the situations to monitor are exposure of the soil, the presence of steep slopes, heavy rain events and the proximity of sensitive environments.

It is important to note that the work related to the permanent camp will not take place near water environments. The installation of additional control structures will limit the quantity of suspended solids directed toward the settling and pumping ponds. Reducing the quantity of suspended solids will allow for faster settling in the ponds. Ultimately, this will fulfill the discharge requirements more easily without additional processing.

As for the permanent camp, the promoter does not mention whether concreting work will take place. This work could affect the quality of the water in the receiving environment.

- viii) *Present, if applicable, a description of work involving concrete, including the installation of a concrete plant and the storage of concrete, the management of wastewater generated by this work and these installations and the planned protection and monitoring measures to prevent or minimize impacts on the quality of water in the receiving environment.*

Answer:

The plan is for the permanent camp to be installed on a foundation of concrete pilasters and footings. The components of the foundation could be poured on site or assembled from prefabricated sections, depending on the availability and cost of these options. In either case, the associated water management measures in point 3.1 will be implemented.

A mobile concrete plant is operated by Béton Fortin at the Whabouchi site, under an approval issued by the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC). The plant is responsible for meeting the concrete needs of the Whabouchi site (concrete slabs and pillars for the mining infrastructures). Cement is stored there in closed silos and the additives are stored in totes on spill pallets.

The equipment, pumps and formwork will be washed in a designated, leakproof area. This area will be located more than 60 m from any body of water or wetland. The workers will be trained in safe washing procedures and the management of concrete residues.

Once the concrete mixer is emptied of residue, it will be washed at the dedicated station, which consists of two leakproof containers located in a dome. A tarp is placed on the ground between the concrete mixer and the containers to recover any discharged contaminants. Then the water from container 1 is used to wash the concrete mixer, and the contents of the concrete mixer are discharged into container 2 (decantation container).

With each washing, the particles are settled in container 2 and the supernatant is pumped into container 1. When the water becomes unusable for washing or the level in the container is too high, it is pumped into a tank to be reused as an input for the preparation of concrete. The decanted residues will be disposed of off-site, in an authorized facility.

NLI has put a concrete residue management procedure in place. The basic concrete residue management principle is reduction of the residue at source. To achieve this, all contractors have a duty to optimize the volume required for their concrete pouring needs to minimize any remaining concrete.

When a pouring activity is finished, the subsequent management principle is recovery. The residue will therefore be used to pour blocks and jerseys. These blocks will be poured on a designated leakproof surface to prevent the seepage water from pouring out and entering the environment.

NLI conducts regular inspections of the Béton Fortin facility to ensure that the management procedure for residue, wash water and settled residues is properly followed.

Page 9 of the Answers to Questions and Comments document (GCM Consultants, 2025) states that mining truck traffic will be separated from other traffic at the site by building a road reserved for heavy vehicles. It mentions that an additional land area estimated at 28,000 m² compared to the one estimated in 2015 will be necessary for the development of the road. Finally, this development “will bring the installations closer to Lake 2, increasing the risks related to spills and the indirect impacts on fish habitat.”

As this work has not yet been done, the promoter presents, in Table 4 of the Answers document, the mitigation measures planned for during this work. However, the rain conditions for which this work will have to be suspended should be determined to further reduce the impact on surface water quality.

ix) *Determine the flood or precipitation conditions for which the work will be suspended.*

Answer:

The flood or precipitation conditions for which the work would be suspended are torrential rain conditions, based on Environment Canada alert levels for Québec, that is, 50 mm or more in less than 24 hours. During the thaw period, the evaluation will be made based on rains of lesser intensity, 20 mm to 30 mm in 24 hours. Additional visual inspections will be conducted at the construction sites when the factors to be monitored are present (exposure of soil, steep slopes, heavy rain or proximity of sensitive environments).

3.2 Container Storage Area

The promoter is planning a new dome to store the concentrate for the final mixing of the concentrate and the loading of trucks, as well as a new storage area for concentrate containers, to be set up to the north of the industrial site.

The use of this dome constitutes an appropriate mitigation measure for the protection of surface and groundwater quality. However, more information regarding the concentrate container storage area is necessary to complete the evaluation of the potential impacts on water quality in the receiving environment.

- x) Provide more information about the concentrate container storage area, including:
- Its location.
 - Water management at the site.
 - Surface and groundwater protection measures (e.g., use of a closed container to reduce the percolation and runoff of water from the concentrate).

Answer:

The containers used to transport the concentrate will be equipped with a leakproof cover secured by locks (see Figure 1). The cover is removed using special lifting equipment when the container is filled (at the Whabouchi site) and emptied (at the Bécancour plant). The stored and transported concentrate will therefore be sheltered from the elements, thereby limiting contact with rainwater and the risk of dispersion by the elements.



Figure 1. Type of container that will be used to store the concentrate of Nemaska Lithium

The storage area for the concentrate containers will be set up on the rocky overhang to the north of the plant. This sector is part of the areas where the water is already captured by the site’s water management system. A slight slope will be created to encourage the water to flow toward the nearby ditches, which lead to the minewater pond (BC-11).

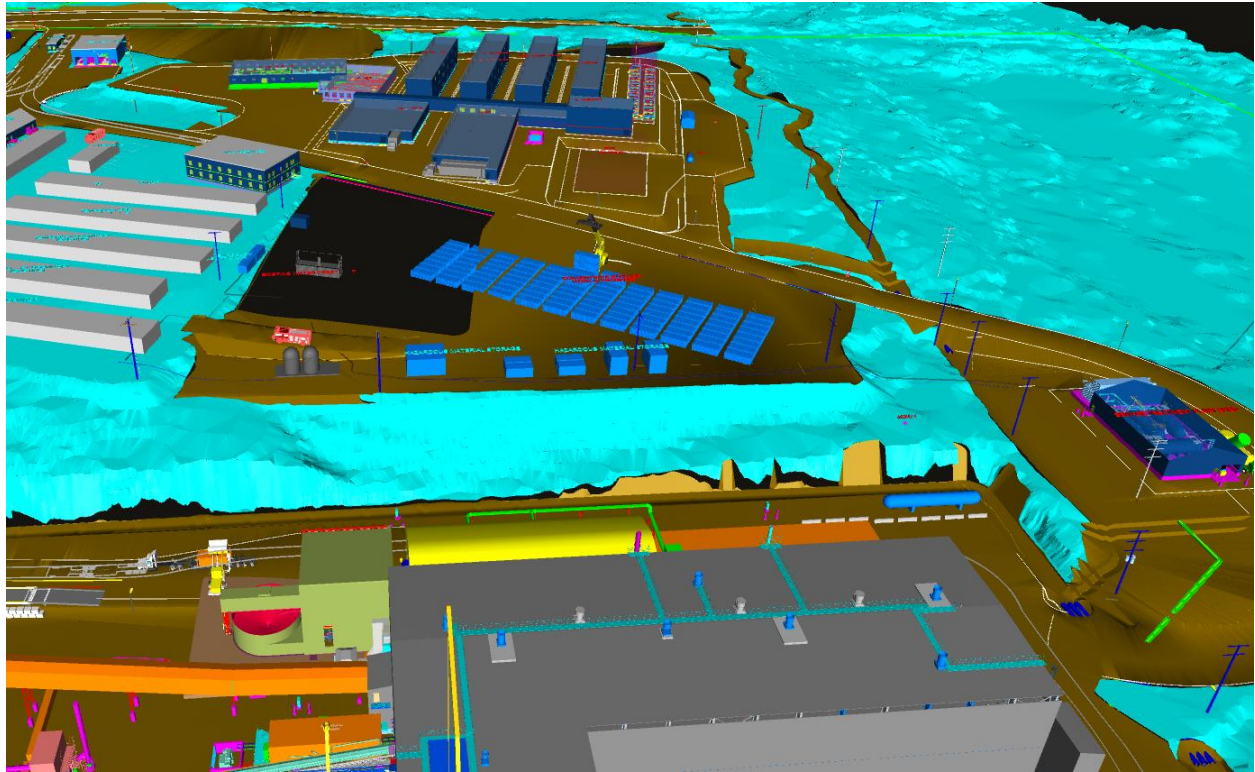


Figure 2. Modelling of the planned storage area for concentrate containers

3.3 Layout at Pond BC-16

Section 7.1 (GCM Consultants, 2024) mentions that the mining site’s water management system “is now comprised of a network of ditches, pumping stations, interconnection piping, a pond system and a minewater treatment plant (mine WTP)” and that the “water management encompasses the collection and routing of the contact water to the treatment plant, the mill’s freshwater requirements and the availability of water in the ponds, which are an integral part of the water management system.” This water management system will drain all the contact water from all the site’s infrastructures other than the weather station infrastructure, and the entirety of the excess water (that will not be reused on the site) will be directed to the WTP for monitoring and discharge, based on the applicable criteria. This measure is required for this project to prevent or reduce the impacts on surface water quality in the receiving environment and to cover the management of all contact water.

However, Table 7.1 (GCM Consultants, 2024) presents the use of Pond BC-16 in relation to the 2024 update, but that was not planned during the 2019 update. This pond does not seem to be identified in Appendix A2 or in Figure 7.2, and is missing from the water report in Figure 7.3. The location of this pond and its use must be presented to complete the evaluation of the impacts related to the water management system.

xi) *Present the location of Pond BC-16 and describe its planned use.*

Answer:

As illustrated in the Site Development Plan, updated in July 2025 and attached in Appendix 1 of this document, Pond BC-16 is located at the southwest end of the Whabouchi mining site. Its purpose is to receive water from the road leading to the explosives storage platform. Originally, just one pumping station was planned at the low point to fulfil this purpose, but after the dimensioning of the equipment, it was deemed more prudent to establish a pond to mitigate rushing water in the event of heavy rains. The water from BC-16 will be pumped to BC-12, and the level will be kept low, in accordance with the site’s water management strategy.

3.4 Layout at Stream F

Map 1 in the Answers to Questions and Comments document (GCM Consultants, 2025) does not appear to be up to date. As mentioned to Fisheries and Oceans Canada on March 6, 2025, the promoter decided to move Pond BC-01 slightly to the north of its original location, to avoid encroachment on Stream F and thereby avoid triggering a registration process for the bodies of water where fish live under Schedule 2 of the *Metal and Diamond Mining Effluent Regulations*. This information was also transmitted to the IAAC on March 24, 2025.

xii) *Update the maps in accordance with the current boundaries of the development plan and, in particular, in terms of Pond BC-01 and Stream F.*

Answer:

The Site Development Plan updated in July 2025 and attached in Appendix 1 of this document shows the new location selected for BC-01.

4.0 FISH AND FISH HABITAT – ENCROACHMENT INTO FISH HABITAT

4.1 Loss of fish habitat

A mismatch was found between the data on the projected pit presented in paragraph 5 of the Notice to the Impact Assessment Agency of Canada (GCM Consultants, 2024) and the data presented in the Whabouchi hydrogeological study (WSP, 2023).

	Sources	
Characteristics	WSP, 2023 hydrogeological study	GMC Consultants, 2024 (paragraph 5.0)
Estimated footprint	41 hectares	42 hectares
Dimensions	1,350 m × 350 m	1,400 m × 400 m
Depth	190 m below ground surface (mbgs)	230 m below ground surface (mbgs)
Time before final depth	33 years	24 years (before underground operation)
Elevation of bottom of pit	95 m above sea level (masl)	80 m above sea level (masl)

The promoter indicates that the encroachments in the most recent development plan were used in the preparation of the fish habitat loss offset plan linked to the completion of the project. However, the information mentioned in subsection 5.1.1.1 states that the modelling of the drawdown of the water table associated with dewatering the pit is based on the pit characteristics presented in the Whabouchi hydrogeological study (WSP, 2023). This does not correspond to the data in the most recent update of the feasibility study (paragraph 5).

As the pit planned by the promoter is deeper, it may have a more significant impact on the water table. Since the effects of the water table drawdown are taken into consideration in the evaluation of fish habitat losses, it is essential for this evaluation to be based on the most recent and most accurate information (e.g., a hydrogeological study with the characteristics of the currently planned pit as set out in the Change Notice).

xiii) Confirm whether the latest fish habitat loss includes the most recent changes made to the project. If not, submit an updated report on the effects on fish and fish habitat that includes the changes arising from the latest version of the Development Plan presented to the IAAC. This update must include, but is not limited to the effects caused by the expansion of the operating area's footprint (8.57 ha), the surface area required to build a mining road from the pit to the viaduct (2.8 ha) and the current characteristics of the planned pit.

In light of the inconsistencies identified, demonstrate that the evaluation of the effects on fish and fish habitat includes, in addition to further encroachments into the habitat, the hydrological and hydrogeological effects stemming from the most recent project modifications, in accordance with the most recent update of the feasibility study (that is, the Change Notice, GCM Consultants, 2024).

Answer:

The updated report on fish habitat loss, dated January 2025 and transmitted to the DFO on January 29 of that year, considers the same surface area for the Whabouchi mining site as the area presented in the Change Notice submitted to the IAAC on January 15, 2025. There are therefore no further encroachments into the sub-watersheds evaluated. The only adjustment to be made to the fish habitat losses is the addition of a culvert in Stream B, leading to a direct habitat loss of 28.8 m². It is important to note that this adjustment was communicated to the DFO on August 20, 2025.

Considering the mismatches noted between the WSP 2023 report (hydrogeological study) and the Change Notice, the WSP notice dated July 18, 2025, provides further details on this matter. This notice can be found in Appendix 2 of this document.

The differences in the configuration of the pit described in the hydrogeological study for the pit (WSP, 2023) and the one described in the Change Notice submitted to the IAAC on January 15, 2025, can be explained by the erroneous interpretation of the numerical data, which led to a slight overestimation of the pit dimensions in the Change Notice. WSP's pit dimensions (2023) adequately reflect the dimensions of the pit at the Whabouchi mining site.

There is, nevertheless, a proven difference of 15 m between the elevation of the bottom of the pit presented in the WSP report (2023) and the one specified in the Change Notice (2025). This difference is located in a small zone in the centre of the pit, which is characterized by the low hydraulic conductivity of the bedrock.

According to WSP (2025), this small difference in elevation will not have a significant impact on the results of the pit's hydrogeological study. The conclusions of the WSP study (2023) are therefore still valid and representative.

On the whole, the pit dimensions used in the hydrogeological study of the open pit of the Whabouchi Mine (WSP, 2023) accurately reflect the configuration of the Whabouchi Mine pit. There is therefore no further encroachment into the watersheds. Therefore, the updated fish habitat loss, dated January 2025 and transmitted to the DFO on January 29 of that year, does not need to be revised, with the exception of adding the permanent encroachment of 28.8 m² into Stream B. It is important to point out that WSP's notice (2025) was transmitted to the DFO on August 20, 2025. The IAAC and the DFO therefore have the same information.

Section 6.12.1.1 (GCM Consultants, 2024) states that the added and/or modified infrastructures will not result in any additional encroachment on the fish habitat, as they will be built on surfaces that are already disturbed, and that, ultimately, the added and/or modified infrastructures will have little effect on fish, fish habitat and other aquatic species. The fact that the added or modified infrastructures are constructed on surfaces that are already disturbed does not constitute sufficient justification to confirm that they will not lead to additional encroachment on fish habitat.

- xiv) *Describe and quantify any additional encroachment directly into the fish habitat and the sub-watersheds. Where applicable, this encroachment must be clearly identified and evaluated in order to measure the direct and indirect effects on fish habitat. Finally, if required, specify whether the modifications were taken into account in the evaluation of the direct or indirect effects on fish habitat.*

Answer:

The updated fish habitat loss, dated January 2025 and transmitted to the DFO on January 29 of that year, considers the same surface areas for the Whabouchi mining site as those presented in the Change Notice submitted to the IAAC on January 15, 2025. There are therefore no further encroachments into the sub-watersheds evaluated.

A culvert of a maximum length of 24 m, meeting the requirements of the *Regulation respecting the sustainable development of forests in the domain of the State* and the "Lignes directrices pour les traversées de cours d'eau au Québec (2016) [Guidelines for watercourse crossings in Québec]", will be constructed in Stream B, under the road leading to the mining effluent final discharge point, as shown in the updated map of the Whabouchi mining site in Appendix 1A. As the HWM of Stream B is 1.2 m, a fish habitat loss of 28.8 m² was added to the loss report due to this encroachment. This adjustment was communicated to the DFO by email on August 20, 2025.

It should be noted that Pond BC-01 was moved so that it no longer encroaches on Stream F and that the entirety of this stream was included in the fish habitat loss report due to its expected dewatering during the application of the NLI water management plan.

5.0 **FISH AND FISH HABITAT – MITIGATION MEASURES**

5.1 **Water Protection Measures During the Work**

The promoter is planning a new 12,000-tonne ore stockpile, which will be established outdoors near Pond BC-11, and covered with a dome to reduce the emission of dust into the atmosphere. The promoter is also planning a bypass stockpile for the crushing circuit with a 750-tonne capacity, to receive the ore after a breakdown or blockage. Based on the piezometric contours presented in map 3.6 of the Monitoring Program (Appendix C [GCM Consultants, 2024]), the groundwater at the location of this bypass stockpile will not necessarily be directed toward the pit and captured with the surface water during the first phases of the project. The promoter does not present any measures related to water quality in the receiving environment.

- xv) *Present groundwater protection measures or justify the absence of such measures in relation to the bypass stockpile, the new reject stockpile and the emergency storage stockpile.*

Answer:

First, it is important to remember the conclusion of the complementary geochemical characterization study carried out by Roche and dated April 2014, filed for the ESIA:

“Considering all the information gathered during the two characterizations, the following conclusions can be stated:

- The rare earth and rare metal content of all the materials co-disposed in the stockpile is very low;
- The co-disposal stockpile is not likely to generate acid minewater;
- The co-disposal stockpile is not likely to generate contaminants in concentrations deemed deleterious (including radioactive isotopes, rare earths and rare metals) in the surface or groundwater.

As such, no specific groundwater protection measures (watertightness) are required.”

In addition, bear in mind that the materials in the reject stockpile and the emergency storage stockpile are those destined for co-disposal.

Additional factors were also considered to justify the absence of further protection measures:

Bypass stockpile (ore)

The bypass stockpile will be used to partially empty the crushing circuit in the event of equipment breakdown. Such breakdowns are not expected to be frequent. Furthermore, only limited quantities of material should be stored there for short periods, which will limit exposure to the elements.

Reject stockpile (waste rock)

The sorter's reject stockpile represents a temporary storage point between the crushing circuit and the co-disposal stockpile. The material from the sorter is comprised of two sieved fractions from the crushing circuit with a grain size ranging between 10 mm and 80 mm. Moreover, the material is sorted by air jets, which should have the effect of reducing the presence of fine particles in the stockpile. Although the material is not identified as fundamentally leachable, its grain size and the sieving and air-jet sorting steps provide an additional barrier to the exchange of substances into rainwater and, ultimately, groundwater.

Emergency storage stockpile (residue)

As illustrated by the screenshot of the virtual model of the site (Figure 3), the design of the emergency stockpile was updated and it will now be stored under a shelter and on a concrete surface. The primary function of the shelter is to provide protection against wind erosion. The primary function of the concrete surface is to facilitate the handling of the material. However, these two additions (in green) will also serve as water protection measures.

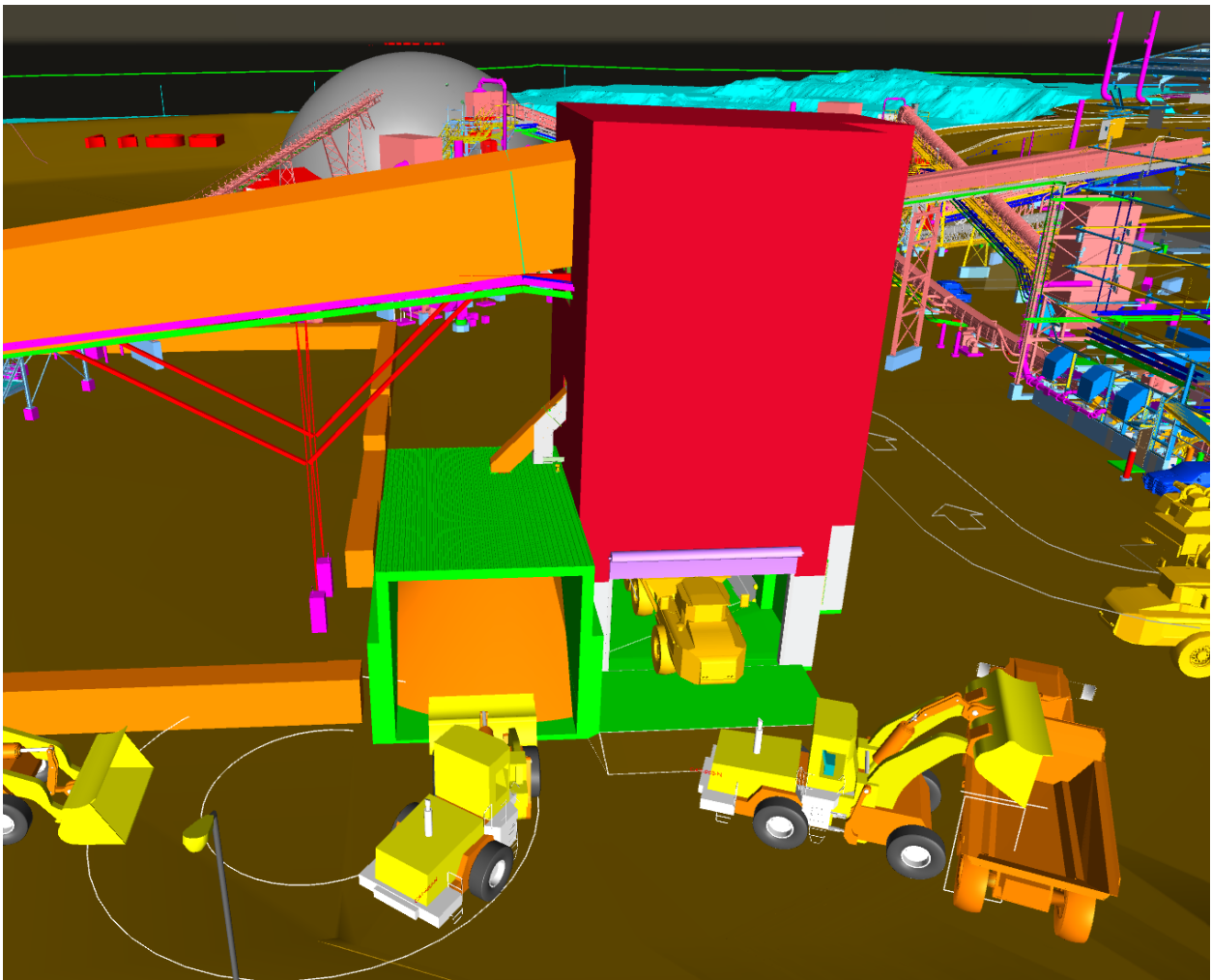


Figure 3. Virtual model of the residue silo and the emergency stockpile

As the ditch and pond design, and the management of volumes of water on the site were reviewed after the modifications to the layout of the mining site, the promoter plans to add the following activities related to these modifications: “deforestation, excavation, blasting (when required), the placement of materials to finish the ponds and embankments, as well as the implementation of the pumping system and the associated conduits.” However, no mitigation measures are presented in relation to the quality of the surface and groundwater during this work.

- xvi) *Present surface and groundwater protection measures related to the deforestation, excavation and blasting work (if applicable), the placement of materials to finish the ponds and embankments and the implementation of the pumping system and associated conduits.*

Answer:

The surface and groundwater protection measures will consist, first, of a diversion of the runoff water that is not in contact with the work zone to reduce the volumes to be treated and limit the transportation of particles. Next, different strategies will be put in place, based on the nature of the work.

With regard to deforestation, the strategies will include:

- Limiting the deforestation area to the footprint required for the work.
- Complying with the regulatory distances for buffer zones related to sensitive environments.
- Maintaining or refuelling equipment in areas that are already deforested and stripped, such as service roads, existing platforms or the garage (for maintenance, more specifically).
- Provide spill kits for all equipment.
- Take immediate action in the event of a spill to clean up contaminated materials.

With regard to the excavation, backfill and material placement work, the strategies will include:

- Limiting the area to the footprint required for the work.
- Avoiding excavation or backfill work during the thaw period or during rain.
- Loading the stripped material gradually and storing it in designated locations.
- Setting up an equipment circuit, especially for transport trucks.
- Maintaining or refuelling equipment in places that are already deforested and stripped, such as service roads, existing platforms or the garage (for maintenance, more specifically).
- Reducing the flow speed of water in the work zone.
- Channelling water from the work zone to the settling and pumping points.
- Provide spill kits for all equipment.
- Take immediate action in the event of a spill to clean up contaminated materials.

For blasting:

- Using Hydromite 860 or equivalent cartridge explosives, instead of bulk emulsions.
- Using electronic primers and detonators to reduce the risk of failures.
- Only the quantities of explosives required for one work shift shall be stored at the designated blasting site.

- Ensuring that all loaded holes are adequately stemmed.
- Avoiding leaving unloaded holes open to the air when there is a risk of rain
- Not loading holes when they are filled with water.
- Directing water from the blasting zone to a pumping point and sending it to a settling pond.

5.2 Communication Plan for the Exclusion Zone

The promoter is planning changes to the layout of the mining site and operational improvements, including to the infrastructures and storage areas. These installations could pose a physical danger to land users, because they might venture into danger zones on foot, all-terrain vehicle or snowmobile.

xvii) Present measures (e.g., agreements or communication) that can minimize the risks related to the safety of Cree land users at the mining site.

Answer:

First, the exclusion zone defined in Appendix 5.4.6 of the Chinuchi agreement, presented in Appendix 3 of this document, considers the storage areas, including the co-disposal stockpile located north of the Route du Nord, as well as the optimized infrastructures described in the Change Notice dated January 15, 2025. The only infrastructure that is not covered by the exclusion zone is the final mining effluent conduit, which has its outlet in the Nemiscau river. As this gravity pipe does not pose any risk for land users, it is not included in the Whabouchi Mine exclusion zone.

In addition to having been communicated to the members of the Cree Nation of Nemaska in the Chinuchi agreement, the exclusion zone is reiterated to the members of the Nation at the joint Environment and Land Conference, held annually by NLI and the Nation's administrative staff. It is also posted and available at the office of the NLI liaison officer in Nemaska.

Signage prohibiting access to the exclusion zone has also been added to all access points to this zone from the Route du Nord.

NLI intends to reiterate the boundaries of the exclusion zone in future editions of the annual Environment and Land Conference, which is attended by more than one third of the community's members. This fall, NLI will also send a map of the exclusion zone to local land users, that is, the holders of Cree camps located near the Whabouchi Mine.

NLI also intends to provide a map of the exclusion zone to the department of the Cree Nation of Nemaska that is responsible for issuing fishing licences to non-Indigenous people, in order to inform them about the access restrictions around the Whabouchi Mine.

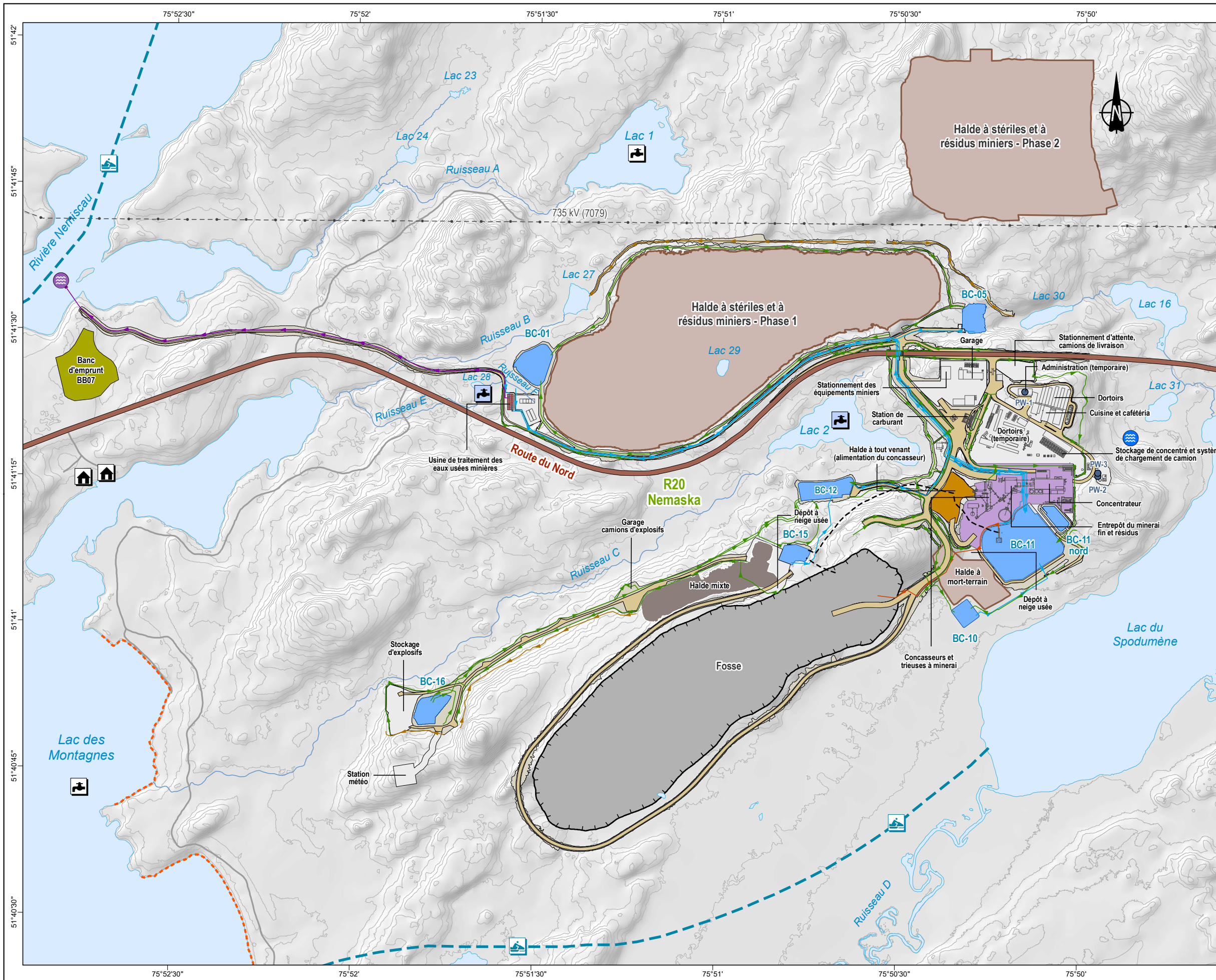
A map illustrating the exclusion zone will also be distributed to the members of the Cree Nation of Nemaska at their Annual General Assembly.

It should be noted that NLI submitted the boundaries of the exclusion zone to Hydro-Québec last year (2024). Hydro-Québec forwarded the map of the exclusion zone to its employees.

APPENDIX 1

MAPS AND PLANS

1A. WHABOUCHI SITE DEVELOPMENT PLAN (GCM, 2025)



- ÉLÉMENTS DU MILIEU**
- Plan d'eau
 - Cours d'eau permanent
 - Route principale
 - Route secondaire
 - Ligne hydroélectrique
- INFRASTRUCTURES DU PROJET**
- Fosse
 - Route
 - Déblai, remblai
 - Complexe usinier
 - Plateforme pour les activités de support aux opérations
 - Infrastructure
- LIEUX DE DÉPÔT**
- Lieu de dépôt définitif
 - Lieu de dépôt temporaire
 - Halde à tout venant (run-of-mine stockpile)
 - Banc d'emprunt
- GESTION DES EAUX**
- Bassin de collecte
 - Conduite d'eau principale
 - Conduite pour la gestion des crues
 - Fossé de dérivation
 - Conduite pour rejet de l'effluent final
 - Fossé de collecte
 - Point de rejet de l'effluent final
 - Point de rejet du système sanitaire
 - Conduite d'eau temporaire
 - Puit d'eau souterraine
 - Usine de traitement des eaux usées minières
- UTILISATION DU TERRITOIRE**
- Camp permanent
 - Plage
 - Sentier de motoneige
 - Lot de piégeage
 - Source d'eau potable
 - Source d'eau potable historique maintenant à l'intérieur du périmètre d'exclusion de la mine



SITE MINIER WHABOUCHI
Avis de modification de projet – Juin 2025

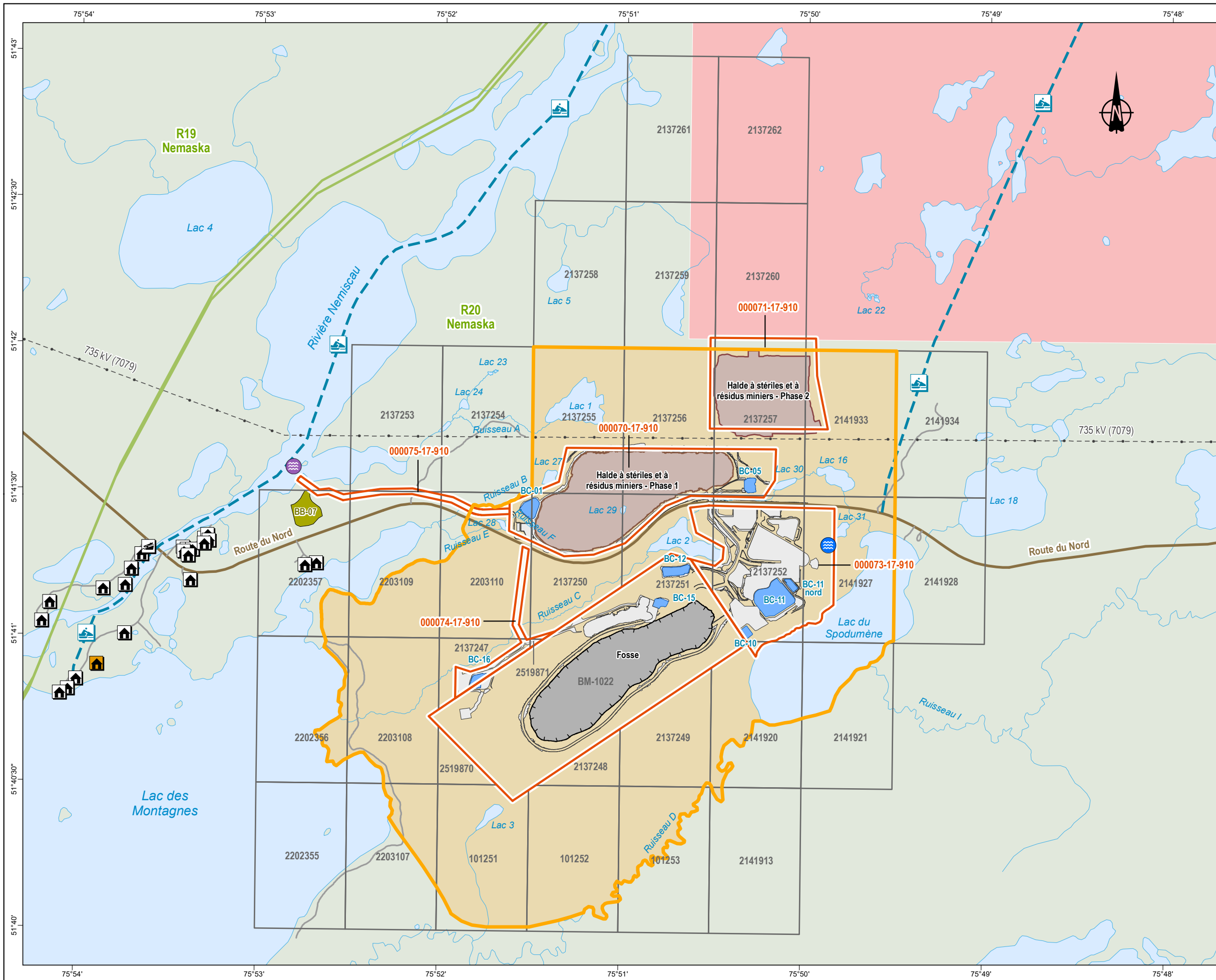
Plan d'aménagement du site

Sources :
CanVec, RNCan, 2019
BDGA, 1/5 000 000, MRNF Québec, 2012
Adresses Québec, MERN Québec, 2018
Infrastructures : DRA Americas inc., 2024
Utilisation du territoire : Norda Stelo, 2019

Projet : 22-1331-0514
Fichier : 22-1331-0514_c1_gcm_plan_aménagement_aeic_2025-07-17.mxd

0 50 100 150 200 250 m
Projection UTM, zone 18, NAD83

1B. MINING TITLE AND OCCUPANCY LEASE PLAN



ÉLÉMENTS DU MILIEU

- Plan d'eau
- Cours d'eau permanent
- Route principale
- Route secondaire
- Ligne hydroélectrique

INFRASTRUCTURES DU PROJET

- Fosse
- Route
- Empreinte des infrastructures

LIEUX DE DÉPÔT

- Lieu de dépôt définitif
- Banc d'emprunt

GESTION DES EAUX

- Bassin de collecte
- Point de rejet de l'effluent final
- Point de rejet du système sanitaire

DROITS MINIERS

- Titre minier
- Bail d'occupation

TERRES DE CATÉGORIE

- Terre de catégorie II
- Terre de catégorie III

UTILISATION DU TERRITOIRE

- Camp permanent
- Camp culturel (Bible Camp)
- Débarcadère
- Sentier de motoneige
- Lot de piégeage

SÉCURITÉ

- Zone de sécurité

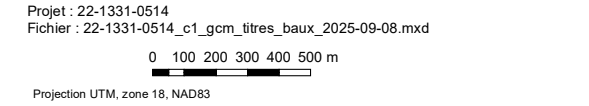


SITE MINIER WHABOUCHI
Avis de modification de projet – Août 2025

Titres miniers et baux d'occupation

Sources :
 CanVec, RNCan, 2019
 BDGA, 1/5 000 000, MRNF Québec, 2012
 Adresses Québec, MERN Québec, 2018
 Infrastructures : DRA Americas inc., 2024
 Utilisation du territoire : Norda Stelo, 2019

Projet : 22-1331-0514
 Fichier : 22-1331-0514_c1_gcm_titres_baux_2025-09-08.mxd



APPENDIX 2

MODELLING RESULTS AT SENSITIVE RECEPTORS, CCME METHOD (HATCH, 2025)

Résultat de la modélisation au récepteurs sensibles, méthode CCME (Hatch, 2025)

Contaminant	Type de valeur limite	Période	Valeur Limite (µg/m3)	Conc. initiale (µg/m3)	R1			R2			R3			R4			R5			R6		
					Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL
Particules fines (PM2,5)	CCME	24 h	27	15	1,10	16,10	60%	1,59	16,59	61%	1,21	16,21	60%	1,08	16,08	60%	0,88	15,88	59%	0,89	15,89	59%
Particules fines (PM2,5)	CCME	1 an	8,8	0,0	0,13	0,13	1%	0,21	0,21	2%	0,14	0,14	2%	0,12	0,12	1%	0,11	0,11	1%	0,11	0,11	1%
SO2	CCME	1 h	186 (65 ppb)	21	20,37	41,37	22%	17,37	38,37	21%	27,67	48,67	26%	15,21	36,21	19%	14,12	35,12	19%	16,58	37,58	20%
SO2	CCME	1 an	11 (4 ppb)	2	0,13	2,13	19%	0,22	2,22	19%	0,15	2,15	19%	0,12	2,12	19%	0,11	2,11	18%	0,11	2,11	18%
NOx	CCME	1 h	86 (42 ppb)	50	52,73	102,73	119%	62,11	112,11	130%	56,67	106,67	124%	50,48	100,48	116%	49,01	99,01	115%	49,69	99,69	116%
NOx	CCME	1 an	25 (12 ppb)	10	0,57	10,57	43%	0,99	10,99	45%	0,64	10,64	43%	0,53	10,53	43%	0,49	10,49	43%	0,50	10,50	43%

Contaminant	Type de valeur limite	Période	Valeur Limite (µg/m3)	Conc. initiale (µg/m3)	R7			R8			R9			R10			R11			R12		
					Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL
Particules fines (PM2,5)	CCME	24 h	27	15	0,88	15,88	59%	1,10	16,10	60%	1,10	16,10	60%	1,14	16,14	60%	1,16	16,16	60%	1,19	16,19	60%
Particules fines (PM2,5)	CCME	1 an	8,8	0,0	0,11	0,11	1%	0,14	0,14	2%	0,14	0,14	2%	0,14	0,14	2%	0,14	0,14	2%	0,15	0,15	2%
SO2	CCME	1 h	186 (65 ppb)	21	15,28	36,28	20%	19,84	40,84	22%	21,37	42,37	23%	18,02	39,02	21%	17,84	38,84	21%	16,65	37,65	20%
SO2	CCME	1 an	11 (4 ppb)	2	0,11	2,11	18%	0,14	2,14	19%	0,14	2,14	19%	0,15	2,15	19%	0,15	2,15	19%	0,15	2,15	19%
NOx	CCME	1 h	86 (42 ppb)	50	48,27	98,27	114%	51,84	101,84	118%	51,78	101,78	118%	51,74	101,74	118%	52,21	102,21	118%	51,31	101,31	117%
NOx	CCME	1 an	25 (12 ppb)	10	0,49	10,49	43%	0,63	10,63	43%	0,64	10,64	43%	0,66	10,66	43%	0,66	10,66	43%	0,68	10,68	43%

Contaminant	Type de valeur limite	Période	Valeur Limite (µg/m3)	Conc. initiale (µg/m3)	R13			R14			R15			R16			R17			R18		
					Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL
Particules fines (PM2,5)	CCME	24 h	27	15	1,11	16,11	60%	1,08	16,08	60%	1,12	16,12	60%	1,13	16,13	60%	1,02	16,02	59%	1,03	16,03	59%
Particules fines (PM2,5)	CCME	1 an	8,8	0,0	0,15	0,15	2%	0,14	0,14	2%	0,14	0,14	2%	0,14	0,14	2%	0,12	0,12	1%	0,12	0,12	1%
SO2	CCME	1 h	186 (65 ppb)	21	19,89	40,89	22%	19,88	40,88	22%	21,13	42,13	23%	20,80	41,80	22%	21,18	42,18	23%	13,60	34,60	19%
SO2	CCME	1 an	11 (4 ppb)	2	0,15	2,15	19%	0,14	2,14	19%	0,14	2,14	19%	0,14	2,14	19%	0,12	2,12	19%	0,12	2,12	18%
NOx	CCME	1 h	86 (42 ppb)	50	52,37	102,37	119%	51,32	101,32	117%	53,96	103,96	121%	53,90	103,90	120%	53,59	103,59	120%	39,23	89,23	103%
NOx	CCME	1 an	25 (12 ppb)	10	0,67	10,67	43%	0,63	10,63	43%	0,63	10,63	43%	0,64	10,64	43%	0,54	10,54	43%	0,51	10,51	43%

Contaminant	Type de valeur limite	Période	Valeur Limite (µg/m3)	Conc. initiale (µg/m3)	R19			R20			R21			R22			R23					
					Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL	Max Pro.	Max Cumul.	%VL			
Particules fines (PM2,5)	CCME	24 h	27	15	1,01	16,01	59%	0,90	15,90	59%	0,87	15,87	59%	1,06	16,06	59%	1,10	16,10	60%			
Particules fines (PM2,5)	CCME	1 an	8,8	0,0	0,11	0,11	1%	0,10	0,10	1%	0,10	0,10	1%	0,12	0,12	1%	0,13	0,13	1%			
SO2	CCME	1 h	186 (65 ppb)	21	10,61	31,61	17%	10,61	31,61	17%	12,90	33,90	18%	23,65	44,65	24%	16,03	37,03	20%			
SO2	CCME	1 an	11 (4 ppb)	2	0,11	2,11	18%	0,09	2,09	18%	0,09	2,09	18%	0,12	2,12	19%	0,12	2,12	19%			
NOx	CCME	1 h	86 (42 ppb)	50	38,48	88,48	103%	34,44	84,44	98%	36,62	86,62	100%	48,55	98,55	114%	48,19	98,19	114%			
NOx	CCME	1 an	25 (12 ppb)	10	0,48	10,48	43%	0,42	10,42	42%	0,42	10,42	42%	0,53	10,53	43%	0,57	10,57	43%			

Item Signification
 Conc. : Concentration
 Max Projet : Concentration maximale - Contribution du Projet seulement
 Max Cumul. : Concentration maximale du Projet + Concentration initiale
 %VL : % de la valeur limite

- Note 1 En absence de données, la concentration initiale pour les PM2,5 sur un an est posée à 0 µg/m3. Il n'y aurait pas de dépassement même si une concentration initiale de 8 µg/m3 était considérée.
- Note 2 Les résultats sur 24 h pour les PM2,5 représente la moyenne sur 5 ans du 98e centile annuel des concentrations quotidiennes moyennes sur 24 heures
- Note 3 La concentration initiale pour le SO2 a été calculée à partir de la concentration initiale sur 4 du MELCCFP et de la formule à l'annexe H du Règlement sur l'assainissement de l'atmosphère
- Note 4 Les résultats sur 1 h pour le SO2 représente la moyenne sur 5 ans du 99e centile annuel des maximums quotidiens des concentrations moyennes de SO2 sur une heure
- Note 5 Les résultats sur 1 h pour le NO2 représente la moyenne sur 5 ans du 98e centile annuel des maximums quotidiens des concentrations moyennes de NO2 sur une heure
- Note 6 Les résultats sur 1 heure et sur 1 an pour le NO2 a été évaluée en calculant la conversion du NOx en NO2 selon la méthode OLM

APPENDIX 3

NOTICE CONCERNING DIFFERENCES OBSERVED IN THE HYDROGEOLOGICAL STUDY (WSP, 2025)



18 juillet 2025

N° de projet CA0043163.5322

Ministère des Pêches et des Océans du Canada

AVIS SUR LES DIFFÉRENCES OBSERVÉES PAR LE MPO SUR LES PARAMÈTRES DE LA FOSSE À CIEL OUVERT DU SITE WHABOUCHI DE NEMASKA

Madame, Monsieur,

À la suite de questions soumise à Nemaska Lithium inc. (Nemaska) de la part du ministère des Pêches et des Océans du Canada (MPO, 2025) concernant des différences notées entre les paramètres de la fosse à ciel ouvert du projet Whabouchi de Nemaska utilisés dans l'étude hydrogéologique (WSP, 2023) et ceux présentés dans l'avis de changement soumis à l'Agence d'évaluation d'impact du Canada (GCM, 2024) la présente vise à apporter des informations complémentaires et des précision.

Les différences de dimension de la fosse suivantes ont été notées par le MPO :

D'abord, le MPO a noté certaines différences dans les dimensions de la fosse présentée :

- Empreinte estimée : 41 hectares (WSP, 2023) contre 42 hectares (GCM, 2024)
- Dimensions : 1 350 m × 350 m (WSP, 2023) contre 1 400 m × 400 m (GCM, 2024)
- Profondeur : 190 m sous la surface du sol (WSP, 2023) contre 230 m sous la surface du sol (GCM, 2024)
- Durée du minage avant d'atteindre la profondeur finale : 33 ans (WSP, 2023) contre 24 ans (GCM, 2024)
- Élévation du fond de fosse : 95 m au-dessus du niveau de la mer (WSP, 2023) contre 80 m au-dessus du niveau de la mer (GCM, 2024)

Les fichiers numériques de la géométrie de la fosse à ciel ouvert décrite dans le rapport de GCM Consultants (GCM, 2024) ont été fournies à WSP par Nemaska pour validation et vérification. Après la revue par WSP des

deux sources de données de la géométrie de la fosse à ciel ouvert (fichiers numériques de la géométrie de la fosse (WSP, 2023) et (GCM, 2024), les conclusions suivantes ont été tirées :

- 1) L'empreinte estimée de la fosse est sensiblement la même si on considère la surface qui recoupe la surface topographique. En effet, les données 2024 s'étendent au-dessus de la surface topographique. Si les fichiers numériques ne sont pas consultés en 3D, cela peut mener à une surestimation de la superficie et des dimensions (longueur/largeur) de la fosse.
- 2) La profondeur de la fosse peut varier selon le point de référence topographique qui est utilisée. Tout comme au point 1, si les fichiers numériques 2024 ne sont pas consultés en 3D, cela peut mener à une estimation erronée de la profondeur de la fosse.
- 3) Il y a bien une différence de 15 m de l'élévation du fond de la fosse entre les fichiers numériques de 2023 et les fichiers numériques de 2024. Cette différence est localisée dans une petite zone au centre de la fosse. À cette profondeur, la conductivité hydraulique du roc est faible (WSP, 2023). Il est considéré que cette différence d'élévation n'entraînerait pas d'impact majeur sur les résultats de l'étude hydrogéologique (WSP, 2023).
- 4) Les résultats présentés dans le rapport de l'étude hydrogéologiques (WSP, 2023) ont été obtenue par des simulations en régime permanent. L'aspect temporel n'est donc pas pris en compte directement dans ces résultats. Dans le cas des résultats présentés dans l'étude hydrogéologique les valeurs de rabattement du niveau de l'eau souterraine n'est donc pas influencé par la différence de durée de l'exploitation de la fosse.

En conclusion, les différences relevées par le MPO sont principalement liés à des ajustements dans la conception de la fosse à ciel ouvert depuis la réalisation de l'étude hydrogéologique (WSP, 2023). Suite une analyse approfondie il est confirmé que ces différence n'ont pas d'impact significatif sur les rabattements de l'eau souterraine et débits simulés dans notre étude hydrogéologique. Les conclusions de l'étude hydrogéologique pour la fosse Whabouchi sont donc valides (WSP, 2023).

Nous restons à votre disposition pour toute information complémentaire et vous prions d'agréer, Madame, Monsieur, l'expression de nos salutations distinguées.

WSP Canada Inc.



Sylvain Gagné, géo. MSc.
Hydrogéologue

Alexandre Boutin
Ingénieur principal en hydrogéologie

SG/AB

c.c: Carl Pednault (WSP), Vincent Perron (Nemaska Lithium)

Références :

MPO, 2025. Analyse de l'avis de changement soumis à l'Agence: demande de précision Pêches et Océans Canada (MPO). Courriel envoyé à M. Vincent Perron (Nemaska Lithium inc.) le 13 juin 2025 à 12 :22 par Annaïg Kervella (Annaig.Kervella@dfo-mpo.gc.ca).

WSP, 2023. Hydrogeological Study of the Pit area, Whabouchi Site. Nemaska Lithium inc. 15-09-2023. 21453761A-006RA-Rev0.

[https://wsponlinecan.sharepoint.com/sites/ca-2024ca291516/shared documents/06. livrables/ca0004482.2081- watermanagement/06. deliverables/029-lettre_mpo_modele_hydrogeo_2023/ca0004482.2081_reponse_mpo_hydrogeologie_rea.docx](https://wsponlinecan.sharepoint.com/sites/ca-2024ca291516/shared%20documents/06%20livrables/ca0004482.2081-watermanagement/06%20deliverables/029-lettre_mpo_modele_hydrogeo_2023/ca0004482.2081_reponse_mpo_hydrogeologie_rea.docx)

APPENDIX 4

MAP OF WHABOUCHI MINE SAFETY ZONE (ROCHE, 2015)

