



**MODIFICATIONS AU PROJET MINIER WHABOUCHI – NEMASKA LITHIUM**

**ADDENDA**

**RÉPONSES À LA DEMANDE DE PRÉCISIONS DE L'AGENCE D'ÉVALUATION D'IMPACT DU CANADA**

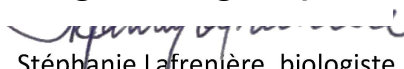
**ENV0742-1502-00-ADDENDA**



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2. Compte-rendu de la rencontre du 14 décembre 2022

## **1.0 INTRODUCTION**

### **1.1 Mise en contexte**

Le 18 octobre 2021, l'Agence d'évaluation d'impact du Canada (AÉIC) a acheminé à Nemaska Lithium inc. (Nemaska) une demande de précisions concernant les modifications apportées ou proposées au projet minier Whabouchi depuis l'émission de la déclaration de décision de 2015. Pour donner suite à cette demande, Nemaska a fait parvenir à l'AÉIC en mai 2022 le document intitulé « Modifications au projet minier Whabouchi – Nemaska Lithium, Réponses à la demande de précisions de l'Agence d'évaluation d'impact du Canada ».

Le 18 avril 2023, l'AÉIC a adressé à Nemaska des questions (par courriel) afin de pouvoir clarifier certains aspects des modifications proposées au projet Whabouchi. L'une de ces questions visait le rejet des eaux sanitaires au site Whabouchi.

### **1.2 Objectif du présent document**

Le présent addenda vise à fournir à l'AÉIC les précisions demandées relativement au rejet des eaux sanitaires au site Whabouchi. En effet, l'AÉIC demande de préciser les éléments suivants :

- a. Distinguer et spécifier la modification proposée au projet, concernant le système de traitement des eaux usées et son rejet, en comparant au projet autorisé au fédéral par déclaration de décision en 2015. Exemple, le promoteur souhaite-t-il proposer la modification suivante : un système de traitement des eaux usées et un rejet d'eau pour 40 travailleurs pour une certaine période, puis un système de traitement des eaux usées et un rejet pour 420 travailleurs pour le reste de la période de construction? (Spécifier également les débits de traitement pour chaque modification). De plus, quel serait le système de traitement et le rejet des eaux usées prévues pour la période d'exploitation?
- b. Apporter les modifications nécessaires à l'analyse présentée en avril 2022, pour couvrir les modifications demandées. Par exemple, considérant qu'un système de traitement et un rejet d'eaux usées pour 420 travailleurs n'ont pas été autorisés à l'Agence, le promoteur doit également présenter une analyse pour cette activité, s'il souhaite la faire autoriser.

### **1.3 Rejet d'eaux sanitaires autorisé par la déclaration de décision de 2015 versus le rejet d'eaux sanitaires du campement temporaire**

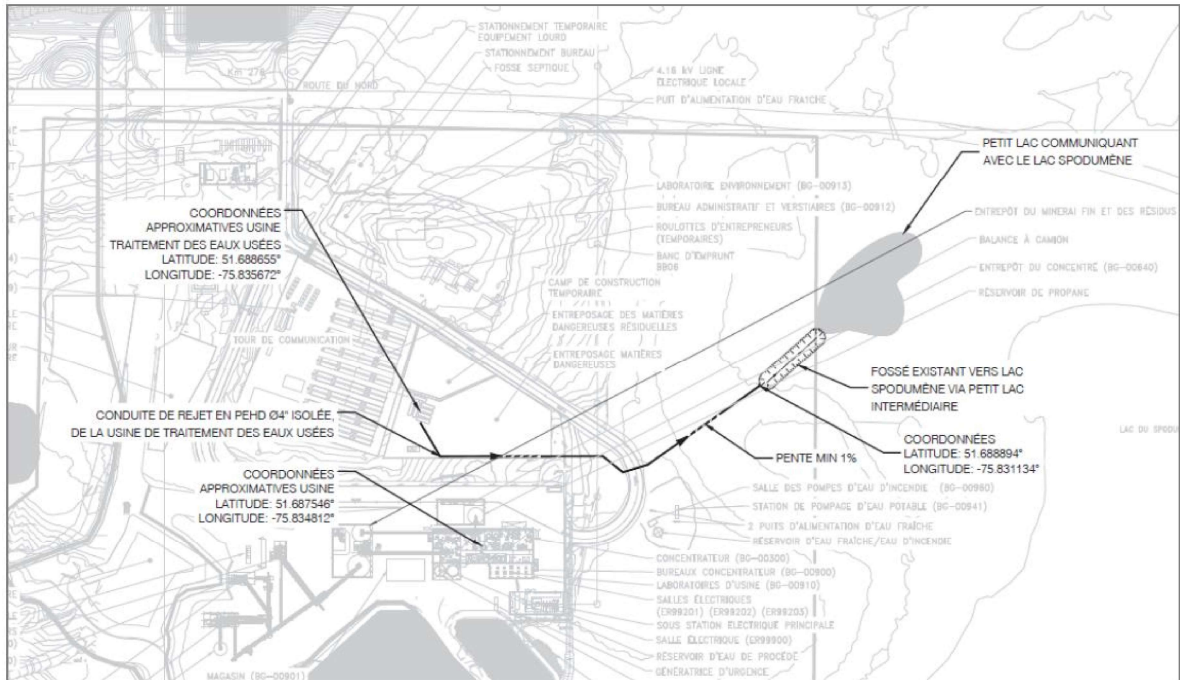
Tel que l'AÉIC le souligne dans son courriel du 18 avril dernier, dans l'étude d'impact de 2013 il était prévu que les eaux usées domestiques proviendraient des installations sanitaires situées dans les bâtiments des services administratifs et techniques, le garage et le concentrateur, et que ces eaux seraient acheminées vers des fosses septiques puis vers des champs d'épuration (système d'épuration par infiltration dans le sol, sans effluent relié au réseau hydrique). Il n'était pas prévu dans l'étude d'impact de 2013 qu'il y aurait une filière de traitement distincte pour les eaux usées domestiques du campement de construction temporaire, avec un rejet en surface.

Nemaska désire donc préciser que les modifications dont il est question dans la présente ne concernent pas les eaux usées domestiques et les installations sanitaires des bâtiments des services administratifs et techniques, du garage et du concentrateur, mais bien les eaux usées domestiques et le système de traitement du campement de construction temporaire sur le site minier Whabouchi. Ce rejet d'eaux sanitaires en surface n'était pas initialement inclus dans l'étude d'impact de 2013 et n'a pas été autorisé par la déclaration de décision de 2015.

## 2.0 SYSTÈME DE TRAITEMENT DES EAUX USÉES DOMESTIQUES – CAMPEMENT TEMPORAIRE

En avril 2022, Nemaska a fait part à l'AEIC des modifications apportées au projet à propos de la relocalisation du campement de construction temporaire sur le site minier Whabouchi, ainsi que pour le système de traitement des eaux usées sanitaires du campement incluant un rejet en surface. Les travaux relatifs à ces aménagements ont été effectués en 2019.

La Figure 2-1 illustre l'emplacement du système de traitement, de la conduite de rejet et du fossé existant en amont du petit lac (lac 31).



**Figure 2-1. Emplacement du système de traitement des eaux usées domestiques et de la conduite de rejet menant au petit lac**

Depuis cette date, une usine de traitement des eaux usées d'origine domestique est donc en place au site Whabouchi pour le campement temporaire, soit un système de réacteur biologique à membrane (MBR). Les installations de traitement furent conçues pour traiter une charge pour un campement de 420 travailleurs et le système a par la suite été ajusté afin de réduire la charge à traiter pour un maximum de 41 travailleurs (avec un débit de 10,25 m<sup>3</sup>/jour). Le document présenté à l'AEIC en avril 2022 visait la filière de traitement adaptée à un maximum de 41 travailleurs.

Cependant, avec la reprise des activités de construction en 2023, le campement devra accommoder un grand nombre de travailleurs et Nemaska projette d'augmenter la capacité de son système de traitement des eaux usées domestiques. Nemaska désire donc demander à l'AEIC une modification afin de considérer une capacité du système de traitement du camp temporaire de construction pouvant héberger jusqu'à 350 travailleurs, soit une capacité de traitement du système à 87,5 m<sup>3</sup>/jour.

En ce qui concerne le système de traitement et le rejet d'eaux usées prévues pour la période d'exploitation, Nemaska fera parvenir à l'AEIC, à une étape ultérieure, les informations en lien avec ces modifications.

La filière de traitement est présentement utilisée pour un débit maximum de 10,25 m<sup>3</sup>/jour (maximum de 41 travailleurs). Le système d'épuration existant reçoit les eaux usées du campement temporaire et celles liées aux activités de la cafétéria. La modification demandée vise une capacité de traitement maximale de 87,5 m<sup>3</sup>/jour soit pour les besoins de 350 travailleurs.

Afin de satisfaire les critères de rejet les plus sévères pouvant être associés au projet du complexe d'hébergement, Nemaska avait sélectionné la filière de traitement sous le principe de « La Meilleure Technologie Existante ». La technologie permettant de rencontrer la meilleure qualité d'eau possible par traitement biologique est celle des réacteurs biologiques membranaires (RBM). Les objectifs environnementaux de rejet (OER) définis en 2021 par le ministère de l'Environnement, de la Lutte contre les Changements climatiques, de la Faune et des Parcs (MELCCFP), les normes appliquées à la technologie et les critères de conception du RBM sont présentés au Tableau 2-1. Il est à noter que les performances de traitement du système doivent répondre aux critères les plus stricts entre les normes RBM et les OER.

**Tableau 2-1. Normes de rejet et critères de conception**

Paramètres	OER 2021	Normes RBM	Conception
DBO <sub>5</sub>	15 mg/l	10 mg/l	< 5 mg/l
MES	15 mg/l	10 mg/l	< 5 mg/l
NH <sub>4</sub>	N/A	3 mg/l en été 5 mg/l en hiver	< 2 mg/l
Pt	1 mg/l	0,3 mg/l	< 0,1 mg/l
Coliformes / 100 ml	200 UFC	200 UFC	100 UFC

La filière de traitement des eaux sanitaires en place est décrite ci-dessous. Il est à noter qu'elle demeurera ainsi.

- Décanteur : Débourbeur-Déshuileur de 60 m<sup>3</sup>.
- Bassin d'égalisation de 46 m<sup>3</sup>.
- Pompes de transfert vers les bioréacteurs.
- Bioréacteur anoxie de 7,5 m<sup>3</sup>.
- Bioréacteur aérobie de 21 m<sup>3</sup>.
- Filtration membranaire : Clarification sur deux trains de membranes d'ultrafiltration (UF) de capacité maximale de 90 m<sup>3</sup>/jour chaque.
- Réservoir de collecte des boues : Emmagasinement et digestion aérobie des boues dans un réservoir de 25 m<sup>3</sup>.

Les systèmes RBM représentent le jumelage de deux technologies, soit la boue activée et la filtration membranaire. Contrairement à une boue activée conventionnelle travaillant à des concentrations de liqueur mixte de 3,000 à 5,000 mg/l, les RBM permettent de travailler à des concentrations supérieures à 10,000 mg/l réduisant ainsi la taille des bioréacteurs.

La clé de cette technologie est l'utilisation de membranes comme outil de clarification. L'abattement de la demande biologique en oxygène 5 jours ( $DBO_5$ ) s'effectue par la transformation de la  $DBO_5$  soluble en floccs biologiques dans le bioréacteur.

Ces floccs composés de micro-organismes de tailles variant entre 5 et 10 microns sont retenus par les membranes qui offrent une séparation avec un seuil de coupure à 0,04 micron.

Pour l'enlèvement des matières en suspension (MES), la technologie permet l'enlèvement de presque la totalité des MES, offrant même une qualité d'eau traitée de turbidité inférieure à 1,0 UTN.

L'abattement de  $NH_4$  est fixé à 2 mg/l. La nitrification est tenue pour compte dans le dimensionnement. L'ajout d'alcalinité est requis pour assurer de bonnes performances de traitement même si le système implanté possède une phase anoxie qui permet de libérer l'alcalinité consommée lors de la nitrification. La phase anoxie permet l'enlèvement des nitrites et des nitrates, libérant l'azote en  $N_2$  gazeux.

L'enlèvement du phosphore nécessite l'ajout de coagulant afin de flocculer le phosphore de façon physico-chimique et de le retirer par clarification. L'abattement du phosphore est directement lié à la performance de l'outil de clarification utilisé. Pour les mêmes raisons que celles mentionnées précédemment, la séparation membranaire à 0,04 micron permettra d'éliminer la presque totalité du phosphore particulaire, ne laissant passer que le phosphore soluble (non coagulé). La performance sur l'enlèvement du phosphore ne sera plus qu'une question de dosage de coagulant. Les coliformes, ayant une taille d'environ 10 microns, sont retenus dans le système par la séparation membranaire qui offre une coupure à 0,04 micron.

Enfin, il est important de préciser que les performances épuratoires des RBM ne requièrent aucun champ de polissage en aval. Les effluents produits par les RBM respectent normalement les critères de rejets à l'environnement pour un ruisseau.

Après la filière de traitement, deux points d'échantillonnage sont présents. La fin de la conduite se trouve en amont du petit lac 31 (voir la figure 2-2).



Figure 2-2. Conduite de rejet menant au petit lac

## 2.1 Évaluation des effets

### 2.1.1 Environnement atmosphérique

#### *Effets anticipés*

Aucun effet n'est anticipé sur l'environnement atmosphérique par l'augmentation du débit d'eau à traiter à 87,5 m<sup>3</sup>/jour pour les besoins de 350 travailleurs, car seuls les paramètres d'opérations de la filière de traitement devront être ajustés.

Les effets potentiels sur l'environnement atmosphérique ont été limités lors de la période de mise en place de ces installations sur le site minier existant en 2019.

### 2.1.2 Eau souterraine et eau de surface

#### *Effets anticipés*

Dans la mesure où l'usine de traitement des eaux usées domestiques ne respecterait pas les exigences de rejet, cela pourrait occasionner un effet sur l'eau de surface. Aucun effet n'est toutefois appréhendé au niveau de l'eau souterraine.

#### *Mesures d'atténuation, de surveillance et de suivi proposées*

La technologie sélectionnée, soit le réacteur biologique membranaire, est une des plus performantes parmi les technologies d'épuration des eaux usées domestiques par voie biologique. La filière de traitement a été initialement conçue et aménagée en 2019 pour un nombre plus élevé de travailleurs que ce qui est visé par la présente modification.

Les installations de traitement des eaux usées sanitaires seront entretenues selon les exigences des manufacturiers. Les performances de traitement du système doivent toujours répondre aux critères les plus stricts entre les normes RBM et les OER.

Conformément à ce qui est mentionné au Programme de suivi environnemental et social (PSES), Nemaska utilisera et entretiendra les équipements de traitement de façon à ce que leur fonctionnement soit optimal. Le suivi prévu au PSES pour les systèmes de traitement des eaux usées domestiques du projet Whabouchi s'appliquera aussi pour la filière de traitement du campement temporaire, soit un suivi visant à vérifier que :

- Les systèmes de traitement des eaux usées demeurent opérationnels.
- La performance d'épuration soit respectée.

La sortie d'eau traitée de la station de traitement des eaux usées est dotée d'équipements de mesure en continu pour les paramètres suivants :

- Débit
- pH
- Turbidité
- Température

Un contrôle et suivi approprié des paramètres (DCO, DBO<sub>5</sub>, MES, P<sub>tot</sub>, NH<sub>4</sub>, nitrites-nitrates, coliformes, toxicité aigüe), en fonction des différentes exigences réglementaires, seront assurés. Les données de suivi seront conservées et transmises au MELCCFP, le cas échéant.

Si un bris est observé ou que les performances épuratoires ne sont pas atteintes, les réparations requises seront effectuées dans les plus brefs délais et il y aura recherche de la source du problème et mise en œuvre des mesures correctives qui s'imposent.

Le point de rejet de l'effluent se dirige vers un fossé qui s'écoule vers le petit lac 31. Il est actuellement prévu que le point de rejet soit également le petit lac 31 pour le rejet d'eaux usées sanitaires du camp permanent (en phase d'exploitation). Cet aspect sera confirmé à l'AÉIC à une étape ultérieure.

### ***Effets résiduels anticipés***

À la suite de l'application des mesures d'atténuation, de surveillance et de suivi, l'évaluation des effets résiduels de l'ajout du système de traitement et du rejet d'eaux usées sanitaires pour 350 travailleurs sur l'eau de surface est la suivante :

- Intensité de l'effet : Faible, car la technologie épuratoire sélectionnée et le respect des exigences de rejet font en sorte que l'effet résiduel n'est pas ou peu susceptible d'affecter l'intégrité et la qualité de l'eau.
- Étendue de l'effet : Ponctuelle, car l'effet résiduel ne serait ressenti que sur une superficie circonscrite.
- Durée de l'effet : Moyenne, car ce point de rejet d'eaux usées sanitaires devrait être effectif pour la période de construction et d'exploitation. Par ailleurs, en cas de dépassement des exigences de rejet, bien que l'intensité de l'effet puisse augmenter, cela serait de très courte durée, car des ajustements seraient effectués dans les meilleurs délais.
- Réversibilité/Irréversibilité : Effet réversible.

## **2.1.3 Climat sonore**

### ***Effets anticipés***

Aucun effet n'est anticipé sur l'environnement sonore par l'augmentation du débit d'eau à traiter à 87,5 m<sup>3</sup>/jour pour les besoins de 350 travailleurs, car seuls les paramètres d'opérations de la filière de traitement devront être ajustés.

Les effets potentiels sur l'environnement sonore ont été limités lors de la période de mise en place de ces installations sur le site minier existant en 2019.

## **2.1.4 Milieux terrestres et humides**

### ***Effets anticipés***

Le système de traitement des eaux usées sanitaires est déjà en place; conséquemment, aucun effet n'est anticipé sur les milieux terrestres et humides. Par ailleurs, l'usine de traitement des eaux usées domestiques a été aménagée en 2019 sur une aire existante déjà aménagée du site Whabouchi.

## **2.1.5 Poissons et leur habitat**

### ***Effets anticipés***

Dans la mesure où l'usine de traitement des eaux usées domestiques ne respecterait pas les exigences de rejet, cela pourrait occasionner un effet sur l'eau de surface ainsi que sur le poisson et son habitat.

### ***Mesures d'atténuation, de surveillance et de suivi proposées***

Les mesures d'atténuation, de surveillance et de suivi sont les mêmes que celles mentionnées à la section 2.1.2. L'application de celles-ci fera en sorte de minimiser l'effet potentiel sur le poisson et son habitat.

### ***Effets résiduels anticipés***

À la suite de l'application des mesures d'atténuation, de surveillance et de suivi, l'évaluation des effets résiduels de l'ajout du système de traitement et du rejet d'eaux usées sanitaires pour 350 travailleurs sur le poisson et son habitat est la suivante :

- Intensité de l'effet : Faible, car la technologie épuratoire sélectionnée et le respect des exigences de rejet font en sorte que l'effet résiduel n'est pas ou peu susceptible d'affecter l'intégrité et la qualité de l'eau.
- Étendue de l'effet : Ponctuelle, car l'effet résiduel ne serait ressenti que sur une superficie circonscrite.
- Durée de l'effet : Moyenne, car ce point de rejet d'eaux usées sanitaires devrait être effectif pour la période de construction et d'exploitation. Par ailleurs, en cas de dépassement des exigences de rejet, bien que l'intensité de l'effet puisse augmenter, cela serait de très courte durée, car des ajustements seraient effectués dans les meilleurs délais.
- Réversibilité/Irréversibilité : Effet réversible.

## **2.1.6 Oiseaux migrateurs**

### ***Effets anticipés***

Le système de traitement des eaux usées sanitaires est déjà en place, conséquemment, aucun effet n'est anticipé sur les oiseaux migrateurs. Par ailleurs, l'usine de traitement des eaux usées domestiques a été aménagée en 2019 sur une aire existante déjà aménagée du site Whabouchi.

## **2.1.7 Espèces en péril**

### ***Effets anticipés***

Le système de traitement des eaux usées sanitaires est déjà en place, conséquemment, aucun effet n'est anticipé sur les espèces en péril. Par ailleurs, l'usine de traitement des eaux usées domestiques a été aménagée en 2019 sur une aire existante déjà aménagée du site Whabouchi.

## **2.1.8 Usage courant des terres et des ressources à des fins traditionnelles**

### ***Effets anticipés***

Le système de traitement des eaux usées sanitaires est déjà en place, conséquemment, aucun effet n'est anticipé sur l'usage des terres et des ressources à des fins traditionnelles. Par ailleurs, l'usine de traitement des eaux usées domestiques a été aménagée en 2019 sur une aire existante déjà aménagée du site Whabouchi.

### **2.1.9 Santé humaine et conditions socioéconomiques des Premières Nations**

#### ***Effets anticipés***

Le non-respect des exigences de rejet des eaux usées sanitaires vers le petit lac 31 pourrait affecter la qualité de l'eau et ainsi occasionner des effets potentiels sur la santé des Premières Nations. Toutefois, le petit lac 31 se situe à l'intérieur de la zone de sécurité du site minier Whabouchi et n'est donc pas une source d'eau potable accessible. Le lac 31 ne constitue pas un site de prélèvement d'eau potable pour les Premières Nations et aucun site de prélèvement d'eau n'est présent dans le lac du Spodumène situé en aval hydraulique.

#### ***Mesures d'atténuation, de surveillance et de suivi proposées***

Des mesures d'atténuation, de surveillance et de suivi sont prévues afin de réduire les effets sur l'eau de surface et la santé des Premières Nations. Ces mesures sont détaillées à la section 2.1.2.

#### ***Effets résiduels anticipés***

À la suite de l'application des mesures d'atténuation, de surveillance et de suivi, l'évaluation des effets résiduels de l'ajout du système de traitement et du rejet d'eaux usées sanitaires pour 350 travailleurs sur la santé humaine et les conditions socioéconomiques des Premières Nations est la suivante :

- Intensité de l'effet : Faible, car la technologie épuratoire sélectionnée et le respect des exigences de rejet font en sorte que l'effet résiduel n'est pas ou peu susceptible d'affecter l'intégrité et la qualité de l'eau.
- Étendue de l'effet : Ponctuelle, car l'effet résiduel ne serait ressenti que sur une superficie circonscrite.
- Durée de l'effet : Moyenne, car ce point de rejet d'eaux usées sanitaires devrait être effectif pour la période de construction et d'exploitation. Par ailleurs, en cas de dépassement des exigences de rejet, bien que l'intensité de l'effet puisse augmenter, cela serait de très courte durée, car des ajustements seraient effectués dans les meilleurs délais.
- Réversibilité/Irréversibilité : Effet réversible.

### **2.1.10 Patrimoine naturel et culturel/Constructions d'importance sur le plan historique, archéologique, paléontologique ou architectural**

#### ***Effets anticipés***

Le système de traitement des eaux usées sanitaires est déjà en place, conséquemment, aucun effet n'est anticipé sur le patrimoine naturel et culturel.

### **2.2 Modalités d'information et de consultation du public**

Le système de traitement des eaux usées sanitaires du campement de construction de même que l'agrandissement de ce dernier ont été discutés lors des rencontres du comité environnement du 25 octobre 2022 et 14 décembre 2022. Les comptes-rendus sont disponibles aux annexes A.1 et A.2.

### **3.0 CONCLUSION**

Le présent addenda vise à répondre à l'une des questions de l'AÉIC adressée à Nemaska Lithium le 18 avril 2023 par courriel, en lien avec le rejet des eaux sanitaires sur le site minier Whabouchi. L'addenda vient préciser qu'une modification à la déclaration de décision de 2015 est effectivement demandée afin de faire autoriser le système de traitement des eaux usées du campement temporaire de construction pour une capacité de traitement maximale de 87,5 m<sup>3</sup>/jour, soit pour les besoins de 350 travailleurs, ainsi que son rejet en surface vers le petit lac 31. L'évaluation des effets sur les composantes de l'environnement et de l'environnement valorisées a été effectuée et la démarche d'information et de consultation auprès des membres du comité Environnement a été présentée.

## **ANNEXE A**

### COMPTES-RENDUS DE RENCONTRES

1. Compte-rendu de la rencontre du 25 octobre 2022
2. Compte-rendu de la rencontre du 14 décembre 2022

**WHABOUCHI MINE PROJECT**  
**ENVIRONMENT COMMITTEE – Meeting Minutes**  
**October 25<sup>th</sup>, 2022 – Videoconference**

**Were present**

Anna Krupa	Cree Nation Government (CNG)	Environmental Analyst	Interim Member
Matthew Tanoush	Cree Nation of Nemaska (CNN)	Director of Land and Sustainable Development	Observer
Walter Jolly	Cree Nation of Nemaska (CNN)	Councillor	Member
Tanya Lamoureux	Cree Nation of Nemaska (CNN)	Corporate Secretary – Legal Counsel	Observer
Anderson Jolly	Cree Nation of Nemaska (CNN)	Councillor	Substitute
James Wapachee Sr	Cree Nation of Nemaska (CNN)	Tallyman	Observer
Denis Isabel	Nemaska Lithium (NLI)	VP – Sustainable Development	Member
Vincent Perron	Nemaska Lithium (NLI)	Senior Director – Environment and Stakeholder Relations	Member
Isaac Gauthier	Transfert Environnement et Société (TES)	Facilitator - Project Director	Animator
Laurianne Francoeur	Transfert Environnement et Société (TES)	Note Taker - Analyst	Note taker

**Meeting Agenda**

Item #	Description
1	Opening and introduction
2	Approval of the proposed agenda for the meeting
3	Approval of the minutes of the previous meeting
4	Follow-ups from previous meetings
5	Sharing environmental updates and feedback from the field <ul style="list-style-type: none"> <li>• BC-10 decantation pond</li> <li>• Domestic water treatment system</li> <li>• Minor Spill on site</li> </ul>
6	Presentation of the new Closure Plan (summary)
7	Presentation of undertaken, ongoing and planned wildlife monitoring/assessments (tallyman request) - postponed to next meeting
8	Updates on permitting - postponed to next meeting
9	Varia
10	Summary of actions for the next meeting

### **Item #1. Opening and Introduction**

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Isaac opens the Environmental Committee (EC) meeting by welcoming the members. Denis is invited to share an introductory word. The meeting's agenda is well packed with several important issues to be discussed. The Cree members are invited to say a prayer before the meeting continues. Matthew proposes himself and says a prayer in Cree.

Since the last meeting was several months ago, a quick round table is held to allow members to reintroduce themselves.

It is mentioned that Anna will fill Kelly's seat on an interim basis. Her official replacement will be announced shortly.

### **Item #2. Approval of the proposed Meeting Agenda**

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The meeting agenda is presented. Isaac proposes a 15-minute break after the sixth topic on the agenda.

The agenda is approved. No varia is proposed.

### **Item #3. Previous Meeting Follow Ups**

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Isaac presents the previous meeting's minutes. No comments nor feedback were received. The minutes are adopted.

Vincent and Denis present the previous meeting's follow-up actions, namely to:

- Apply minor corrections to the March 9<sup>th</sup> EC meeting report;
- Present a summarized version of the mine's Closure Plan;
- Send a survey to determine environmental symposium date;
- Arrange a site visit with Walter Jolly and Matthew Tanoush;
- Present Nemaska Lithium's Communication Plan;
- Share Nemaska Resources' contact information with the CNG;
- Share the Nemaska Resources' final report;
- Share a summarized report of undertaken, planned and ongoing wildlife monitoring/inventories.

They begin by confirming the minor corrections to the previous meeting report. The members received the corrected version on June 29<sup>th</sup>, 2022. The summarized version of the Closure Plan will be presented later in the meeting.

Vincent continues by explaining NLI's decision to postpone the environmental symposium, as it would require a lot of work, with little time. Moreover, the mine is currently under care and maintenance, which means that there will be fewer things to share at a symposium. Since construction is planned to begin in 2023, it makes more sense to hold the event next year. Denis adds that it is important to find the ideal moment for the event, since summer, fall and spring are not optimal, due to traditional activities of the community. As such, February and March are proposed to which Tanya mentions that January or February would be best. She asks if the event will have any political topics, adding that there is an election in February. Vincent confirms that only environmental topics will be discussed. Matthew suggests that the event is held in March.

Still on the topic of the environmental symposium, it is mentioned that the event's planning will

begin before the end of the year. Vincent mentions that the event could also be a good opportunity for the CNG to present the ongoing eDNA project. Denis adds that the symposium is not focused on the Whabouchi Project but aims to discuss local environmental issues or projects. Researchers, non-profit organizations, and regional partners are welcome to do presentations. Tanya suggests that Matthew's team participates in the event's planning. She adds that for previous similar events, Nemaska has worked with the FauneNord firm to ensure an environmentally friendly event.

The meeting continues with a mention that Vincent will be present at the mine site all week and if committee or community members wish to visit the site, Vincent will make it his priority. Matthew confirms that he is interested in visiting the mine site. It is agreed upon that he can present himself at the gate on Thursday October 27<sup>th</sup> at 11:00 AM for a visit and lunch. Matthew also mentions that James Wapachee, the R20 tallyman, is in his office and would also be interested in a site visit. Vincent welcomes James to join the site visit and mentions that he will contact him to organize the visit.

Tanya asks Matthew if James will attend the committee meeting, which Matthew confirms, adding that Walter is also in attendance. The Nemaska board room is set up so the members can join the meeting. Anderson also joins the meeting. Isaac provides a summary of the meeting so far so the members can be up to date.

Regarding the Communication Plan, Vincent explains to the members that the document is not ready yet, and its presentation is postponed to next year. Anderson takes the opportunity to ask if Nemaska Lithium's new liaison agent was hired, which Denis confirms. The new liaison agent is Silas Blackned and he will be soon joining the team. Anderson continues by asking if NLI will share a newsletter to inform the community about the project's progress. Denis answers that this is currently under discussion. However, NLI will probably use more popular communication channels like Facebook or local radio, for example. Anderson agrees but insists on the fact that the community wants to be informed. He mentions that many people have questions about the new committees and employment opportunities at the mine. Anderson continues by asking if Silas Blackned will continue to work at the airport since he is currently a supervisor. Denis answers that yes, he will work both jobs part-time in the short term.

The follow-up actions continue with Vincent explaining that Nemaska Resources' final report refers to a monitoring report from last year. He adds that the report is now available to the committee members on the Teams channel. Anna then asks if the contact information for Nemaska Resources was shared with Kelly. Vincent answers that it is possible since it was shared for the eDNA Project, but if needed, the information can be shared with Anna. She confirms that she will need the information to share it with Kelly's replacement.

The discussion on follow-up actions continues with Vincent mentioning that the final topic, wildlife monitoring, will be discussed in the meeting. Matthew asks if black bears are part of the control plan, especially for those who may try to eat garbage. Denis answers that NLI has cages to capture bears if they get too close to the site and, if needed, the tallyman will be contacted to assist in the capture. He adds that no bear was spotted this year near the cafeteria area, with one bear seen further away from the property. Walter adds that the bears will be hibernating soon and won't be a problem. James continues by saying that the cages owned by NLI are not the best ones since they don't have wheels. Denis confirms that he will look into having wheels added to the cages to facilitate transportation and will reach out to James to find the best solution. Anderson continues by saying that the Eleonore Mine has had problems with bears. A bear even locked himself in the laundry room and was found by an employee. He suggests keeping dogs at the site to make sure that the bears don't come too close.

#### **Item #4. Environmental Updates**

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Following last meeting's discussion on the BC-10 water basin, which showed an orange tint due to an elevated iron concentration, Vincent shares information on the recent water sampling analysis. He notes that the iron concentrations have been slowly rising, reaching a 5.4 mg/L concentration. He reiterates that the water is not toxic, as the orange tint is basically rust, and that the issue is mostly esthetic. Since the regulatory limit is 6 mg/L, Nemaska Lithium decided to pump the water into basin BC-11 and avoid any discharge. Later in the project, NLI plans to build a water treatment plant and treat the site's water. Regarding the water pumping to BC-11 basin, NLI is currently working on improving the process.

James asks when will the water return to a normal colour. Denis explains that it is not the water that is orange tinted, but rather the rocks. He mentions that the rocks will likely remain orange but will be contained on-site. James then asks if the colour is caused by a contaminant, to which Denis explains that the colour is caused by the contact (oxidization) of iron in the soil with air and can be compared to rust on rocks. He adds that the phenomenon is common at mine sites. Walter then asks if other mine sites also the same issue have, which Denis acknowledges. Vincent adds that such rust can often be seen in roadside ditches around the Route du Nord. Denis continues by explaining that the water is clear and that the orange particles are at the bottom of the basin.

Anderson asks if the BC-11 basin's water is orange tinted. Denis answers negatively, but if BC-10 water continues to be pumped without being treated, it will be. He insists on the fact that the solution is temporary and that a company will treat the basin at the beginning of the winter. The pumping will also stop once the weather will be too cold. Denis explains that the water from the BC-10 basin will always have an orange tint, but it won't be as pronounced as it is at the moment. Anderson mentions that he would like to do a site visit but will unfortunately not be available this week. Denis mentions that there is always someone onsite and that anyone who would like to visit can simply call-in advance and present themselves at the gate. On that matter, Isaac suggests that the visits be made by someone at NLI who can speak to the tinted water issue in BC-10. Both Denis and Anderson agree. Laurianne will share the respective parties' contact information to facilitate the site visit.

Tanya asks if the water in basin BC-11 discharges anywhere. Denis answers that the water stays in the basin and is not discharged. Tanya continues by asking whether the treatment will be done repeatedly, to which Denis answers that the treatment will only be done once. Tanya continues by asking if the treatment will have any impacts to wildlife, for example to ducks or geese that land in the BC-10 basin. Denis and Vincent explain that the treatment is non-toxic, and nor is the water in the basin. They mention that some fish (suckerfish) were spotted in the basin and that they are not affected by the orange colour since the water is clear and non-toxic. No birds were seen on the basin.

Matthew shares his thoughts on the issue in Cree. He then summarizes in English by mentioning that the same orange colour can be seen in creeks along roads. He mentions that very few fish are seen in those creeks, which is natural. He adds that iron is a natural occurring mineral from the earth. Denis agrees with Matthew's affirmation. He repeats that the issue is mostly aesthetic and that the measures taken are to avoid any potential future problems.

Matthew continues by sharing the words of his late father, who mentioned that tunnels exist between lakes, rivers, and ponds, which allows water to travel between sources. He explains that in the past, he saw a lake that used to be very clear change colour to a darker one because of underground channels. Matthew then asks if such a situation could happen in Spodumène Lake or

other water sources in the area. Denis agrees with Matthew's observation and answers that the situation should not occur since the water itself is not tinted, only the rocks are affected by the colour change.

Tanya invites Walter and James to join Matthew during the site visit on Thursday to obtain more information on the topic. Walter confirms that he already saw the water colouration during his last visit.

Vincent continues the meeting by presenting NLI's domestic water treatment system. The treatment started on August 26<sup>th</sup>, for which the committee members received an email on the topic on September 1<sup>st</sup>. The system treats the work camp's water, namely from the kitchen, showers, and toilets. Vincent explains that adjustments are still being made to the treatment system, for example, to adjust the bioreactor's pH.

Walter asks if the domestic water discharge will be monitored. Vincent answers that all the mine's water discharge will be monitored during its lifetime. Most of the systems require monthly monitoring.

Isaac summarizes the information shared by Vincent to ensure everyone's understanding. He mentions that the water treatment system and the discharge pipe are only for domestic water and not mining activities, which Denis confirms. Walter then asks if the water used to supply the camp is taken from an underground well. Denis answers that the camp's drinking water is from an underground well while the rest of the water supply comes from the surface. Anderson asks if NLI plans to reduce water use during the mine's operation. Denis answers that the water used by the plant will be recirculated to avoid discharging into the environment. Matthew asks if there is a reason why the domestic water discharge pipe is not underground, to which Denis answers that the above ground pipe is to be used during summer and will be changed during winter to prevent freezing. The pipe is also only used for the construction camp as the permanent camp will use a different system. Denis adds that the above ground pipe should not affect wildlife movement and suggests that the members participating in a site-visit later in the week also see the water discharge pipe to share feedback on the topic. Denis repeats that the current discharge system is preliminary. Matthew thanks him for the answers but mentions that he is looking for a permanent solution.

Isaac suggests that the topic of water management be further discussed in a future meeting.

The meeting continues by discussing a minor spill that happened at the site, for which an email was sent on September 8<sup>th</sup> to the Environmental Committee. Vincent shares information about the spill and how it was managed. He mentions that since the project is in care and maintenance, there are only a few such incidents, NLI can thus communicate to the committee each spill as soon as it happens. During the construction phase, spills and other environmental incidents will be communicated in a monthly report.

The committee takes a 15-minute break.

#### **Item #5. Presentation of the New Closure Plan**

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After a short break, Denis begins presenting NLI's Closure Plan for the Whabouchi Project. He explains that a Closure Plan is required by government to ensure that companies do not abandon mining projects. The plan must be very detailed, supported by a security deposit, and updated every five years to take into account the project's evolution and its operations.

The Closure Plan that is presented today is the latest version from February 2021. The document will

also be available on Teams, for consultation. The topics are the following:

- Co-disposal heap: represents the area where the waste rock and tailings will be stored. The area will be progressively revegetated. Also, since NLI is pilling dry elements, these will partially return to the pit and be revegetated from east to west.
- Barren land: the material will be removed. The remaining barren land will be revegetated.
- Buildings and plants: the buildings will be decommissioned and sold. There will be no demolition or waste landfill at the site, as recycling and waste disposal will be made in the south of Quebec. No waste will remain on Cree land.
- Surface infrastructure: will be demolished. The waste will be recycled or disposed adequately.
- Roads: they will be scarified as they cannot be immediately revegetated due to soil compaction. Some roads will be rehabilitated later since they will be needed in the short-term for monitoring. This usually takes 10 years, but it can be longer if requested by government.
- Underground infrastructure: they will be cleaned and left in place.
- Overburden heap: will be used for re-vegetation.
- Ditches and basins: will be cleaned and backfilled. The site will also be re-vegetated.
- Open pit: The pit will be progressively filled with water to be transformed into a new lake. It will take many decades to fill this lake, up to 30 years according to Denis. A peripheral berm will be installed at a safe distance from the pit.
- Heavy equipment: it will be sold. If a Cree company wants the equipment, they will have priority on buying the equipment.
- Petroleum products, chemical products, and hazardous materials: They will be sent for disposal in approved facilities.
- Contaminated soils: depending on the quality and the contamination of the soil, it will be managed per regulations.
- Ditches and basins: They will be cleaned and backfilled.

Tanya asks if NLI could consider selling the camp site to Nemaska. Denis answers that it is not in the plan since it was not discussed with the community, however the idea could be considered. He adds that there is still time to have these conversations since the Closure Plan will be updated in 2026 and the mine's closure is in minimum 33 years.

Matthew asks if NLI will use the overburden for backfilling. Denis answers that only the co-disposal heap will be used.

Tanya asks if the Closure Plan is written in French, to which Denis answers positively. Tanya suggests that this should be made clear when the document is shared. If needed, a translation of certain parts could be made, per the community's specific interests. Denis and Vincent agree.

Walter asks if fish will be able to live in the open pit once it is transformed into a lake. Denis answers that yes, although they will likely be small fish, as there will be little vegetation to support larger fish due to the lake's depth. He adds that the plan does not aim to create an ecosystem for animals, mentioning that there was little consultation on the document. He adds that NLI will look to consult the Nemaska community when it will update the Closure Plan. Walter asks if the lake will be toxic, to which Denis answers that it will not. Walter and James both mention that the lake looks beautiful according to the pictures, with a beautiful colour. Denis suggests showing pictures of other mine lakes post rehabilitation to the members. He mentions that the lake's colour will be light blue but will eventually become darker. Tanya asks if the lake will be like a gravel pit lake, to which Denis answers positively, although mine pits are deeper. Thus, the colour is darker than in a gravel pit lake.

Tanya explains to Walter and James that Lake Lemay near Ottawa is a gravel pit lake. People can swim in it and use it for recreational activities.

Anderson asks if the lake's water will be monitored, to which Denis answers positively. Anderson then asks how deep the lake will be, to which Denis answers that it is not known yet, but the information can be shared later in the project's development.

Matthew intervenes to insist on the importance of good planning in project development and mentions that he hopes younger generations will be smarter with resources management and request stricter regulations. As an example, he mentions that in Ontario, mines must use overburden, waste rock and tailings to fill a pit after closure. He suggests the same practice be used and that the community be consulted on the topic. Denis answers that backfilling a pit is always recommended in Quebec. In some cases, he mentions that project's with more than one pit often progressively fill them as the project moves forward. Different pit shapes can also be used to support the backfilling or parts of the mine can be built underground. To sum up, Denis mentions that NLI is still considering different options.

Regarding Matthew's comment, Isaac asks NLI if they can commit to having meaningful consultations on the Closure Plan with the community. Denis commits to consultations with the Nemaska community prior to the updating the Closure Plan. Tanya mentions that the topic of consultations on the Closure Plan was a big issue for the community. She then asks if an underground mine is a serious option. Denis explains that it is a possibility and will depend on the mine's economics. If the lithium market stays up, the mine will likely be an open pit. If the lithium market goes down, the project may be underground. This will be planned out to ensure the best use of the project's finances and the site's lithium resources. Denis adds that NLI could organize a visit to a closed mine site so the members can see what it looks like.

Denis continues by presenting recent improvements to the Closure Plan. One key element is the building of a co-disposal test pad by a team from the Université du Québec en Abitibi-Témiscamingue (UQAT) to assess geochemistry and predict water quality for the project's eventual full co-disposal heap. The testing and monitoring were made by a Ph.D. student for their thesis and the report is now available. The objective was to predict the water quality of the co-disposal heap to ensure better control. Matthew asks what a co-disposal test pad is, to which Denis explains that it is a smaller version of the co-disposal heap to test potential environmental issues and plan appropriate mitigation measures.

Vincent follows by giving details about a re-vegetation study undertaken by the Université de Sherbrooke. The study's objective was to test the revegetation potential of local plant species. Usually, hydroseeding is used in such studies, but in this case, there were concerns about this approach with local plants. The plants were thus tested in soil, with different nutrients and different soil compositions. He adds that the nursery will be built next year, and it will be possible for local companies to operate the nursery. Isaac asks which plants are tested, to which Vincent answers that he doesn't know the names of all the plants but knows that Labrador tea is currently being tested. The name of the plant species will be shared with the group at the next meeting.

Denis thanks the community for keeping the Université de Sherbrooke project alive and further thanks Matthew for helping to fund the project. Matthew mentions that Sébastien Roy, the study manager from the Université de Sherbrooke, wanted the Cree nation to actively participate in the project, but unfortunately, there was a lack of community participation. Denis mentions that the topic can be discussed at the following meeting and that for the moment, the project will rely on resources from the Université de Sherbrooke. He also adds that the topic could be raised during

consultations with the community. Matthew mentions that the University has the skills and knowledge necessary to undertake the study since they worked with Hydro-Québec on a similar project. He asks if training will be available in Nemaska to support the project. Denis mentions that Sébastien Roy is open to sharing how the project works and partnering with the Nemaska community. Isaac points out that this would be a good topic for the Economic Development Committee.

**Item #6. Summary of actions**

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The rest of the presentation is postponed to the next meeting as it is lunchtime. This will allow enough time to cover the topic of wildlife monitoring and answer member questions. Denis takes time to thank everyone for their participation. He repeats that a visit is planned on Thursday at 11:00 PM, and everyone is welcome to join. Another visit will also be planned later for Anderson.

Tanya suggests that the next Environmental Committee meeting be in person. It is agreed by all. The aim is to hold the next meeting in December, before the holidays. A survey will be sent out by Laurianne to organize the meeting.

The actions are the following:

Share the eDNA project’s information with Anna	VP
Share Vincent and Denis’ contact information with Anderson	LF
Present details about the construction of the permanent camp, including water discharge	VP and DI
Reach out to James Wapachee regarding bear management at the mine site	VP and DI
Share Closure Plan and identify significant portions for community review	VP and DI
Verify details about the Closure Plan <ul style="list-style-type: none"> <li>- Depth of the new lake</li> <li>- Members’ interest to visit another closed mine site</li> <li>- Photos of mine lakes where the water changed colour</li> </ul>	VP and DI
Share the names of the plants tested by the Université de Sherbrooke with regards to re-vegetation of the mine pit	VP

# Environment Committee Meeting

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October 25<sup>th</sup> 2022



# 1. Opening and Introduction (Quorum)

## Cree Members

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**Walter Jolly**, Council Member - Cree Nation of Nemaska

**Anderson Jolly (alternate)**, Council Member - Cree Nation of Nemaska

**Currently empty seat (Kelly Leblanc)**

## Nemaska Lithium Members

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**Denis Isabel**, Vice President - Sustainable Development

**Vincent Perron**, Senior Director - Environment and Stakeholder Relations

## Transfert Environnement et Société

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**Isaac Gauthier**, Facilitator

**Laurianne Francoeur**, Minute-Taker



## 2. Approval of the Proposed Meeting Agenda

### Proposed meeting agenda:

1. Opening and Introduction
2. Decision: Approval of the proposed meeting agenda
3. Decision: Approval of the previous meeting minutes
4. Discussion: Previous meetings follow ups
5. Discussion: Sharing environmental updates and feedback from the field
6. Discussion: Presentation of the new Closure Plan (summary)
7. Discussion: Presentation of undertaken, ongoing and planned wildlife monitoring/assessments (tallyman request)
8. Discussion: Update on permitting and regulatory affairs
9. Varia
10. Summary of actions



### 3. Approval of the Previous Meeting Minutes (EC Meeting - June 2<sup>nd</sup> 2022)



- Previous Meeting minutes were sent to EC members on June 29<sup>th</sup> 2022
  - ✓ TES has not received any comments
- Minutes of the June 2<sup>nd</sup> EC meeting available at this link:

[EC Meeting June 2nd, 2022](#)

**WHABOUCHI MINE PROJECT  
ENVIRONMENT COMMITTEE – Meeting Minutes  
June 2<sup>nd</sup>, 2022 – Videoconference**

**Were present**

Name	Organization	Role	Attendance
Walter Jolly	Cree Nation of Nemaska (CNN)	Councillor	Member
Kelly Leblanc	Cree Nation Government (CNG)	Environmental and Social Assessment Coordinator	Member
Denis Isabel	Nemaska Lithium (NLI)	VP – Sustainable Development	Member
Vincent Perron	Nemaska Lithium (NLI)	Senior Director – Environment and Stakeholder Relations	Member
Isaac Iserhoff	Cree Nation Government (CNG)	Territorial Programs and Natural Resources Advisor	Observer
Anna Krupa	Cree Nation Government (CNG)	Environmental Analyst	Observer
Matthew Tanoush	Cree Nation of Nemaska (CNN)	Director of Land and Sustainable Development	Observer
Tanya Lamoureux	Cree Nation of Nemaska (CNN)	Corporate Secretary – Legal Counsel	Observer
Patrick Corriveau	Nemaska Lithium (NLI)	Environment Coordinator	Observer
Isaac Gauthier	Transfert Environnement et Société (TES)	Facilitator - Project Director	-
Laurianne Francoeur	Transfert Environnement et Société (TES)	Note Taker - Analyst	-

**Meeting Agenda**

Item #	Description
1	Opening and introduction
2	Approval of the proposed agenda for the meeting
3	Approval of the minutes of the previous meeting
4	Follow-ups from previous meetings
5	Sharing environmental updates and feedback from the field
6	Presentation of the environmental and social monitoring program highlights for 2021
7	Presentation of the 2022 environmental and social monitoring program
8	Updates on permitting
9	Varia
10	Summary of actions for the next meeting

## 4. Previous Meeting Follow-ups

Suggestions and actions	Updates and status
1. Apply minor correction to March 9 <sup>th</sup> EC meeting minutes as per Kelly Leblanc's comment	<input checked="" type="checkbox"/> Done
2. Prepare and present a summarized version of NLI's closure plan	<input checked="" type="checkbox"/> Done –will be presented today
3. Send a survey to determine environmental symposium date	<input type="checkbox"/> Postponed to next year
4. Arrange a site visit with Walter Jolly and Matthew Tanoush	<input checked="" type="checkbox"/> In Progress – Several attempts made
5. Present Nemaska Lithium's communication plan	<input type="checkbox"/> Postponed to the next meeting
6. Share Nemaska Resources's contact information with the CNG	<input checked="" type="checkbox"/> Done
7. Share the final report of Nemaska Resources	<input checked="" type="checkbox"/> Done
8. Prepare and share a summarized report of undertaken, planned and ongoing wildlife monitoring/inventories for the Whabouchi Project	<input checked="" type="checkbox"/> Done - will be presented today

## 5. Environmental Updates and Feedback from the Field

- **Coloured water in BC-10 basin**

- ✓ Water samples were taken in August 2022 and sent to laboratory for analysis
- ✓ This year's results compared to those of 2021 show an **increase trend** in water concentration for **suspended solids, turbidity, iron, and sodium**. They also show a **slight decrease of water pH**. However, the coloured water is still **non toxic**.



Parameters	2021 Results	2022 Results	Limit	Trend
Suspended solids (mg/l)	3,8	10	30	
Turbidity (UTN)	28	44	...	↑
Iron (mg/l)	1,5	5,4	6	
Sodium (mg/l)	3,4	47	...	↑
pH	7,32	6,83	6 - 9,5	↓
Bioassays	Non Toxic	Non Toxic	No Toxicity	↔

## 5. Environmental Updates and Feedback from the Field

- **Coloured water in BC-10 basin**

- ✓ **Action Plan:**

- Short-term: Transfer the coloured water from the BC-10 basin to the BC-11 basin and stop the effluent in the peatland
- Mid-Term: Treat the iron-enriched water (water treatment requires an authorization from the regulator)



## 5. Environmental Updates and Feedback from the Field



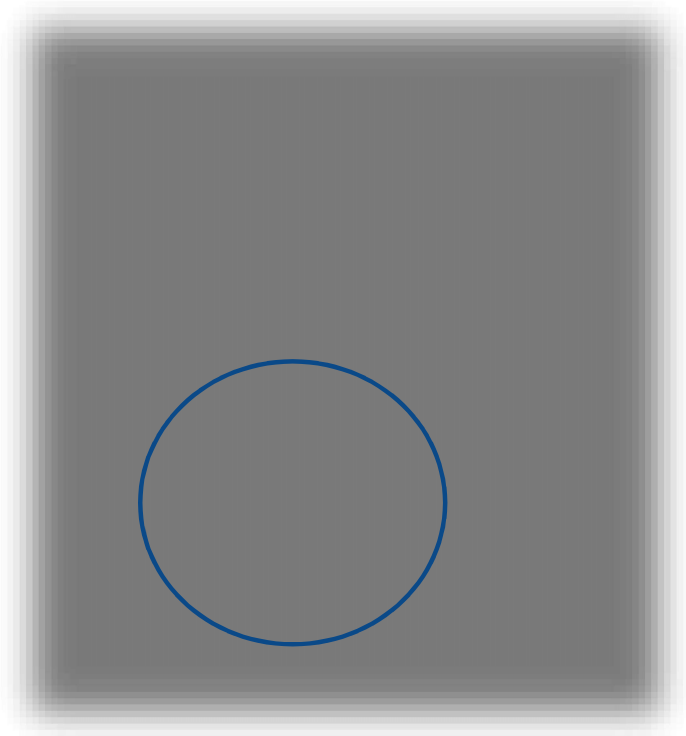
## 5. Environmental Updates and Feedback from the Field

- **Domestic water treatment system (Mabarex)**
  - ✓ Operation of the Whabouchi domestic wastewater treatment system started on August 26, 2022
    - Notification were sent to EC members with the location of the effluent
    - Monitoring program of the effluent has been implemented
    - Effluent is meeting environmental standards, except for the ammoniacal nitrogen (adjustments are being implemented)



## 5. Environmental Updates and Feedback from the Field

- **Minor Spill at Whabouchi**
  - ✓ **Volume spilled:** less than 15 L of hydraulic oil
  - ✓ **Surface impacted:** 2m<sup>2</sup>
  - ✓ **Cause of the spill:** broken hydraulic hose of a propane transfer pump (propane truck)
  - ✓ **Intervention:**
    - Use of absorbent sheets;
    - Excavation of 0,5 m<sup>3</sup> of contaminated soil;
    - Soil disposal in accordance with Quebec regulation.
  - ✓ **Modification of the work procedure:**
    - Visual inspection of the pump and fittings before use;
    - Use undercontainment device to collect any leak;
    - Supervision by Nemaska Lithium of the filling operation, from the beginning to the end of the operation.



## 6. Summary of the Updated Closure Plan

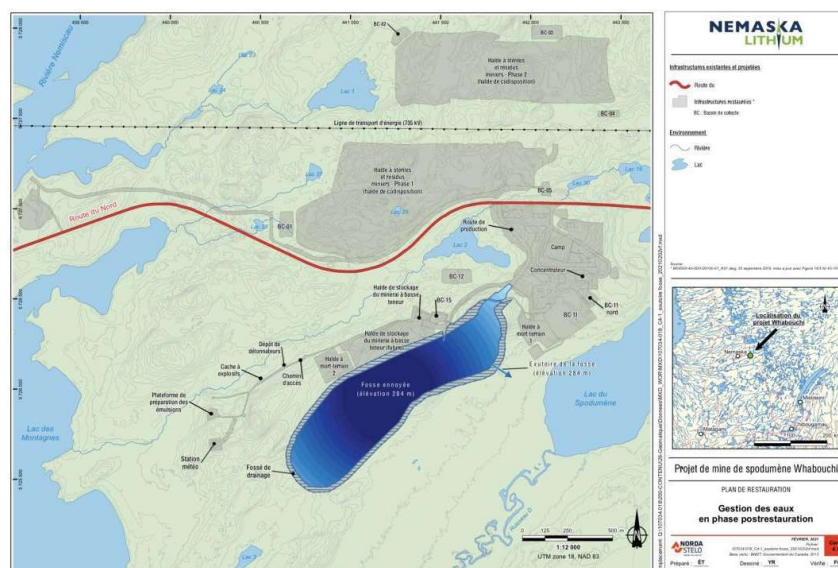
Element	Closure
Co-disposal heap	Progressive re-vegetation
Barren land	Re-vegetation
Buildings and plant	Decommissioning and total demolition and waste recycling or disposal
Surface infrastructures	Total demolition and waste recycling or disposal

## 6. Summary of the Updated Closure Plan

Element	Closure
Roads	Scarification and re-vegetation, Except access path for environmental monitoring
Underground infrastructures	Cleaned and left in place
Overburden heap	Used for re-vegetation
Ditches and bassins	Cleaned and backfilled

## 6. Summary of the Updated Closure Plan

Element	Closure
Mine pit	Water filled and peripheral security berm



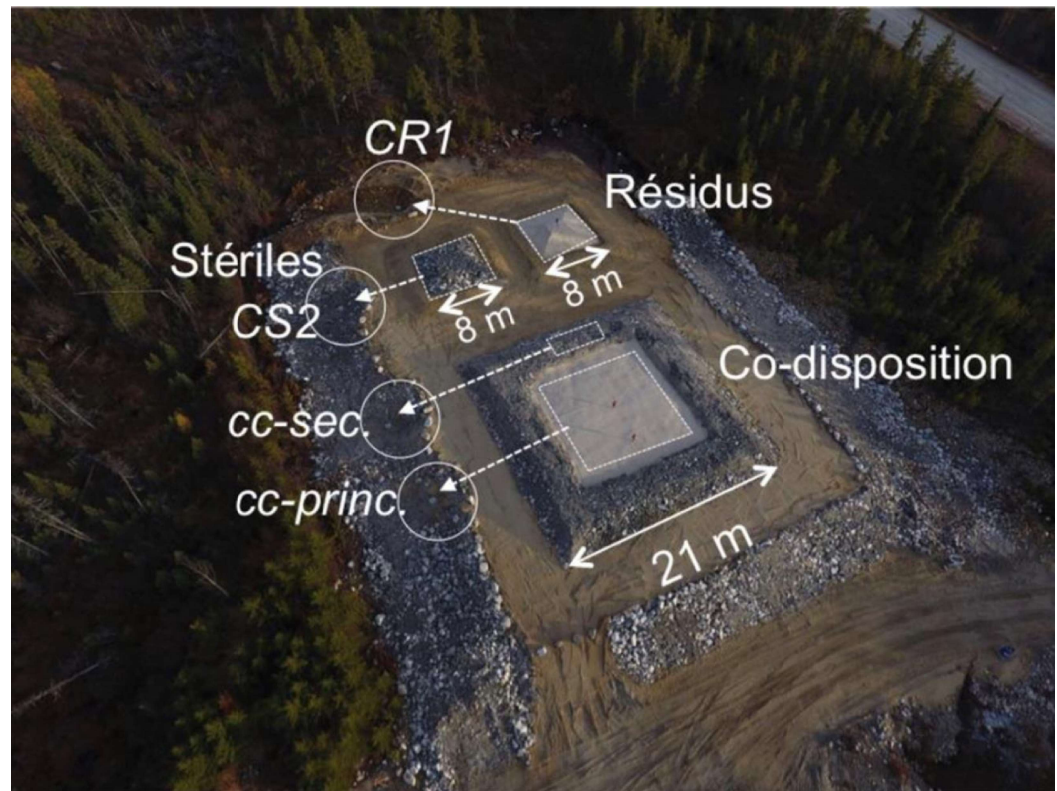
## 6. Summary of the Updated Closure Plan

Element	Closure
Heavy equipment	Sold
Petroleum products, chemical products and hazardous material	Sent to approved disposal facility
Contaminated soils	Managed according to approved rehabilitation plan
Ditches and bassins	Cleaned and backfilled

## 6. Summary of the Updated Closure Plan

### Improvement to closure plan

Co-disposal test pad with UQAT to assess geochemistry and predict water quality



## 6. Summary of the Updated Closure Plan

### Improvement to closure plan

Re-vegetation study with  
Université de  
Sherbrooke to secure  
the use of local plant  
species



## 7. Wildlife Monitoring Effort (Tallyman Request)

Animal	Environmental and Social Impact Assessment (ESIA) (Undertaken Monitoring)	Environmental and Social Monitoring Program (ESMP) (Monitoring Over the Lifespan of the Mine)
<b>Fish</b> ✓ Walleye ✓ Brook Trout ✓ Northern Pike ✓ Lake Whitefish ✓ Others	✓ Fish inventory in every lake, stream and river on and around the mining site ✓ Inventory of fish habitats (spawning sites, nursery, etc.)	✓ Three-yearly monitoring of heavy metals in fish flesh (Walleye, Lake Whitefish, Northern Pike) ✓ Monitoring of spawning sites for Walleye and Brook Trout ✓ Monitoring of fish population in lakes 2, 27 and 28 ✓ Multi-year monitoring of fish habitat compensation projects
<b>Bats</b>	✓ Bat inventory on and around the mine property	✓ Monitoring of bat maternity of the Spodumene Lake
<b>Birds</b>	✓ Bird inventory on and around the mine property	✓ Two-yearly monitoring of bird populations in the Spodumene Lake Peatland ✓ Daily monitoring of migratory birds / endangered bird species at the mine site (register)
<b>Micromammals</b> ✓ Voles ✓ Mice	✓ Micromammal inventory on and around the mine property	✓ Two-yearly monitoring of micromammals population in the Spodumene Lake Peatland
<b>Amphibians &amp; Reptiles</b> ✓ Snakes ✓ Frogs and Salamanders	✓ Amphibian and reptile inventory on and around the mine property	✓ Two-yearly monitoring of micromammals population in the Spodumene Lake Peatland
<b>Benthic organisms</b> ✓ Insects ✓ crustaceans	✓ Benthos inventory in lakes 1, 2, 3 and Spodumene Lake	✓ Annual monitoring of the benthic organisms at the mine effluent in the Nemiscau River

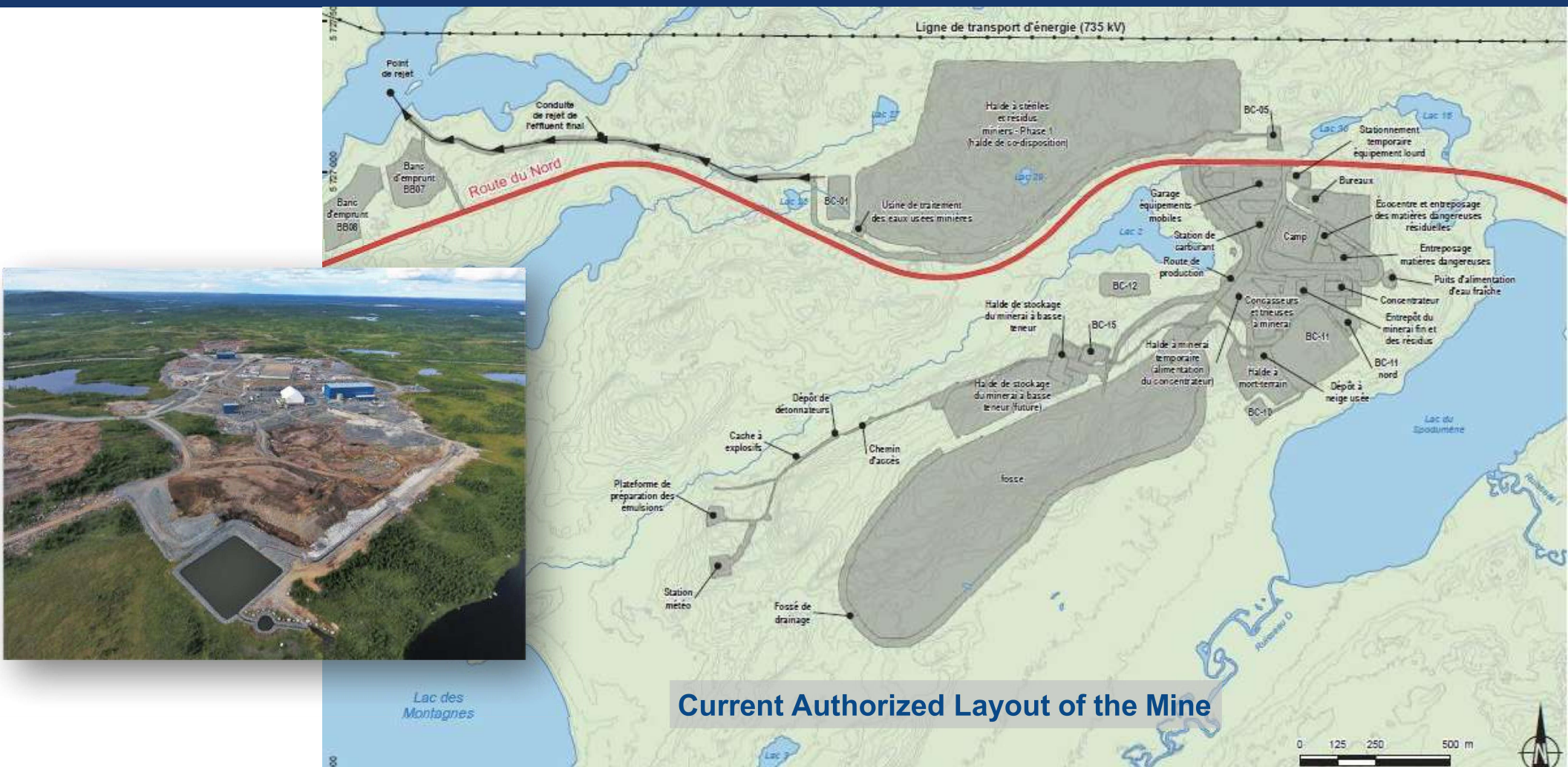
## 7. Wildlife Monitoring (Tallyman Request)

Animal	Environmental and Social Impact Assessment (ESIA) (Undertaken Monitoring)	Environmental and Social Monitoring Program (ESMP) (Monitoring Over the Lifespan of the Mine)
<b>Mammals</b> ✓ Bear ✓ Wolf ✓ Moose ✓ Fox ✓ Wooden Caribou ✓ Beaver ✓ Squirrel ✓ Snowshoe Hare ✓ American Marten ✓ River Otter ✓ Mink ✓ Etc.	✓ Aerial inventory (10 km radius around the mine site) ✓ Ground observations ✓ Ground inventory	✓ Daily monitoring of wildlife at the mine site (direct and indirect observations)



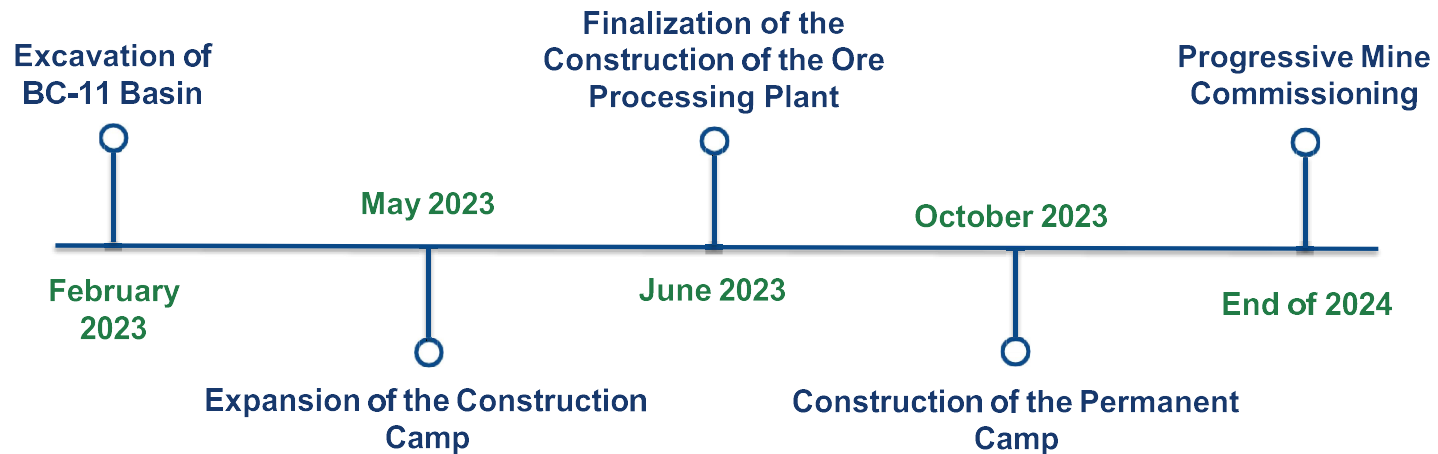


## 8. Update on Permitting and Regulatory Affairs



## 8. Update on Permitting and Regulatory Affairs

### Whabouchi Preliminary Schedule (starting dates)



## 8. Update on Permitting and Regulatory Affairs

### PERMITS ISSUED

- No new permit issued since the last meeting

### PERMITS IN PROCESS

- No new permit in process since the last meeting

### REPORTS FILED WITH REGULATOR

- Annual report for the COMEX (results of the 2021 environmental and social monitoring program)
- Annual report for the IAAC
- Reports available here:  
[COMEX - Annual Report](#)  
[IAAC - Annual Report](#)

### NEXT STEPS

- In the short term, prepare permit applications related to:
  - ✓ the expansion of the construction camp
  - ✓ the modification of the ore processing plant
  - ✓ the construction of the permanent camp
- Other permit applications will be prepared in 2023

## 9. Varia



## 10. Summary of Actions



**Vincent Perron**, Biol. M.Sc.  
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**NEMASKA**  
**LITHIUM**

**WHABOUCHI MINE PROJECT**  
**ENVIRONMENT COMMITTEE – Meeting Minutes**  
**December 14<sup>th</sup>, 2022 – Hybrid Format**

**Were present**

Vincent Perron	Member	Senior Director – Environment and Stakeholder Relations (NLI)
Denis Isabel	Member	VP – Sustainable Development (NLI)
Walter Jolly	Member	Councillor (CNN)
Anderson Jolly	Substitute	Councillor (CNN)
Aurora Maria Hernandez	Member	Mining Engineer (CNG)
Tina Vassiliou	Observer	Business Partner and Talent Manager (NLI)
Silas Blackned	Observer	Liaison Agent (NLI)
Anna Krupa	Observer	Environmental Analyst (CNG)
Matthew Tanoush	Observer	Director of Land and Sustainable Development
Isaac Gauthier	Observer	Animator (TES)
Laurianne Francoeur	Observer	Note taker (TES)

This environmental committee meeting was held in a hybrid format. Denis, Vincent, Walter, Anderson, Tina, Silas, Isaac, and Laurianne joined the meeting in person in the hotel Four Points in Gatineau. Aurora, Anna, and Matthew joined the meeting online.

**Meeting Agenda**

Item #	Description
1	Opening and Introduction
2	Approval of the proposed agenda for the meeting
3	Approval of the minutes of the previous meeting
4	Follow-ups from previous meetings
5	Sharing environmental updates and feedback from the field
6	Presentation of the revegetation research by Université de Sherbrooke
7	Wildlife Monitoring efforts (Tallyman Request)
8	Updates on permitting
9	Summary of actions
10	Next meeting

### **Item #1. Opening and Introduction**

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The meeting begins at 1:23 p.m. with a proposal from the facilitator to say a prayer. Anderson volunteers and prays in Cree.

The meeting continues with the presentation of the agenda. Anderson then asks if the minutes of the meetings will be available for the public. Tanya adds that they should be, but members should also be able to give information off the record. Isaac agrees while mentioning that there should be consistency between the various committees. Tanya underlines that care should be taken when publishing the WIC minutes since more confidential information will be shared. The members agree to share the environmental committee meeting minutes. Vincent asks what would be the best channel for sharing the meeting minutes, to which Anderson suggests that Silas be the channel. The members agree with the proposal and NLI's team mentions that the minutes will also be added to their website.

Anderson and Walter ask about the fish in Basin 10, namely how they arrived there and if they still are in the basin. Vincent explains that they are Sucker Fish, a specie that does not need a lot of water to travel. He also adds that NLI did not pump water in the basin, therefore the fish were not introduced into the basin by human activities. The members are surprised by this natural event as they never witnessed anything similar.

### **Item #2. Approval of the proposed Meeting Agenda**

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Isaac presents the link to access the document. He states that it will still be available after the meeting. No other comments are made.

### **Item #3. Previous Meeting Follow Ups**

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The previous meeting follow-ups are presented.

#### **Send a survey to determine the environmental symposium date in March: In progress**

Vincent discusses anew the revegetation research project, as the researchers Sebastien Roy and Nicole Fenton from the University of Quebec in Abitibi-Témiscamingue, who are responsible for the revegetation project, both agreed to make a presentation at the environmental symposium on their research. Specifically, Sebastien Roy works on mining site biodiversity revitalization and Nicole Fenton works on Eeyou Istchee's biodiversity. Vincent repeats that the symposium will be organized by NLI, but it will discuss different environmental projects and issues in the area not exclusive to the company or the Whabouchi Project. It is agreed that a Doodle link will be sent to find the best date to hold the event. Anderson suggests that important environmental actors, such as David Suzuki, be invited to the symposium. He adds that he met him at the COP15 biodiversity conference in Montreal, that he has already visited Nemaska, and that his input would be very interesting. It is agreed that an invitation will be sent.

Anna mentions that she contacted the researchers of the eDNA Project, following Kelly's departure from the CNG. She adds that she will also join the February meeting with Vincent.

Isaac and Vincent share a quick explanation of the symposium to Aurora since she is new to the committee.

**Share Vincent and Denis' contact information with Anderson Jolly: Done**

The contact information was shared on October 31<sup>st</sup>. No comments or questions are made.

**Organize a site visit with Matthew Tanoush: Done**

Vincent makes a quick recap of the recent mine visit. Matthew thanks Vincent for the warm welcome and mentions that he found the visit very interesting and was able to learn a lot about the new technologies used at the mine site. Vincent repeats that every member and observer can call the mine for a visit since an employee is always onsite.

**Present details about the permanent camp's construction, including water discharge: In progress**

Vincent goes on by specifying that the mine is still in the engineering phase. He mentions that there are no new developments and assures that when there are more details, they will be shared with the committee. He further adds that concerns were raised at the last meeting about the domestic water pipes and the possibility of having them buried. He explains that the pipe burial is being analyzed by the engineering team.

Walter then asks if the camp will be at the mine site. Vincent answers that it will indeed be onsite.

**Bear management at the mine site – Improve bear trap device: In progress**

Vincent continues by mentioning that the bear traps were shown to the tallyman, James Wapachee. He pointed out that the currently used model is not optimal. The team is currently working with the tallyman to improve the trap.

Walter suggests monitoring the bears after their capture to follow their movement. Vincent answers that the monitoring of animals needs a specific permit, but that the possibility will be studied. Walter mentions that the monitoring could ensure that the same bears do not return to the site. Vincent thanks Walter for his input but emphasizes that no bears have been seen in the area. This option will still be looked at.

Anderson asks if the bear traps have battery-operating doors. Vincent answers that they do not, but that they should for safety reasons. Anderson mentions that other sites use battery operated bear traps to protect their employees. Vincent thanks Anderson for the suggestion.

**Share Closure Plan for community review: In progress**

Vincent continues by mentioning that the Closure Plan is only available in French for the moment. Since the document contains very technical and precise elements, he mentions that a summary will be prepared and could be presented at the symposium. Anderson then asks if copies could be distributed to the community so people can consult it and come back with questions later. Vincent agrees and mentions that the presentation does not have to be a PowerPoint, it could rather be a one-pager. Tina adds that a QR code could also be used to refer community members to the website and the relevant information. Anderson continues by saying that other companies have used USB keys containing the relevant documents on them. Vincent acknowledges the suggest and mentions that it will be looked at.

Aurora then asks if the symposium will be for the whole community. Vincent answers that it will indeed be for everyone. Anderson asks if the symposium will be one (1) or two (2) days. Tanya adds that depending on the number of presentations, three (3) days would be preferable. Anderson continues by mentioning that the event should be held in the evening to help working people attend. He also thinks that food should be served. Tanya also adds that a mix of presentations and information booths similar to the format used at the Québec Mine conference should be used to provide various types of presentations. Vincent agrees with the suggestion. Matthew then mentions that simultaneous translation should be used, if possible, to which Vincent answers that it will be possible. Tanya adds that Nemaska has the necessary technology. Vincent thanks Matthew and Tanya and mentions that if the community wishes simultaneous translation, it will be organized. Isaac then suggests that the topic be brought up at the next meeting, to plan the event. It is agreed.

**Share plant species tested by the University of Sherbrooke (revegetation study): Done**

It is mentioned that the topic is on the agenda and will be addressed later in the meeting

**Item #4. Environmental updates and feedback from the field**

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The domestic wastewater treatment system is presented by Vincent, who mentions that the system has had a few hiccups recently. Due to the ongoing adjustments, the discharge will no longer pour into Lake 31 and will be contained in a tanker until it meets regulatory standards. He continues by mentioning that two (2) technicians specialized in water treatment are now working onsite to operate the treatment system. The supplier used to monitor the system remotely, but they could see the limit of this way of working.

Aurora asks what the maximum capacity of the tank is. Vincent answers that the tank has a capacity of 28 000 L. A back truck is emptying it every two (2) weeks. A pump is also available if necessary. The prior problem has been identified. A team is currently fixing the pipe.

Tanya asks if the presence of technicians onsite is a long-term solution. Vincent answers that for now, it is and that an action plan has been prepared by the technicians. The water is tested every day to make sure the system is working well. Tanya continues by asking if the technician position could be available for a Cree member of the community. Vincent answers that NLI currently has a contract with Nordikeau. He adds that Denis has met with the community's public service department, however, they did not have the necessary staffing. Tanya asks if a company in Nemaska could eventually have the opportunity to do this work. Vincent confirms that it could be a possibility, since NLI has a local purchasing policy encouraging this kind of partnership. Tanya suggests that a person from the community is hired by Nordikeau for onsite training. Vincent mentions that it is a possibility. Currently, there was an emergency that made it hard to implement the local purchasing policy. However, in the future, it will be considered.

Anderson mentions that at a previous job of his, the mine reused treated domestic water for its mining activities. Vincent mentions that this is an option.

## **Item #5. Revegetation project from the Université de Sherbrooke**

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Vincent presents the different plant species that are being tested including Labrador Tea, Sweet Gale, Jack Pine, White Birch, and Balsam Poplar. Labrador Tea, Sweet Gale and Jack Pine have the most promising results. Walter confirms that those species grow easily in the area. He continues by mentioning that a forest fire occurred a few years ago and from that fire, White Birch and Jack Pine have grown.

Vincent adds that the researchers are also looking to reduce the amount of transportation needed for the revegetation. Usually, the process needs a lot of dirt being transported, which causes significant greenhouse gas emissions. Vincent continues by saying that the researcher, Sebastien Roy, will be presenting his project at the symposium.

Anderson mentions that a similar study has been made by another mining company, using a waste truck. It could be interesting to share the results. Vincent thanks Anderson and mentions he will discuss the topic with Sebastien Roy.

Matthew adds that his team is open to working with the university research team. It was supposed to be done last summer but a shortage of manpower made it impossible. He mentions that solutions will be put in place for next year. Vincent answers that the next three (3) years of funding are planned even if Cree participation is more difficult than hoped. Also, Silas will be able to help engage people in the program and the symposium presentation will also likely interest people.

## **Item #6. Wildlife Monitoring (Tallyman Request)**

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Vincent explains the wildlife monitoring table (available in Appendix 1). The third column indicates the monitoring required throughout the mine's lifetime.

### **Fishes**

Every three years, fish will be caught to test the presence of heavy metals in the flesh. Vincent mentions that NLI's activities are not likely to cause heavy metal contamination, however, the monitoring will be done to meet regulatory requirements. He continues by mentioning that NLI is working on a compensation plan. The habitat is also monitored to enable revitalization.

Anderson asks in which lake will the fish be taken from. Vincent answers that it will be done in every lake located on the company's property, same as for the project's Impact Assessment.

The benthic specie monitoring in the Nemiscau river will also be made. Aurora asks why there is no specific sturgeon monitoring, to which Vincent answers that he will verify. He thinks that it may be because no sturgeons were caught previously and therefore the specie is not present in the area. Walter confirms that there is no sturgeon in the area. Vincent thanks Walter for his input and he will verify the information for the next meeting. Walter continues by asking if the fish will be tagged during the monitoring work to track their movements, as is often done. Vincent answers that NLI's project is a localized project and should not affect the ecosystem in a way that warrants fish tracking. The team is using a different approach by catching the fish and releasing them after

analyzing individual and fish population health. Walter continues by saying that the movements are important to track to know where the food sources are located.

#### **Bats**

Visual counts were made for the last two (2) years, showing a reduction in the bat populations in the area. A monitoring of the bat echolocations will be done to determine if this is a trend. While bats were visually identified, they do not use the bat maternity near the site.

#### **Birds**

Visual counts are made daily to monitor endangered species and migratory birds near the mine. At Spodumene Lake, the monitoring is made twice a year.

#### **Micromammals**

Vincent explains that the micromammal monitoring will be done every two years. Tanya then asks if the monitoring is site only or if it covers the surrounding area. Denis answers that the monitoring is flexible. For the moment, it is only planned on-site since the current monitoring requirements are not the same as for the Impact Assessment. Vincent adds that NLI is open to doing more than the minimum required. He adds that the inventory maps showing where they will be undertaken will be shown at the next meeting. Walter adds that he would also like to discuss fish population health, which the members agree too. Vincent asks him if he spoke with Hydro-Quebec's team about his concerns. Walter answers that he only spoke with Neskimau, and that he sends his fishing results to the monitoring committee.

#### **Amphibian and Reptiles**

The monitoring will be made every two years. No questions are asked.

#### **Benthic organisms**

The monitoring will be made annually at the mine effluent in the Nemiscau River. No questions are asked.

#### **Mammals**

The monitoring will be made daily through direct and indirect observations.

Anderson asks, in general, in what season is the monitoring done. Vincent answers that he will check, since there is a lot of wildlife monitoring undertaken.

Aurora asks if the wildlife reports will be shared with the committee. Vincent answers that an annual report will be shared with the COMEX and that the report will also be available on the Teams channel. Laurianne will make sure that Aurora has access to the channel.

Anna leaves the meeting due to other obligations.

#### **Item #7. Update on permitting and regulatory affairs**

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Vincent presents the permitting and regulatory oversight for the Whabouchi Project (Appendix 1). A

total of four (4) organizations have environmental oversight responsibilities in the Eeyou Itschee region, namely the COMEX, the federal Impact Assessment Agency, the Quebec Ministry of the Environment, Fight against Climate Change and the Eeyou Istchee James Bay Regional Government. Vincent continues by showing the mining site's layout and its surrounding and the project's timeline (Appendix 1).

Tanya asks why NLI plans to build an expansion to the construction camp and then build a permanent camp. Denis answers that the expansion will be used by the construction workers that build the permanent camp. He continues by saying that the permanent camp construction was planned over a longer period in order to use fewer workers, as it is cheaper and safer.

Walter asks if the workers from Nemaska will be able to stay at the camp. Denis answers positively, as it will help with employee integration and create a sense of belonging in the team. Moreover, the travel between the mine site and the village can be dangerous after long shifts. For safety reasons, the workers will be encouraged to stay at the camp.

Vincent continues by presenting the permits issued and in process. He also presents the documents that were filed with the regulators. The links available in the PowerPoint presentation will also be sent by email to the members.

Finally, Vincent explains the next steps in term of permitting. He briefly provides information about the modifications that will be made to the ore processing plant, more specifically to the crushing circuit. He mentions that the permit application for the modification of the crushing circuit is under preparation and an English summary of the application will be shared with the EC members for comments. He also mentions that the permit application for the water treatment unit for the BC-10 basin is under preparation and will follow the same path.

Vincent mentions that each change to the project requires permitting updates and a review of the local impacts. Walter asks if the permitting process generates costs for the company. Denis answers that administrative costs are included in the permitting process.

Tanya suggests that Vincent and Denis present NLI's new logo. Vincent explains the meaning of the two circles that come together, which represent the north and the south united in the same project while also representing the energy transition and circular economy that are integral to the project.

#### **Item #8. Summary of actions**

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The actions are the following:

Discuss the symposium planning	All members
Send a Doodle for the symposium event	LF
Verify the presence of sturgeon in the mine area	VP
Present the wildlife inventory maps	VP
Discuss fish population health	All members
Verify at what time of the year monitoring is done	VP
Give access to the team channel to Aurora Maria Hernandez	VP
Send the permit links to the members by email	LF and VP

**Item #9. Next Meeting**

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It is agreed that the symposium will be held in March. The next committee meeting will be in early February. Members are open to holding the meeting in Nemaska or in Montreal. A full day will be scheduled to discuss the symposium's planning.

# Environmental Committee

**Hybrid Meeting**  
Gatineau and Virtual Meeting



# Meeting Agenda



1. Opening
2. Proposed Meeting Agenda
3. Approval of the previous Meeting Minutes
4. Previous Meeting Follow-Ups
5. Environmental Updates et Feedback from the Field
6. **Discussion:** Plants Tested by the Université de Sherbrooke Team
7. **Discussion:** Wildlife Monitoring Efforts (Tallyman Request)
8. Update on Permitting and Regulatory Affairs
9. Summary of Actions
10. Next Meeting
11. End of the Meeting



# Opening



# EC Members & Alternates

## Cree Members

**Walter Jolly**, Councillor at Cree Nation of Nemaska

**Anderson Jolly (alternate)**, Council Member - Cree Nation of Nemaska

**Anna Krupa**, Environmental analyst at the Cree Nation Government (interim)

## Nemaska Lithium Members

**Vincent Perron**, Senior Director – Environment and Stakeholder Relations

**Denis Isabel**, VP – Sustainable Development

## Transfert Environnement et Société

**Isaac Gauthier**, Facilitator

**Laurianne Francoeur**, Notetaker





# Approval of Previous Meeting Minutes

Minutes of October 25th 2022



# Previous Meeting Follow-Ups

ITEMS	ACTIONS	STATUS
1	Send survey to determine environmental symposium date in March	In Progress
2	Share Vincent and Denis' contact information with Anderson Jolly	Done
3	Organize a site visit with Matthew Tanoush	Done
4	Present details about the construction of the permanent camp, including water discharge	In Progress
5	Bear management at the mine site – Improve bear trap device	In progress
6	Share closing plan for community review	In progress
7	Share plant species tested by the University of Sherbrooke (revegetation study)	Done – Will be presented today



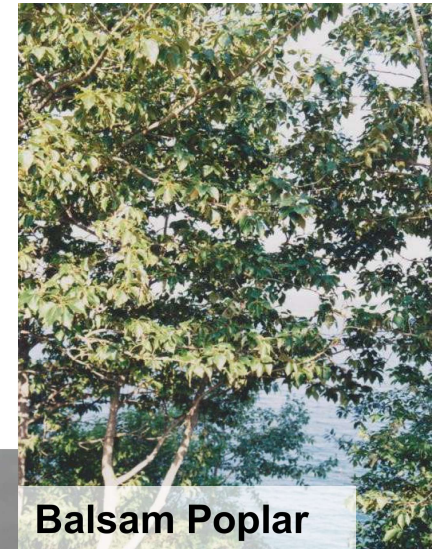
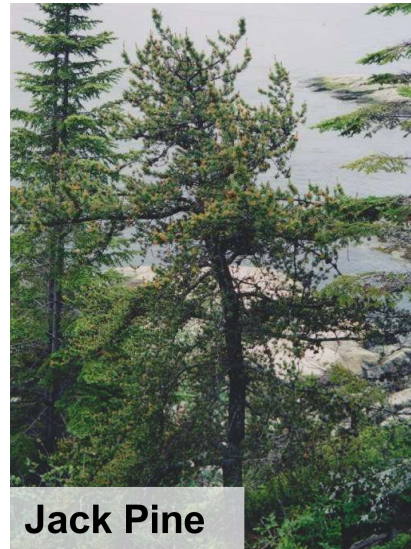
# Environmental Updates et Feedback from the Field

- **Domestic wastewater treatment system**

- ✓ Non-compliance of the effluent based on November monitoring results
- ✓ Effluent is now contained in a tanker until it meets the regulatory standards
- ✓ Action plan developed by experts and mobilization of technicians specialized in water treatment on each rotation (Nordikeau)
- ✓ Notification of Regulatory Agencies



# Revegetation Project (UdS): Plant Species



# Wildlife Monitoring Effort (Tallyman Request)

Animal	Environmental and Social Impact Assessment (ESIA) (Undertaken Monitoring)	Environmental and Social Monitoring Program (ESMP) (Monitoring Over the Lifespan of the Mine)
<b>Fish</b> <ul style="list-style-type: none"> <li>• Walleye</li> <li>• Brook Trout</li> <li>• Northern Pike</li> <li>• Lake Whitefish</li> <li>• Others</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Fish inventory in every lake, stream and river on and around the mining site</li> <li><input checked="" type="checkbox"/> Inventory of fish habitats (spawning sites, nursery, etc.)</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Three-yearly monitoring of heavy metals in fish flesh (Walleye, Lake Whitefish, Northern Pike)</li> <li><input checked="" type="checkbox"/> Monitoring of spawning sites for Walleye and Brook Trout</li> <li><input checked="" type="checkbox"/> Monitoring of fish population in lakes 2, 27 and 28</li> <li><input checked="" type="checkbox"/> Multi-year monitoring of fish habitat compensation projects</li> </ul>
<b>Bats</b>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Bat inventory on and around the mine property</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Monitoring of the Spodumene Lake bat maternity</li> </ul>
<b>Birds</b>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Bird inventory on and around the mine property</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Two-yearly monitoring of bird populations in the Spodumene Lake Peatland</li> <li><input checked="" type="checkbox"/> Daily monitoring of migratory birds / endangered bird species at the mine site (register)</li> </ul>
<b>Micromammals</b> <ul style="list-style-type: none"> <li>• Voles</li> <li>• Mice</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Micromammal inventory on and around the mine property</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Two-yearly monitoring of micromammals population in the Spodumene Lake Peatland</li> </ul>
<b>Amphibians &amp; Reptiles</b> <ul style="list-style-type: none"> <li>• Snakes</li> <li>• Frogs and Salamanders</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Amphibian and reptile inventory on and around the mine property</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Two-yearly monitoring of micromammals population in the Spodumene Lake Peatland</li> </ul>
<b>Benthic organisms</b> <ul style="list-style-type: none"> <li>• Insects</li> <li>• Crustaceans</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Benthos inventory in lakes 1, 2, 3 and Spodumene Lake</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Annual monitoring of the benthic organisms at the mine effluent in the Nemiscau River</li> </ul>

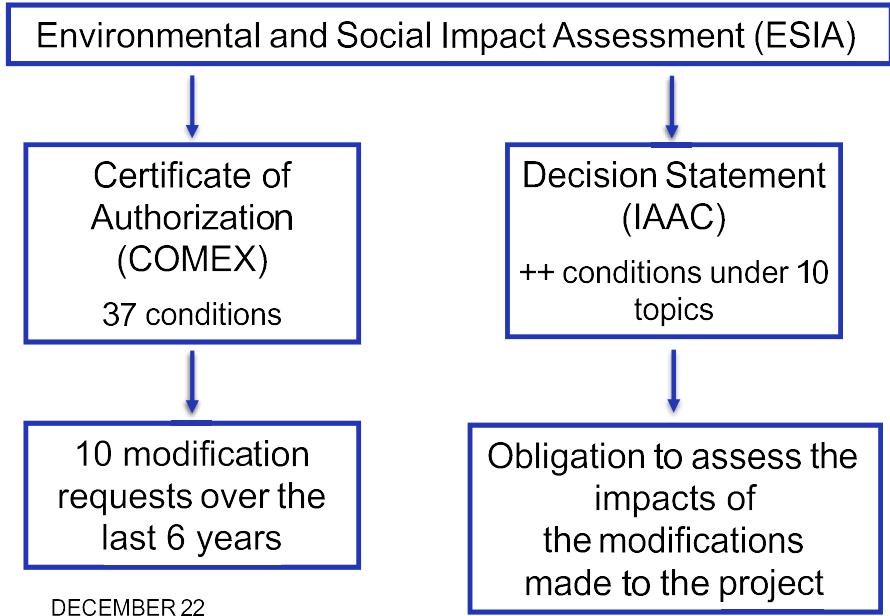


# Wildlife Monitoring Effort (Tallyman Request)

Animal	Environmental and Social Impact Assessment (ESIA) (Undertaken Monitoring)	Environmental and Social Monitoring Program (ESMP) (Monitoring Over the Lifespan of the Mine)
<b>Mammals</b> <ul style="list-style-type: none"> <li>• Bear</li> <li>• Wolf</li> <li>• Moose</li> <li>• Fox</li> <li>• Woodland Caribou</li> <li>• Beaver</li> <li>• Squirrel</li> <li>• Snowshoe Hare</li> <li>• American Marten</li> <li>• River Otter</li> <li>• Mink</li> <li>• Etc.</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Aerial inventory (10 km radius around the mine site)</li> <li><input checked="" type="checkbox"/> Ground observations</li> <li><input checked="" type="checkbox"/> Ground inventory</li> </ul>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Daily monitoring of wildlife at the mine site (direct and indirect observations)</li> </ul>



# Update on Permitting and Regulatory Affairs

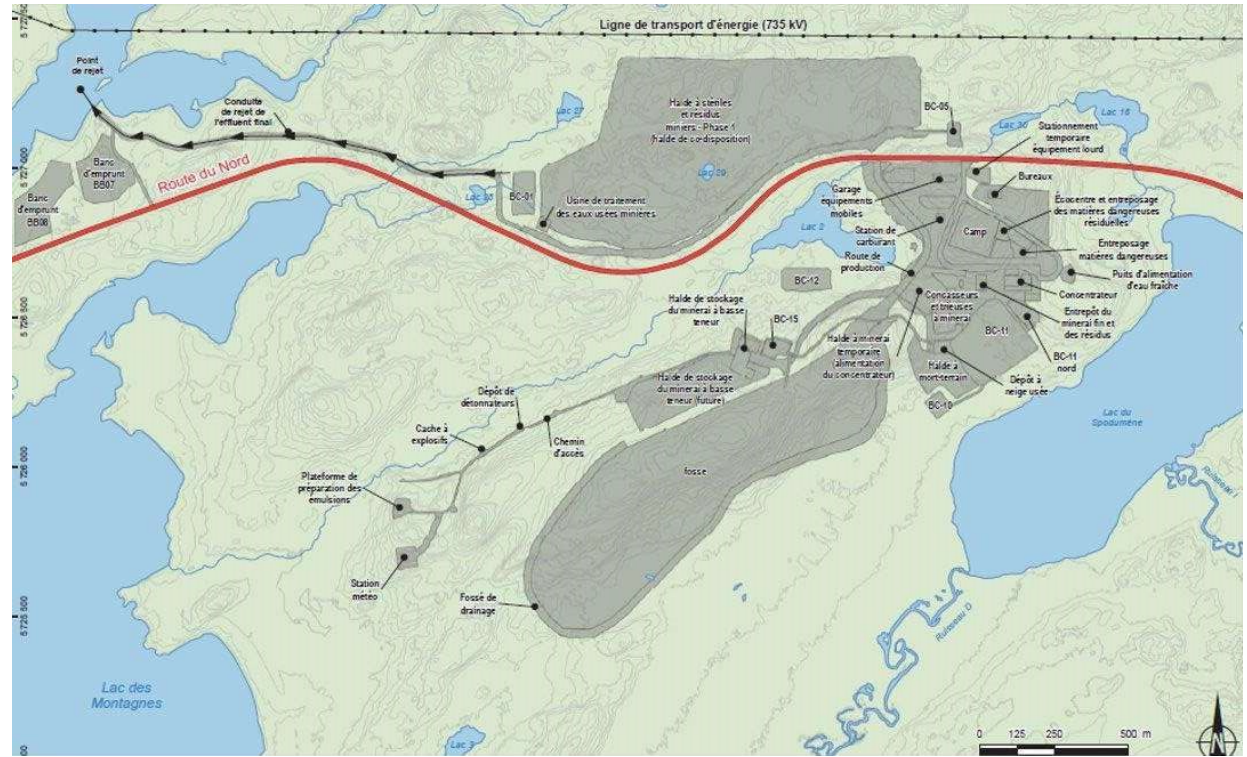


- Main Authorizations Delivered:**
- ✓ Site preparation
  - ✓ Construction of an ore processing plant
  - ✓ Exploitation of sand pits
  - ✓ Installation of the final mining effluent pipe (Nemiscau River)
  - ✓ Ground water withdrawal (mine pit dewatering)
  - ✓ Operation of the Whabouchi mine
  - ✓ Operation of a domestic water treatment plant

- Main Permits Delivered:**
- ✓ Construction permits
  - ✓ Fresh water network permit
  - ✓ Domestic water network permit

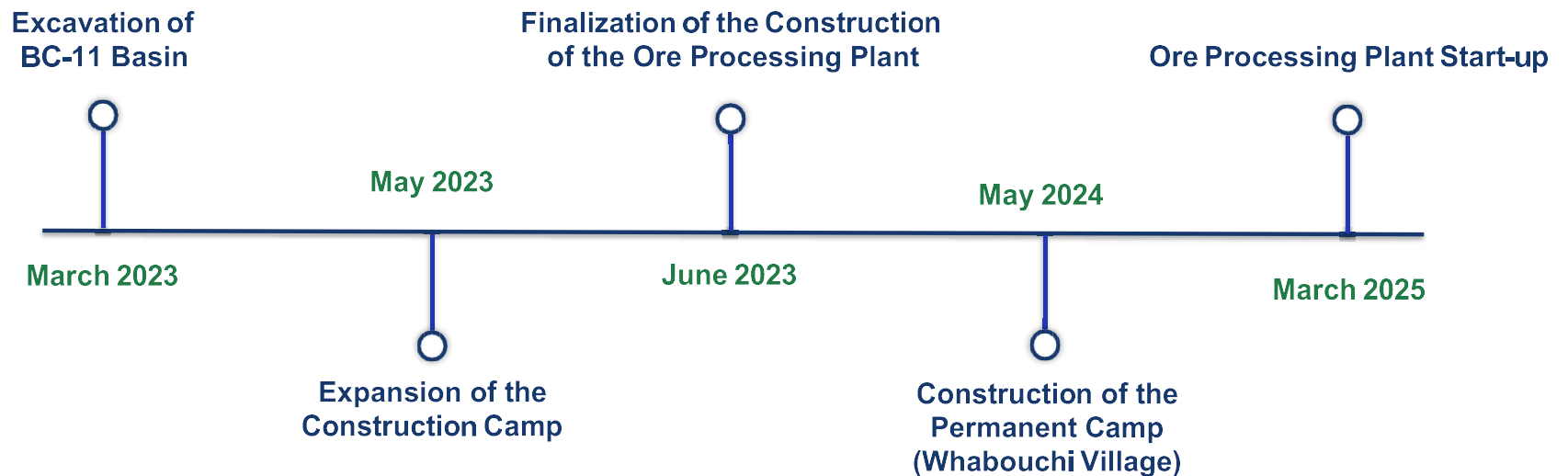


# Update on Permitting and Regulatory Affairs



# Update on Permitting and Regulatory Affairs

## Whabouchi Preliminary Schedule (starting dates)



# Update on Permitting and Regulatory Affairs

## PERMITS ISSUED

- No new permit issued since the last meeting

## PERMITS IN PROCESS

- No new permit in process since the last meeting

## REPORTS FILED WITH REGULATOR

- Annual report for the COMEX (results of the 2021 environmental and social monitoring program)
- Annual report for the IAAC
- Reports available here:  
[COMEX - Annual Report](#)  
[IAAC - Annual Report](#)

## NEXT STEPS

- In the short term, prepare permit applications related to:
  - the expansion of the construction camp
  - the modification of the ore processing plant
  - the installation of a water treatment unit (BC-10 basin) to remove iron and suspended solids
- Other permit applications will be prepared in 2023





 **Nemaska  
Lithium**

