# CRITICAL ELEMENTS LITHIUM CORPORATION

# LITHIUM-TANTALUM ROSE PROJECT – ANSWERS TO THE NON-COMPLIANCE OF THE FIRST REQUEST OF INFORMATION FROM THE IAAC

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# 1. INTRODUCTION

Critical Elements Lithium Corporation (CEC) submitted for the Lithium-Tantalum Rose Project in James Bay its answers to information request of the Impact Assessment Agency of Canada (IAAC) on December 19<sup>th</sup>, 2019. Following examination of the document, the joint evaluation committee determined that some information had to be submitted before the analysis of the environmental impact assessment (EIA) could proceed. This information is identified in a letter of non-compliance sent to CEC on January 6<sup>th</sup>, 2020.

Section 2 of this document transcribes the information requested by IAAC, followed by CEC's responses. To facilitate the distinction between different texts, the information requested by the IAAC on January 6<sup>th</sup>, 2020 is in *italic*.

# 2. QUESTIONS FROM THE AGENCY

## 1. SCOPE OF PROJECT - INCLUSION OF WORKERS' CAMP

C) The promoter must include in the evaluation of environmental impacts (not the cumulative) the workers' camp, services and associated works (landfills, water supply services, wastewater management, etc.). If the location of the camp has not yet been determined, the promoter must carry out this evaluation for each of the options considered, both the camp at 25 km and at 4 km of the mining site.

#### **ANSWER**

The environmental impacts of the workers camps if the option of the camp at 25 km is retained will be minimal, as this camp already exists. The main impact of this option will be increased traffic along the Eastmain-1 road between the camp and the mine. The traffic increase will be minimal. It will consist of three buses and three or four vans morning and evening, two food deliveries per week, one domestic waste transport per week, and one recycling transport every two weeks.

This impact could have an effect on the valued components of herpetofauna, avifauna, mammals, and woodland and migratory caribou by causing avoidance of the territory by animals due to increased traffic. The impact of the traffic on animals in the area could undermine hunting and trapping in the area thereby having an effect on the valued component of Common use of lands and resources for traditional purposes.

A second impact that can be anticipated is the presence of non-Cree workers that could undermine the social cohesion and relations between Cree and non-Cree, components of the Community wellbeing and human health valued component.

For the scenario of the workers' camp at 4 km from the mine, the construction of a new camp would be required. The impacts of the construction of a camp at 4 km from the mining site are similar to the impacts of the mining site (as described in table 13-2 of the EIE), namely:

Valued component	Potential effects
Surface water and sediment	Emission of suspended solids in water.
quality	Risk of hydrocarbons spill in the environment, including surface
	watercourses.
	Deterioration of water quality in nearby watercourses.
Groundwater quality	Risk of contamination of underground water caused by spillage of
	hydrocarbons, solvent or other hazardous liquids.
Soil quality	Risk of contamination of soil caused by spillage of
	hydrocarbons, solvent or other hazardous liquids.
Sound Environment	Increase in natural ambient noise.
Luminous environment	Permanent emission of artificial light during the night.
Vegetation and wetlands	Risk of hydrocarbons spill in the environment.
	Introduction and propagation of IAPS caused by machinery.
Aquatic fauna	Emission of suspended solids in water.
	Risk of hydrocarbons spill in aquatic environment.
Herpetofauna	Habitat loss and fragmentation.
	Disturbance of populations.
	Risk of collision.
	Risk of hydrocarbons spill in the environment

Avifauna	Loss and fragmentation of habitat (change in the structure).
	Risk of mortality.
	Disturbance associated with the presence of infrastructure and traffic
	(disturbance caused by noise, light and dust).
	Risk of hydrocarbons spill in the environment.
Mammals	Loss and fragmentation of habitat (change in structure).
	Disturbance associated with the presence of infrastructure and traffic
	(disturbance caused by noise, light and dust).
	Risk of collision.
	Risk of hydrocarbons spill in the environment.
Woodland and migratory	Deterioration of habitat (loss, degradation or fragmentation).
caribou	Disturbances caused by noise and light.
	Risk of collision.
Chiroptera	Habitat loss and fragmentation.
	Disturbance to populations.
	Risk of collision.
	Loss or alteration of feeding site.
	Risk of contaminants spill in the aquatic environment and wetland
	(feeding sites).
Socio-economic conditions	Business opportunities for Cree companies.
	Job creation.
	Increase in Cree household income.
	Workforce displacement.
Common use of lands and	Loss of territory to perform traditional activities.
resources for traditional	Temporary disruption to traditional activities.
Purposes	Need for Cree users to get used to the presence of the camp.
	Increase in land use and pursuing traditional activities.
	Increase in risk of road accidents.
Community wellbeing and	Sense of loss and undermining of the Cree cultural identity.
human health	Decrease in the sense of security for Nemiscau-Eastmain-1 road
	users and increase in road accidents.
	Risk of tension between Cree community and non-Cree workers.
	Opportunity for rapprochement.
Historic, cultural and	Update of archeological features during work.
Archeological heritage	opanio or manorogram realizada de magnetica
Landscape	Modification of the visual aspect of the site landscape.
	Modification of observers' visual field.
Socio-economic environment	Business opportunities for regional companies.
Land and infrastructure use	Adjustment for sport hunters to the presence of the mine.
	Increase in the risk of road accidents.

## 19. PROJECT DESCRIPTION - MANAGEMENT OF WATER DURING EACH PHASE

The promoter must present the water management and treatment for the closing and restauration phases.

## **ANSWER**

As specified in the NI 43-101feasbility study, the restauration and close-out phase will take place between years 18 and 24. The close-out works will include:

- Dismantlement of infrastructures;
- Removal of the mining water collection and treatment infrastructure and the water supply infrastructure;
- The closing of the ground water drawdown wells.

The restoration works will include:

- Scarification of the soil and revegetation of the affected zones, such as the infrastructure footprints, the access roads and the former ore stockpile that will be entirely used;
- The final re-profiling and revegetation of the mining site and co-deposition and overburden stockpiles;
- The impoundment and securing of the pit sector.

As such, all affected zones such as the service and transport routes, the deposit zones, the industrial works zone, the ore deck and the different zones of dismantled infrastructure footprints will be scarified to improve the results of draining and revegetation. A layer of overburden of 150 mm will then be deposited on the restored ground before seeding.

In the NI 43-101 feasibility study, it is assumed in a preliminary way, that approximately 500 mm of sludge will accumulate at the bottom of the sedimentation ponds. As a result, the restoration of these ponds will include the excavation and transportation of this sludge to the bottom of the pit. The sedimentation ponds' dykes will be excavated and the materials levelled.

The overburden around the pi twill be re-profiled to a slope of 3H : 1V before being revegetated. Finally, water will fill the pit and create a lake.

The ditches will be backfilled in an attempt to recreate a stream distribution similar to that of the natural state (before exploitation of the mining site). As such, the portion of the co-deposition stockpile which drains towards the north will no longer be intercepted by the peripheral ditch to drain into Stream A, but rather will contribute to the flow of the natural watershed which feeds Stream M (outlet M2).

The restoration of the site will be done progressively during operations until the close-out phase for a quicker return to nature. No active or passive treatment will be necessary, the restoration of the site such as it is conceived will ensure that the quality of water is at a level which presents no long term risks for the environment or human health.

At closure, the annual flow at the Rose Lithium-Tantalum mine site will decrease due to the elimination of water flow from mining production and the modifications of the retention and humidity evaporation characteristics.

It is planned that the volume of annual flow of the footprint of the Rose project towards Stream A passes from 5,79 Mm3 to 1,56 Mm3 for medium climatic conditions. The run-off of the site after closure will be intermittent and dependent on climatic conditions.

# 47. QUALITY OF SURFACE WATER AND SEDIMENTS - EXFILTRATION RATES THROUGH DIFFERENT WATER RETENTION STRUCTURES

A) The promoter must present the results of the exfiltration rate calculations for all ditches.

## **ANSWER**

The water collected by the contact water ditches that surround the southeast and south-west sides of the co-deposition stockpile comes from run-off from drained surfaces as well as underground water exfiltrations.

The ditches of the main access road receive the surface run-off, as well as the underground water exfiltrations from the natural basin on the north side of the pit, with the exception of the exfiltrations coming from the portion of the basin to the south of the ore stockpile that re-emerge at the level of Stream A.

In a preliminary way, the value of the exfiltrated fraction through the ditches varies, on average, between 65% and 100% of the infiltrated flow at the level of the drained zone. As such, in the context of the monthly water balance, the exfiltrations are generally greater during the summer period than the winter period.

The following table summarizes the average exfiltration flows at the level of the co-deposition stockpile ditches:

Ditch	Average exfiltration flow (m³/d)
Ditch south-east of the co-deposition stockpile	From 274 to 422
Ditch south-west of the co-deposition stockpile	From 499 to 768
Principal access road ditch	From 222 to 342

Exfiltration at the level of the ditch surrounding the industrial sector is negligible given that the exfiltration rate at the level of this zone is week (waterproofed zone). Furthermore, the potential exfiltrations of groundwater at the level of the zone located south of the industrial sector directly join Stream A without being intercepted by the ditch due to favorable topography.

# 76. AIR QUALITY - TRACKING FINE PARTICLES

The promoter must specify in their answer which elements are fine particles (PM2.5)

#### **ANSWER**

According to Environment Canada and the EPA:

« The term fine particles ( $PM_{2,5}$ ) is used to describe all particles in the air having an aerodynamic diameter less than or equal to 2,5  $\mu$ m. This is a complex mixture of constituents of differing sizes, shapes, densities, surfaces, and chemical compositions. »

A dedicated sampler will allow for sampling of fine particles PM<sub>2,5</sub> in parallel to the total particle sampler.

The metallic and metalloid substances in the Table IAAC-76 of norms and criteria will be sampled on the total particles by means of a large flow sampler, with the exception of silica. A dedicated apparatus will be used for sampling silica considering the specific durations required for sampling this substance.

No metals or metalloids will be quantified on the samples of fine particles PM<sub>2,5</sub> conducted as part of the air quality follow-ups.

## 81. WETLANDS - COMPENSATION PROJECT

A) The promoter mentions in their answer that a compensation project is "possible". It is also mentioned in the answers to 82 A) and B) that the compensation plan will be used as a mitigation measure and that it is considered in the evaluation of the intensity of the impact and residual cumulative impact. The promoter must not simply mention if a compensation plan is possible, they must specify if a compensation plan for the loss of wetlands is still required and in the case that it is, specify the type of compensation.

#### **ANSWER**

CEC confirms that a compensation project for the loss of wetlands is still required and will be put in place by the promoter.

The exact nature of the compensation project has not yet been determined however, the process has been started. The following steps are suggested:

- Consultations with the tallymen and communities in order to determine their preferences, suggestions, and preoccupations concerning the compensation project.
- Selection of projects based on the information gathered during consultations and the characterisation of potential sites for the project(s).
- Submission of potential projects to the concerned agencies (IAAC, MELCC)
- Implementation of the project(s) following approval by the authorities.

These steps will allow CEC to include the communities concerned by the project in the selection of the compensation project in order to ensure that the mitigation measures put in place for the loss of wetland are truly adequate. CEC plans on beginning this process as soon as financially viable.

# 120. CURRENT USE OF ABORIGINAL PEOPLE - MITIGATION MEASURES LIMITING THE EFFECTS ON TRADITIONAL FOOD COLLECTION ACTIVITIES

The promoter presents the mitigation measures that will be put into place in order to mitigate the effects of the project on traditional food collection activities; however, they have not re-evaluated the effects of the project following the implementation of these measures. The promoter must re-evaluate their evaluation of the effects of the project on the traditional foods collection activities as a function of the mitigation measures suggested. For example, the promoter can explain how the mitigation measures suggested will limit the effects on traditional foods collection activities.

#### **ANSWER**

The tallyman of trapline RE1 confirmed during a consultation on January 29th, 2020 that there is no collection of traditional foods on the mine site. This is shown on the map provided as an answer to question IAAC-137. A new camp at km 51 replaces the one in proximity to the site and it is in this area that the tallyman practices traditional food collection activities.

Given that there is no traditional food collection on the site and considering the mitigation measures suggested, the impact of the project on the traditional food collection activities will be minimal.

More specifically, the measures proposed will reduce the impact in the following ways:

- Adaptation of operations during Goose and Moose Break will decrease traffic on the roads allowing the tallymen to continue his activities.
- During environmental follow-ups, the tallyman will be consulted in order to ensure that the follow-

- ups do not conflict with his traditional activities.
- The tallyman of trapline RE1 and family members will continue to be able to trap on the mining site, however, as the tallyman confirms that he does not use this portion of his trapline for collection of traditional foods, the impact of the project will be minimal.
- The speed limits which will be imposed for employees and suppliers will decrease the risk of collisions, as much with animals as with other road users.
- Continued communication with the tallyman will allow CEC to adjust over time if the mitigation measures are not sufficient.
- Given that the tallyman will be consulted concerning restoration, CEC will be able to restore the site in such a manner as to maximise opportunities for traditional food collection.

# 122. CURRENT USE BY INDIGENOUS PEOPLE - ZONES OF STUDY AND INFLUENCE OF THE HUMAN ENVIRONMENT

A) The promoter must supply the documents specifying the consultation dates, comments, and preoccupations raised during the consultations on the human environment study zone and the manner in which this information influenced the choice of study zone.

## **ANSWER**

The community of Waskaganish was added to the study zone of the human environment at the request of the Agency in the non-compliance letter of August 25th, 2017.

Concerning the possibility of extending the study zone, it should be noted that only an extension to the East would modify which traplines are included in the zone (VC-37). Furthermore, the continued consultation process with the communities allows CEC to be aware of their concerns. All concerns from the communities are considered by CEC, even if these are from a member who is not in the study zone of the human environment. These concerns are generally high-level concerning, for example, watersheds, trafic, impacts on animals, etc. Extending the study zone of the human environment would not change these preoccupations, and as such, it is not justifiable to modify the study zone.

E) Provide maps showing all RE1, R16, R19 (Nemaska) and R10 (Waskaganish) traplines including the location of areas valued for hunting, fishing and gathering as well as the precise location of camps. The precise layout of the final mining effluent in the Waskaganish trapline must be presented on the appropriate maps. These maps will locate future land use areas and projected resources by the tallymen and camp relocation areas known to date by the proponent. Inquire about the level of confidentiality required from the tallymen and provide these responses confidentially to the Agency, as appropriate.

# **ANSWER**

The maps for traplines RE1, R16 and R19 can be found below. For trapline R10, CEC is in communication with a member of the environment team from Waskaganish who is trying to finalize a confidentiality agreement before sharing this information. CEC will send the answer for trapline R10 as soon as it is available.

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# 123. CURRENT USE BY INDIGENOUS - CRI INCOME MONITORING AND SECURITY PROGRAMS AND GOVERNANCE OF TRAPPING MASTERS

The promoter must confirm, on map 8-4 of the EIA, which camps are used by participants of the Cri Income and Security Monitoring Program in the human environment study zone. They must also evaluate the capacity of these participants to continue depending on the resources during the different phases of the project. They must also propose mitigation measures, if required, even if an impacts and benefits agreement has been signed.

## **ANSWER**

At the suggestion of the CNG (email communication on January 20<sup>th</sup>, 2020), CEC contacted the Cree Hunters and Trappers Income Security Board in order to obtain this information. During a phone call on January 20th, 2020, the Cree Hunters and Trappers Income Security Board confirmed that this information was confidential and could not be shared with CEC.

## 129. CURRENT USE OF ABORIGINAL PEOPLE - GOOSE AND MOOSE HUNTING

B) The promoter must evaluate, at this stage of the environmental evaluation process, the possibility of suspending extraction activities during the goose hunt, and to adapt the calendar of operations according to these periods of intensive territory usage, considering mainly the opinions of the concerned tallymen. The case being, the promoter must specify the modifications that will be brought to the operation activities and calendar. If not, the promoter must justify the reasoning.

#### **ANSWER**

CEC does not anticipate suspending extraction operations, for economic and logistic reasons. CEC could however, adjust the blasting periods in order to decrease the frequency during hunting periods, in order to prevent the (unlikely) impacts this cold have on the wildlife.

In order to ensure that a maximum of Cree employees can participate in the traditional hunts, the mining activities must be minimal. This implies that the preventative maintenance periods must be planned before or after the hunting periods as these periods of preventative maintenance (shut-down) generate more road traffic than regular operations.

C) The promoter must evaluate at this stage of the environmental evaluation process, the possibility of suspending, limiting, or concentrating the transportation activities of the concentrate, transportation related to mine supplies, and the transportation related to dangerous materials and domestic waste during the four weeks of goose and moose hunting or to establish a management plan for traffic during these periods. The case being, the promoter must specify which modifications will be brought to the transportation activities and the calendar of operations. If not, the promoter must justify the reasoning.

## **ANSWER**

CEC does not plan to suspend operations during goose and moose hunting for economic and logistic reasons.

It is important to note that employees will be on a 14/14 schedule, which will allow those who wish to go hunting to do so during the two weeks that they are not scheduled to work. Furthermore, those who with to leave longer will be able to take vacation time. For those employees who do not wish to go hunting, suspending operations would imply an imposed work break.

The impact of operations on geese and moose will be minimal as they rarely frequent the mine sector.

# 131. CURRENT USE OF INDIGENOUS PEOPLE - VALORIZED AREAS FOR ORIGINAL AND OIE HUNTING

A) The promoter must specify if the cri camps on the Nemaska trapline (R19), mainly used for moose hunting, will be relocated and if the users, whether they will be relocated or not, have already been consulted on this subject (provide a summary of the discussions with the users consulted) or when they will be. The promoter must specify if the members of Nemaska were consulted or when they will be consulted and confirm if they wish to be relocated or not.

#### ANSWER

During a consultation with the tallyman of the R19 trapline on January 28th, 2020, the possibility of relocating the camps in question was discussed and the tallyman confirmed that it would not be necessary to relocate the camps.

Though the increased traffic could have an impact on the users of these camps, easy access by the road will be prioritized. Furthermore, the tallyman mentions that even if the camps were relocate further from the road, the users of these camps would nonetheless use the Eastmain-1 road to reach their camps thereby the impact of increased traffic would be felt during their travels.

# 132. CURRENT USE OF ABORIGINAL PEOPLE - TRADITIONAL USE OF CARIBOU AND CUMULATIVE EFFECTS

A) The promoter must provide an overview of past, present, future use of caribou (woodland and migratory) on the traplines (Eastmain: RE1, Nemaska: R16 and R19 and Waskaganish: R10). In order to do this, the promoter must provide approximate annual collection rates over the last few decades and use the temporal limits recommended by the Cree territory users. The promoter can obtain this information by means of consultations with the tallymen concerned or members of their families.

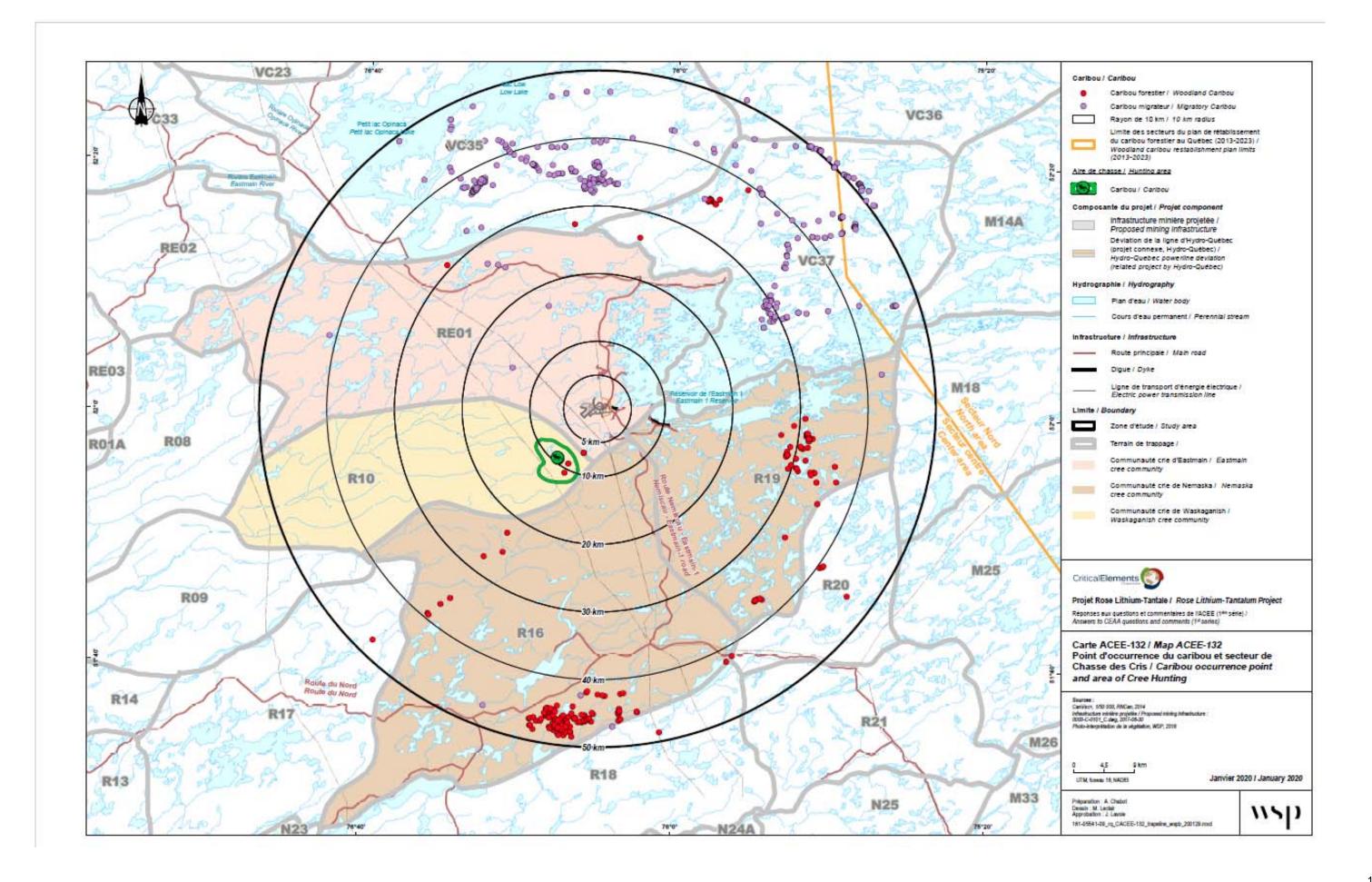
#### **ANSWER**

Usage of caribou by Cree families on their traplines is related to the presence of the animal. Harvesting takes place principally during the winter periods, when use of snowmobiles facilitates hunters' movement on the territory and the detection of animal tracks in the snow. As mentioned in Chapter 7.6 of the EIE, the information obtained from the office of the Management of fauna in Northern-Quebec of the MFFP concerning telemetric follow-ups of caribou in a radius of 50 km from the centre of the projected mine indicates that two woodland caribou wearing collars have frequented the study zone over the course of the last 15 years. An individual stayed in the area during the end of the winter period, from March 31st to April 14th, 2009. The other individual frequented the zone during two periods, the winter period from December 10<sup>th</sup>, 2005 to January 6<sup>th</sup>, 2006, and during the spring period from April 16<sup>th</sup> to 21<sup>st</sup>, 2007.

Nearly all the localisation points are situated in the portion to the south of the study zone (map IAAC-132). No localisation points are situated less then 8 km from the center of the mine. The sectors visited during winter periods are more than 25 km from the projected mine.

The delineation of inventory zones of woodland caribou conducted by the MFFP is based on their knowledge of the caribou population spread during the last decades. According to information transmitted by representatives of the MFFP, they have not conducted aerial inventories of caribou during these recent decades. This indicates that the MFFP does not judge it is necessary to inventory this zone, considering the low probability of finding woodland caribou.

Current knowledge indicates that the woodland caribou have rarely frequented the study zone during the last few decades, in a radius of approximately 25 km from the projected mine.



Concerning the migratory caribou, its presence in the sector covering the study zone of the project is considered marginal (Équipe de rétablissement du caribou forestier du Québec, 2013). Information obtained by the MFFP shows that from 2010 to 2015, 11 migratory caribou wearing collars from the Rivière aux Feuilles population have been seen in the study zone, 7 in 2010, 2 in 2013, 1 in 2014 and 1 in 2015. These visits have all been during the winter period, between December 1st and January 6th. The duration of their visits in the zone have varied between 2 and 16 days. Nearly all the localisation points are situated in the north portion of the study zone, at more than 25 km from the center of the projected mine. As a result of inventories conducted in May and July of 2011, the MFFP estimates this herd to have about 430 000 caribous. The analysis of more recent inventories from July 28<sup>th</sup> to August 2<sup>nd</sup>, 2016 allowed the MFFP to estimate the size of the heard to 199 000 caribous (MFFP, 2016a). The decrease in the population has the effect of reducing their movement in the south portion of their range in winter periods. As such, it can be anticipated that the caribou will be less likely to visit the zone of the projected mine, and to be harvested by Cree families who practice traditional activities

During interviews conducted in 2011 and 2012 with the tallymen of the four traplines (RE1, R-10, R-16 and R-19), two of them mentioned hunting caribou and moose on the territory. The tallyman of trapline R-10 mentioned that his two sons hunt caribou and moose during winter. The tallyman of trapline R-16 mentioned that the part of the trapline included in the study zone is accessible by snowmobile in the winter, and constitutes a good hunting area for woodland caribou and moose. He identified an area where ha has already harvested woodland caribou and moose (see map 8.4 of the EIE). He did not however provide details regarding the frequency and number of caribou harvested during the last few years.

The Cree tallymen are generally reluctant to share information on their caribou harvests during interviews or surveys in the context of studies conducted by promoters for projects on their territories. Considering the low density of caribou in the zone, the harvesting is likely limited and conducted base con opportunity during winter hunting excursions aimed mainly at harvesting moose.

During consultations on January 28<sup>th</sup> and 29<sup>th</sup>, 2020, the tallymen reiterated this information. They confirmed that there are no migratory caribous in the sector since about ten years and that their passage lasted only two or three years.

The woodland caribou is present, though rare, on their traplines. They prefer to hunt moose but if they do see a caribou during a moose hunt, they will sometimes harvest it.

The table below presents caribou harvests declared by the tallymen to the Cree Trappers Association [CTA] for each Cree community from 2011 to 2016. This informations shows that the three communities where traplines overlap the project study area, Eastmain, Nemaska and Waskaganish, have recorded the lowest caribou harvests, corresponding to roughly one caribou per year. It sould be noted that these declarations make no distinction between woodland and migratory caribou. It is normal that the communities located more to the north, who benefit from the presence of the Rivière aux feuilles herd of migratory caribou, record larger harvest, such as Mistassini who benefits from the presence of the Assinica and Témiscamie herds of woodland caribou on their territory.

Table ACEE-132 Caribou harvests by Cree community declared to the Cree Trappers
Association for 2011 to 2016

Community	2011- 2012 <sup>a</sup>	2012- 2013	2013- 2014	2014- 2015	2015- 2016	Average/year
Chisasibi	59	52	95	57	121	76,8
Eastmain	3	0	0	0	2	1,0
Mistassini	19	44	20	4	30	23,4
Nemaska	0	0	1	0	0	0,2
Oujé-Bougoumou	1	6	5	0	4	3,2
Waskaganish	1	0	0	1	0	0,4
Waswanipi	0		0	13	0	3,3
Weminji	0		14	3	24	10,3
Whapmagoostui	123	284	198	121	232	191,6
				199	413	307,4

a The compilation period is from July1st to June 30th of the following year Source :Cree Trappers Association, Activity report 2011-2012, 2012-2013, 2013-2014, 2014-2014, 2015-2016.

The preceding information shows that the annual harvest rates of caribou is closed to null on all four Cree territories over that last decade. This situation will certainly maintain the course over the next decade as a function of low frequentation on the territory by caribou and the high frequency of forest fires, which continue to offer unfavorable habitat conditions for this species.

- → CREE TRAPPER ASSOCIATION (CTA). 2015. *Activity Report 2014-2015*. [En ligne] http://creetrappers.ca/wp-content/uploads/2015/09/CREE-TRAPPERS-activity-report-2014-20152-copy.pdf. (Consulté le 13 décembre 2016).
- → ÉQUIPE DE RÉTABLISSEMENT DU CARIBOU FORESTIER DU QUÉBEC. 2013b. Plan de rétablissement du caribou forestier (Rangifer tarandus caribou) au Québec 2013-2023. Produit pour le compte du ministère du Développement durable, de l'Environnement, de la Faune et des Parcs du Québec (MDDEFP). Faune Québec. 110 p
  - C) The promoter must re-examine the Program for monitoring use of territory for traditional purposes (see question 123) as a function of the information obtained in question B) concerning the annual collection rates of migratory and woodland caribou.

#### **ANSWER**

It is not justifiable to re-evaluate the Follow-up Program considering the weak probability of harvesting migratory or woodland caribou by the tallymen concerned or their family members. It should be noted that it is very difficult to identify a caribou as being either a woodland caribou (Boreal) or a migratory caribou from the East when harvesting in zones which overlap the ranges of both populations. The members of Cree communities do not generally distinguish between them when making declarations.

# 134. CURRENT USE OF ABORIGINAL PEOPLE - ROAD TRANSPORT EFFECTS AND PROPOSED MITIGATION MEASURES

A) The promoter must consult the tallymen from Eastmain, Nemaska and Waskaganish in order to inquire about their travel habits during the goose and moose hunting periods; for example, the moment of the day when they usually leave the camp or village to go hunting and evaluate if it is possible to modify the transport activities (concentrate, supplies, dangerous matters, etc.) in order to limit the impacts during the hunting periods. In the case where these transport activities cannot be modified, describe the precise measure/modifications amongst all the promoter's mitigation measures that will be implemented. The promoter must specify the travel habits of all the users of the territory (not only the travel habits of the tallymen)on all the roads that will be used for transportation related to the project.

## **ANSWER**

The tallymen and the territory users prefer to travel at dawn and at dusk in order to benefit from daylight. They generally avoid travel at night as the darkness increases the risk of collisions.

It is important to note that meteorological conditions have an important impact as well and that travel is modified consequently.

CEC judges that it is not necessary to modify its transport activities.

B) The promoter must identify the measures that will be implemented during the weeks chosen for goose hunting in the spring (two weeks) and for moose hunting in the fall (two weeks) which will allow for mitigation of the effects of transport on the activities of the territory users. Si le promoteur prévoit adapter ses opérations durant ces périodes de chasse pour limiter le trafic, il doit expliquer comment ses opérations seront adaptées.

## **ANSWER**

In order to ensure that a maximum of Cree employees can participate in the traditional hunts, the mining activities must be minimal. This implies that the preventative maintenance periods must be planned before or after the hunting periods as these periods of preventative maintenance (shut-down) generate more road traffic than regular operations.

# 137. ABORIGINAL HEALTH AND WELFARE - THE EFFECTS OF ROAD TRANSPORTATION ON AIR QUALITY AND NOISE

The promoter must evaluate the potentials effects (air and noise quality) related to an increase in traffic on the road network at an appropriate distance from the project (off site and during the construction and exploitation) on the health of the Indigenous population.

# **ANSWER**

The Rose property is accessible by the route du Nord, and by the Nemiscau-Eastmain-1 road, passable in all seasons from Chibougamau. The mining site can also be reached by passing by Matagami, by the 109 and the route du Nord. The Nemiscau-Eastmain-1 road along which the Rose Project will be is made of gravel.

Going towards the workers' camp (25 km to the north of the mine), there uis one Cree camp, whereas to the south there are four camps:

- 2 camps at km 22, 1 camp at km 26, and 1 camp at km 40 of Nemiscau-Eastmain-1 road (near the road;
- 1 camp along the route du Nord.

These camps are used year-round at various different periods. As such, it is possible that there will be inconveniences on air and sound quality due to passing trucks associated with the CEC project (construction and exploitation) when Cree users are present at these camps.

During construction of the mine, there will be a total of 24 trucks per day(both directions). During exploitation, according to the critical scenario, there will be a total of 68 trucks per day (both directions), or according to the medium scenario, 44 trucks per day (both directions). The speed limit on the Eastmain 1 road and the route du Nord, between Albanel and the James Bay road, is of 70 km/h. The company vehicles and those of its suppliers will have to follow this speed limit, under penalty of expulsion. Road signs reminding of the speed limit will be added at an adequate frequency. Furthermore, CEC will put in place a system for receiving and resolving complaints that will include complaints related to traffic.

The air and sound quality, which constitutes in sort a component of quality of life (health), have an environmental value considered medium for the camp users as these camps are already along a functioning gravel road. The disturbance has been judged medium as an occasional disruption by increased traffic which will temporarily increase the level of noise and possibly raise dust during the periods without snow according to the distance of the camps from the road. Based on the actual impacts of transport, adjustments will be possible as a result of complaints. The amplitude of the impact is thus considered medium. The geographical scope is established as punctual as the effect is susceptible to being felt by the camp users. The duration has been established as short for construction and long for exploitation. The occurrence has been judged medium as an effect could manifest, though is not guaranteed. The residual effect is weak for construction (non important) and medium during exploitation (non important).

# 138. ABORIGINAL HEALTH AND WELFARE - EFFECTS OF ROAD TRANSPORTATION AND PROPOSED MITIGATION MEASURES

The promoter must determine the increase in traffic on the Eastmain 1 road caused by the project. Present, if needed, data on actual traffic, before the project. In the case where no date is available, specify which resources were consulted and why no database can be consulted by the promoter.

## **ANSWER**

The road traffic study presented to the MELCC in the answer document from February 2019 (Appendix QC-13) estimates that during the construction period, the project will generate 24 trucks per day (total of both directions) for the critical scenario and will generate 12 trucks per day (total of both directions) for the medium scenario. As such, the increase in road traffic on the Eastmain 1 road (EM1) during the construction period will be 24 trucks per day (total of both directions) for the critical scenario and 12 trucks per day (total of both directions) for the medium scenario.

The road traffic study also estimates that during the production period, the project will generate 68 trucks per day (total of both directions) for the critical scenario and it will generate 44 trucks per day (total of both directions) for the medium scenario. As such, the increase in road traffic caused by the project on the Eastmain 1 road (EM1) during the production period will be of 68 trucks per day (total of both directions) for the critical scenario and of 44 trucks per day (total of both directions) for the medium scenario.

The minister of transportation of Quebec (MTMDET) does not have data on the flow of traffic on the Eastmain 1 road (EM1). Hydro-Québec and the SDBJ were also consulted and do not have any data on the traffic of this road.

However, according to a representative of Hydro-Québec, a good portion of the traffic on the Route du Nord measured 50 kilometers South of Nemiscau passes by the Eastmain 1 road toward (or coming from) destinations further North (Radisson, La Grande, etc) because this is the shortest route.

Also, the counting/metering done by the MTQ on the James Bay road (route 109) in 2017 was done near Matagami and almost none of this traffic passes by the Eastmain 1 road (EM1). The activities of Hydro-Québec and the neighbouring communities in the sector generate very little traffic on the Eastmain 1 road. On this basis, the annual average daily flow (DJMA) on the Eastmain 1 road (EM1) is 90 at its maximum of which 54% consists of heavy-duty vehicles (see Table 1 of the road traffic study below).

% Véhicules **DJMA** Route Secteur Année lourds Route du Nord 50 km au sud de Nemiscau 2018 90 54% 109 Entre le chemin de l'Aéroport et le Boulevard Matagami 2017 1470 21%

Tableau 1 - Débits de circulation sur les routes

# 140. INDIGENOUS SOCIOECONOMIC CONDITIONS - SOCIO-ECONOMIC EFFECTS OF THE CRIS PROJECT

A) The promoter must specify the quantity of employment positions reserved for members of each Cree community.

#### **ANSWER**

As mentioned in answer IAAC-147, CEC must hire employees and award contracts according to the following priority:

- A member of the Eastmain RE1 family
- An Eastmain Cree
- A Cree of Nemaska
- A Cree from another community

These are the terms negotiated in the Impacts and Benefits Agreement and as such, approved by the Cree Nation Government.

Furthermore, according the IBA, CEC will provide annually to the implementation committee a report, not containing any personal information, the reasons for which a Cree candidate was not hired in order to allow the Cree parties to put in place the appropriate corrective measures, as applicable. This report will include the percentage of candidates refused based on the following refusal categories:

- Qualifications and references
- Criminal record

- Performance during the interview
- Other

This collaboration with the implementation committee will allow both parties to ensure that the hiring of a Cree employee (or rejection of the candidate) is compliant with the expectations of the Cree Nation Government and the Cree communities.

D) The promoter must evaluate the positive and negative effects of the project on all the different sub-groups of the indigenous population of the communities of Eastmain, Nemaska and Waskaganish (particularly women, youth, and the elderly) and propose appropriate mitigation measures. If not, justify the absence of measures. Evaluate the possibility of conducting a follow-up with these sub-groups in the context of the Community Health and Well-Being Monitoring Program (section 8.4.8 of the EIA). In the case where this is added to the Community Health and Well-Being Monitoring Program, provide details of this component to the Program. If not, justify the reasons for this exclusion.

#### **ANSWER**

The positive and negative effects for the sub-groups of the indigenous population, as well as the mitigation measures suggested, are discussed below.

For women, the project present several positive impacts such as employment opportunities, at the mine or in the communities. The mitigation measures suggested to maximise this positive aspect are:

- CEC will collaborate with organisations such as « Chapeau les filles », Women in Mining, and the Cree Women's Association of the Eeyou Istchee in order to promote employment opportunities for women in fields that are traditionally male.
- CEC commits to putting in place support programs in the communities, which can contribute to work-family balance, such as training for social workers and daycare service employees.

On the negative side, the project will cause a larger male population to be in proximity of the communities and one the main preoccupations discussed during consultations, is the risk that this could pose for women in the communities. Likewise, preoccupations concerning increased use of alcohol and drugs exacerbate the situation. In order to address these preoccupations, CEC will:

- Make available to employees support programs for alcohol and drug use.
- Prohibit consumption of alcohol and drugs at the workers camp (it will be a dry camp as stipulated in the IBA).
- Create a safe environment for women employees whereby sexual harassment is not tolerated.
- Support the efforts of the Eastmain community to put in place support programs for women.

For youth, the project will bring employment opportunities, either at the mine or in the communities. As for women, CEC plans to maximise this aspect by promoting in schools the mining industry and sharing information about training programs prior to the start of the project.

Employment opportunities present some of the same challenges for youth as for adults, namely the risk of increased alcohol and drug use and financial management issues. The social support programs offered to employees and within the communities will aim to address these problems.

Another negative aspect, which affects youth as much as the elderly, is the potential that youth abandon traditional activities to pursue a more modern lifestyle, as encouraged by employment at the mine. The effort to integrate Cree culture in daily life by means of thematic days, areas dedicated to practicing traditional activities and preparing traditional foods, will allow youth to find a balance between a modern lifestyle while preserving traditional activities.

The elderly could be negatively affected by the fact that community members could find employment at the mine or elsewhere in the community, thereby being less available to provide support. It will be very important that the adequate social programs be put in place.

It is important to note that these sub-groups (and all other sub-groups), continued consultations and communication over the life of the mine will allow CEC and the communities to adjust when new preoccupations arise or if any of the mitigation measures do not adequately fit the communities needs.



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