

Meeting summary

The 272nd meeting was held in Montreal on September 8, 2022.

Present: Pierre Philie David Annanack
 Daniel Berrouard Joseph Annahatak
 Cynthia Marchildon
 Murielle Vachon

Executive Secretary: Florian Olivier

PROJECTS AND OTHER MATTERS

DISCUSSIONS OR DECISIONS

Expansion of the Puimajuq Ore Pile, Nunavik Nickel Project by Canadian Royalties inc. (3215-14-007)	<ul style="list-style-type: none"> Because the promoter started the works before obtaining the required authorization for a modification of the CA, the Commission will not make a decision regarding this project.
Raglan Mine Project, Phase II and III, by Glencore Canada Corporation (3215-14-019)	<ul style="list-style-type: none"> Discussion postponed
Project to Restore Five Sites along the Mid-Canada Line, by the MELCC (3215-16-060)	<ul style="list-style-type: none"> After analysis and discussion, the Commission decided to exempt this project
Mesamax site underground exploitation and waste rock pile extension, Expo 2 and 2b quarries, esker 2b site exploitation, 2 helipads construction, Nunavik Nickel Project by Canadian Royalties (3215-14-007)	<ul style="list-style-type: none"> The Commission decided to send the promoter a series of questions and comments in order to decide on the authorization of the modification of the CA for this project
Project of rehabilitation and widening of a 5 km section of road and replacement of 13 culverts in the northern Village of Kuujjaraapik by Kativik Regional Government (3215-05-009)	<ul style="list-style-type: none"> The Commission decided to send the promoter a series of questions and comments in order to decide on the exemption of this project
Project of widening of the airport road and installation of security railings in the Northern Village of Quaqtaq by the MTQ (3215-07-010)	<ul style="list-style-type: none"> The Commission decided to send the promoter a series of questions and comments in order to decide on the exemption of this project
Project of construction of a new thermic power station in the Northern Village of Kangiqsujaq (3215-10-017)	<ul style="list-style-type: none"> The Commission sent its guidelines regarding the environmental and social impact study.

5. Raglan Mine Project, Phase II and III, by Glencore Canada Corporation (3215-14-019)

5.1. Follow-up on Conditions 8 of the July 11, 2017, Certificate of Authorization

Task: For discussion, decision

Discussion postponed to a subsequent meeting

6. Project to Restore Five Sites along the Mid-Canada Line, by the MELCC (3215-16-060)

6.1. Exemption request – preliminary information

Task: For discussion, decision

The Mid-Canada Line was built in the 1950s for radar monitoring at the 55th parallel and was abandoned in 1965, before being turned over to Quebec in 1966. The five sites are part of a group of 45 sites in Quebec, 43 of which are still not restored.

The equipment still present on the sites consists of empty, above-ground tanks (capacity of a few thousand litres), a pumping system and the building for this purpose, a pipeline connecting the main station and some empty barrels, a compressor and some areas of miscellaneous debris.

The following activities are planned by the proponent:

- Removal of residual hazardous materials, their packaging and temporary storage in a compliant space
- Removal of equipment from inside the buildings
- The dismantling of pipes and old fuel tanks
- Dismantling of infrastructure (building, shelter, heliport, other)
- Packaging of dismantled materials on a dedicated surface
- Removal of contaminated soils and packaging these soils on a designated surface
- Off-site transportation of dismantled materials and contaminated soils to designated sites in Schefferville or along the Trans-Taiga Highway. In the case of site 339A, materials will be transported to Kuujjuarapik and then to Chisasibi. These designated sites will require agreements between site managers and the receivers.
- Consolidation of dismantled materials for final transport to authorized locations to be identified by the site managers.

Having analyzed all the submitted information and after discussion, the KEQC considered it is not appropriate to subject the project to the environmental and social assessment and review procedure, given that the project appears to have mainly positive impacts.

Thus, the KEQC decided not to subject the project to this procedure.

The KEQC also wished to reiterate the importance of the proponent's commitments regarding social acceptability and informing residents about the impacts of transporting materials off-site. In particular, the KEQC wished to remind the proponent that it is responsible for consulting directly with the communities concerned, for example, by contacting the Northern Village of Kuujjuaraapik and the Band Councils of Whapmagoostui and Kawawachikamach directly.

The KEQC also noted that this decision regards only the impacts of the project under its jurisdiction, north of 55°.

Action: send a letter to the Administrator - Exemption

NEW DOSSIERS

7. Mesamax site underground exploitation and waste rock pile extension, Expo 2 and 2b quarries, esker 2b site exploitation, 2 helipads construction, Nunavik Nickel Project by Canadian Royalties (3215-14-007)

7.1. Request for a modification of the certificate of authorization - preliminary information

Task: For discussion, decision

Nunavik Nickel project (NNiP), by Canadian Royalties Inc. (CRI), was the subject of an initial environmental and social impact study in 2007. This led to certification of authorization for the entire NNiP mining site on May 20, 2008, pursuant to section 201 of the *Environmental Quality Act*. Since then, various changes to the global certificate of authorization have been authorized.

This request to amend the certificate of authorization covers the underground mining of the Mesamax deposit, the expansion of the Mesamax waste-rock stockpile, the operation of the Expo 2 and 2 B quarries, the operation of the 2 B Esker and the construction of two helipads.

After reviewing the information provided by the proponent and discussion, the KEQC sought further information so as to be able to render its decision on the authorization of the amendment and asked the proponent to respond to a series of questions and comments:

Community consultation

The proponent mentioned that the communities have expressed no concerns via the Nunavik Nickel Committee (NNC) regarding the expansion of Expo quarry 2 b.

QC - 1. The KEQC requested the proponent to specify who the members of the NCC are and which groups they represent. It must also present the consultation processes it has put in place to obtain the whole community's comments and concerns, including the dates of the meetings, the topics discussed and the comments obtained. If necessary, the proponent must present the mitigation measures it intends to implement to answer the community's concerns.

The proponent referred to the Inuit Community Environmental Enhancement Project (ICEEP) for the compensation of wetland losses.

QC - 2. The KEQC asked the proponent to identify current and upcoming projects, provide descriptions and indicate the framework in which they were developed. The proponent must specify how the communities were involved in the development and implementation of these projects and how the ICEEP fits into the request to amend the certificate of authorization.

Mesamax

The proponent plans on using part of the waste rock generated by the operations of the Mesamax mine to backfill the pit and underground mine galleries, a method that is favoured by MELCC as it reduces the footprint of the mine site and the risk of surface and groundwater contamination from acid generation and leachate.

QC - 3. The KEQC asked the proponent to specify what proportion of the waste rock to be generated by operations at the Mesamax deposit (pit and underground) will be used for backfill and which areas of the Mesamax mine will be backfilled (pit and underground). The proponent must also evaluate the possibility of backfilling the entire pit, including the northeast pushback, with waste rock in order to avoid creating a pit lake. The proponent must submit a schedule for the completion of the backfill works.

In addition, given the potential for acid generation and leaching of waste rock, the proponent must develop and implement measures to limit the supply of oxygen and to promote permafrost upwelling in the underground backfill, for example, by covering it with an impervious cover, as proposed for the Expo pit. The proponent must submit the details of the measures it has developed.

The literature mentions that taliks can develop under water bodies deeper than 2 m and where the lower part of the water column does not freeze in winter. In addition, for water bodies larger than 200 m in diameter, taliks may develop in such a way that they cut through the entire permafrost (through taliks).

The section “4.3.2. Characterization of the extraction pits” of the impact study (Génivar, 2007) mentions that the Mesamax pit would be 200 m wide, 350 m long and 90 m deep. In the event that the pit is flooded by runoff and contact water, the pit’s dimensions would theoretically allow a hydraulic connection to develop between the pit water and the deep aquifer formation found beneath the base of the permafrost. This link is plausible in the operation of underground workings to a depth of 270 m. The formation of a through talik could therefore allow the migration at depth of contaminants initially isolated in the active part of the permafrost (mollisol), which only thaws at the surface in summer.

This, considering the potentially acid-generating and leachable nature of the mine waste rock that will be placed in the Mesamax underground work sites and that the depth targeted for the operation of these sites (level 270 m),

QC - 4. the KEQC requested that the proponent validate the following in the field:

- Justify whether the Mesamax site may recharge the deep aquifer via a through (open) talik, generated by the combined effects of the pit and underground workings;
- Define and justify what is the residual thickness of the permafrost layer below from 270 m at the end of the Mesamax underground workings;
- Verify whether the base of the permafrost was intersected during exploratory drilling and specify the methodologies used, particularly to validate the 400 m permafrost thickness at the Mesamax site;

- Specify its approach to prevent the initiation of sulfide oxidation (DMA) and leaching reactions depending on the layout of the mine waste rock in the underground workings;
- Specify and justify the impermeability measures that will be put in place to prevent oxygen intake and promote permafrost upswelling;
- Provide thermal modelling to simulate the combined impact of underground workings and the pit on permafrost distribution in a changing climate.

The proponent mentioned that it will excavate borrow materials in the area where the Mesamax deposit is mined.

QC - 5. The KEQC asked the proponent to locate this source of borrowed materials on a map and specify its intended use.

In section 3.1 of its request to amend the certificate of authorization, the proponent referred to an expansion of the Mesamax pushback, also shown on Map 2. However, this pushback was not presented in further detail in the request.

QC - 6. The KEQC asked the proponent to specify whether it holds all the necessary authorizations to carry out this expansion. If not, the proponent would be required to provide all the required documentation to assess the impacts of this expansion in this request to amend the certificate of authorization.

QC - 7. The KEQC asked the proponent to specify the additional volume of water it expects to treat with the proposed modifications to the mine site and specify whether the existing equipment is sufficient. If it is not, the proponent must show how it will modify its facilities to handle the additional volume of water, present a plan of the foreseen installations and indicate the flow rate of the treated effluent. The proponent must present the contaminants likely to be emitted from a new effluent and assess whether Environmental Discharge Objectives (EDOs) can be met.

Furthermore, in view of developing new surfaces on the Mesamax mine site, the proponent must present the drainage plan for water in contact with mining infrastructures and clean water, and present on a map the different ditches and their drainage directions. The map should include the topographic curves.

QC - 8. The KEQC asked the proponent from revise maps 2 and 3 of the request to amend the certificate of authorization to include the entire area occupied by the Mesamax deposit as well as its facilities, including the waste rock stockpile, the water management equipment and the location of the mining effluent. Maps should include a complete and detailed legend.

As for the protection of fauna and flora, the proponent referred to Appendix J of its document concerning mitigation measures for caribou. Appendix J refers to a wildlife

protection plan that was being developed. This plan is required to anticipate and assess the impacts of the proposed activities on wildlife.

QC - 9. The KEQC therefore asked the proponent to contact the Ministère des Forêts, de la Faune et des Parcs (MFFP) to learn the expected content of this plan. The plan must include, but not be limited to an animal management plan, wildlife mitigation measures, protection measures, identification of the roles of each stakeholder, etc. This plan must be filed for information purposes.

The proponent indicates that the results of the geochemical characterization of the ore and mine waste rock generated by the open pit mining of the Mesamax deposit are representative of the future underground mine.

QC - 10. In order to better understand the environmental risks associated with the management of these materials, including the anticipated effectiveness of the water treatment system used at the Mesamax site, and to assess the reactivity of the rock that will be mined in the underground mine, the KEQC asked the proponent to provide evidence of its affirmation. In particular, the baseline geochemical characteristics of the newly mined areas must be compared with the results of previous characterization programs. For example, a comparative analysis of the chemical and mineralogical composition of the ore and mine waste rock extracted from the pit and underground mine must be presented.

Esker 2 b

Two watercourses (CE1 and CE2) are located in Esker 2b and a culvert will be required to allow for machinery traffic in the CE1 intermittent waterbody area. Although intermittent and shallow, the flow of this stream can increase considerably during periods of flooding.

QC - 11. Although details will be provided at the time of the ministerial authorization under Section 22 of the EQA, the KEQC asked the proponent to specify the type of culvert it plans to install. In addition, it is mentioned that the slopes of this stream are steep and prone to erosion. The proponent must specify whether stabilization work, particularly via riprap, will be necessary to prevent suspended matter from being introduced into the watercourse. In such a case, while the addition of a culvert may potentially be exempted, rockfill stabilization may also require approval. For CE1, the culvert must be installed in the absence of flow or at a very low flow.

Judging from Map 5, it would appear that natural environment characterization is low in the area of operation. Characterization aims to define the environment that will be operated. There is little representation of the harvested area, since only two inventory stations were conducted within the area of the works, with the majority are beyond it.

QC - 12. The KEQC asked the proponent to confirm the absence of wetlands in the area

of operation and to indicate whether it would avoid these environments, if applicable.

The proponent planned to strip an area of 19.76 ha to mine the granular material in Esker 2b between 2022 and 2032.

QC - 13. The KEQC asked the proponent to specify the methods that will be used to restore the site during the planned restoration period beginning in 2032 and its schedule for this restoration.

QC - 14. Given the presence of remains with archaeological potential in the Esker 2b sector and that these have not been verified as to whether or not they are indeed archaeological, the KEQC asked the proponent to evaluate the entire Esker area slated for operation before undertaking the works. The proponent must also specify the mitigation measures that it would apply to prevent the destruction of archaeological sites, and justify the established protection perimeter.

Helipads

QC - 15. The KEQC asked the proponent to indicate the results of the inventories carried out in summer 2022 and confirm the absence of at-risk plant species on the site planned for the construction of the two helipads.

General comment

The proponent stated in its document that “The Mesamax open pit pushback, as presented in Appendix K, was already approved at the time of the MELCC’s visit in 2020” and that “The area of the authorized waste rock stockpile at Mesamax is 147,000 m². The surface area currently used is 160,000 m².”

QC - 16. The KEQC also wished to remind the proponent that it must take note that any modification to the operating capacity, to the facilities or to the surface areas operated or any addition of infrastructures on the mine site must be authorized by the MELCC, following a decision by the KEQC. It must also obtain any other authorization or right required.

Action: send a letter to the Administrator – Questions and comments

8. Project of rehabilitation and widening of a 5 km section of road and replacement of 13 culverts in the northern Village of Kuujjuaraapik by Kativik Regional Government (3215-05-009)

10.1 Request of exemption – preliminary information

Task: For discussion, decision

The Northern Village of Kuujjuarapik and the Whapmagoostui Cree First Nation have been using the same trench landfill site located within the Northern Village of Kuujjuarapik since the 1950s. In September 2021, an exemption was issued for the

construction of a 600-metre access road to a new landfill site, from the road connecting the Northern Village of Kuujjuarapik to the existing landfill site. A certificate of authorization was issued for the new landfill in November 2019 by the Cree Regional Administrator. The development, operation and closure of the new landfill site are the responsibility of the Whapmagoostui Cree Nation.

Given the increase in traffic on this road, the Northern Village of Kuujjuarapik wishes to make the road safer. In addition, the culverts put in place during the construction of the road are made of galvanized steel, and the salty coastal air has degraded their integrity and so they must be replaced.

The works covered by this request consist mainly of widening the roadway from 7 to 9 metres. In addition, 13 culverts will need to be replaced with aluminized corrugated metal piping and one culvert will be added. In addition to these tasks, clearing for visibility and guardrail installation will be carried out. The total wetland encroachment will be approximately 1,394 m² over 572 m.

After reviewing the information provided by the proponent and discussion, the KEQC sought further information so as to be able to render its decision on whether or not the project must be subjected to an environmental and social impacts study and asked the proponent to respond to a series of questions and comments:

- QC - 1.** In order to assess the project's environmental impacts, the KEQC asked the proponent to specify whether a characterization of the natural environments that will be affected by the widening and repair works has been carried out and, if so, provide this characterization. If it has not, the proponent must undertake to carry out this characterization, which must include the wetlands affected by the widening of and the watercourses crossed by the road.
- QC - 2.** The KEQC asked the proponent to report on the consultations and steps it has taken to inform both the users of the access road and the populations of the Northern Village of Kuujjuarapik and the Cree First Nation of Whapmagoostui. Since the project is being carried out near Cree lands, the proponent must consult and inform the users and population of Whapmagoostui about the project, its timetable and its impacts, and report any concerns or comments raised.
- QC - 3.** The KEQC asked the proponent to specify the measures it intends to put in place during the works to maintain traffic on the access road and guarantee access to the landfill sites.
- QC -4.** The KEQC asked the proponent to specify where and how it intends to treat and eliminate residual materials generated by the project, including the old culverts.

Action: send a letter to the Administrator – Questions and comments

9. Project of widening of the airport road and installation of security railings in the Northern Village of Quaqtq by the MTQ (3215-07-010)

9.1. Request for a modification of the certificate of authorization - preliminary information

Task: For discussion, decision

The works covered by this request are intended mainly to secure the access road from the Northern Village of Quaqtq to the airport (Litua Street) and to municipal services (landfill and wastewater treatment). This road also provides access to the land around the Northern Village. The road needs to be widened in some areas to allow for guardrails.

The installation of guardrails on 674 metres of Litua Street requires the widening of the shoulders by one to two metres on each side, on 12 sections of road. The additional site area, i.e. widening of the road shoulders, is estimated at 553 m².

To allow for the required shoulder widening, the extension of a surface drainage culvert may be required in the area of the oil tanks by approximately 5 m or less, depending on road fill conditions.

The granular material for the widening of the shoulders will be produced by operating a quarry under the supervision of the MTQ or a quarry operated by the Makivik company.

The production and storage of granular material was planned for summer 2022. The guardrail installation works, including the shoulder widening, is expected to take approximately 15 days and is scheduled for summer 2023.

After reviewing the information provided by the proponent and discussion, the KEQC sought further information so as to be able to render its decision on whether or not the project must be subjected to an environmental and social impacts study and asked the proponent to respond to a series of questions and comments:

Regarding wetland impacts, the 2018 characterization provided is incomplete and does not include all areas of the works. The portions north of the access road are not covered by the characterization.

QC - 1. To better estimate the impacts of the project, the KEQC asked the proponent to provide more details on these environments as well as on the areas of temporary and permanent encroachment of the work in wetlands and waterbodies. The KEQC believes that a field visit may be necessary to collect this information.

The proponent indicates that the granular materials necessary for the widening of the shoulders will be produced in a quarry operated by the Makivik company or by the MTQ.

QC -2. The KEQC asked the proponent to confirm the location of the quarry in operation and the operator. In all cases, the operator must obtain information from the Ministère Forêt, Faune et Parc on the protection of species that may

nest in gravel pits and sand pits, such as the American nightjar, and apply it, if necessary.

Action: Letter to the Administrator – Questions and comments

10. Project of construction of a new thermic power station in the Northern Village of Kangiqsujuaq (3215-10-017)

10.1. Project of guidelines for the impact study

Task: For discussion, decision

The project aims to build a new thermal power plant on the territory of the Northern Village of Kangiqsujuaq on Category I lands. The thermal station project will be located far from the village and from residential areas or areas with residential potential. The plant will initially be equipped with three salvaged generator sets that have been factory refurbished and paired with three new alternators. The units will have capacities of 855 kW, 1,135 kW and 1,168 kW, for a total installed capacity of 3.16 MW at commissioning. This power can be increased to 4.6 MW, as needed, with the addition of a fourth generator.

The project to build a new thermal power plant on the territory of the Northern Village of Kangiqsujuaq is automatically subject to the environmental and social impact assessment procedure, given that under section 188 and Schedule A of the *Environment Quality Act*, any thermal power plant powered by fossil fuel and the heating capacity of which is equal to or greater than 3,000 kW is subject to the procedure.

In the directive, which is reproduced in Appendix C of these meeting minutes, the KEQC outlined the nature, scope and extent of the environmental and social impact assessment that the proponent must carry out. It presents a procedure for providing the information required for the project's environmental and social assessment. The KEQC also repeated that these guidelines should not be considered exhaustive, and that the proponent is required to include in its impact study any other element(s) relevant to the analysis of the project.

Action: Send the Administrator the directives for the environmental and social impact assessment

11. Varia

11.1. Working group on the federal law on impact assessment of 2019

The KEQC wanted to reiterate to the working group that it is not interested in participating in discussions, as it considers that it has provided all relevant information in previous correspondence. The Executive Secretary will send a letter respectfully declining the invitation.

12. Next meetings

The KEQC will conduct site visits to Puvirnituaq, Inukjuak and Kuujjuaraapik during the week of October 24 to 28, 2022, and, if necessary, a meeting will be held at that time.

DOSSIERS UNDER ANALYSIS

Environmental monitoring report 2021 Raglan Mine Project, phases II and III by Glencore (3215-14-019)

Environmental and social monitoring report 2020, direct shipping ore project, project « 2a » (Goodwood) by Tata Steel Minerals Canada, (3215-14-014)

Raglan Mine Project, phases II and III by Glencore – follow up to conditions 1 and 3 of the certificate of authorization of July 11, 2017 (3215-14-019)

Raglan Mine Project, phases II and III by Glencore - follow up to conditions 4 of the certificate of authorization of July 11, 2017 (3215-14-019)

Nunavik Nickel Project by Canadian Royalties Inc. Monitoring of the water quality at the Expo pit site (3215-14-007)

Nunavik Nickel Project by Canadian Royalties Inc. Annual report (3215-14-007)

Project of construction of a new thermic power generation station in the northern village of Puvirnituk, by Hydro-Québec – complementary information to the impact study (3215-10-014)

10. Project of construction of a new thermic power station in the Northern Village of Kangiqsujuaq (3215-10-017)

10.1. Project of guidelines for the impact study

Task: For discussion, decision

11. Varia

Next meetings

Project to develop a contaminated soils treatment platform in Puvirnitug	MELCC to KEQC	Preliminary information	rec'd August 8, 2022		
Project of development of an end-of-life vehicle storage site in Quaqtq	MELCC to KEQC	Preliminary information	rec'd August 29, 2022		