



Montréal, July 7, 2020

Ms. Dominique Lavoie  
Director – Direction de l'évaluation environnementale des projets miniers et nordiques et de  
l'évaluation environnementale stratégique  
Ministère de l'Environnement et de la Lutte contre les changements climatiques  
Marie-Guyart Building, 6<sup>th</sup> floor, Box 83  
675 René-Lévesque Blvd. East  
Québec, QC G1R 5V7

Subject: Coniagas tailings site restoration project - Responses to the questions and comments  
sent on March 30, 2020 with regard to the application for a declaration of exemption  
Y/Ref.: 3214-14-054

Dear Ms. Lavoie:

Regarding the application for a declaration of exemption for the Coniagas tailings site restoration project, we have received questions and comments from the *Comité d'évaluation des répercussions sur l'environnement et le milieu social* (COMEV) sent on March 30, 2020 by email and, subsequently, by mail. Please find attached the full text of the questions and comments from COMEV followed by the responses.

As requested, you will find attached the French version of the responses to the COMEV questions and comments in nine (9) paper copies, as well as three (3) digital copies in PDF format. You will also find eight (8) paper copies of the English versions of the document as well as three (3) digital copies in PDF format as well as a letter certifying that the digital copies are identical to the paper copies.

Hopefully, this document can respond to the questions and comments raised by the COMEV in order to complete the environmental and social impact assessment and review procedures for the Coniagas project.

Please feel free to contact me or Ms. Gail Amyot, Environment, Health and Safety Director, in charge of the Galaxy Lithium (Ontario) Ltd. Project (by telephone: 514-346-0961; by email: [Gail.Amyot@gxy.com](mailto:Gail.Amyot@gxy.com)), and forward all paper correspondence to Galaxy Lithium (Ontario) Ltd. at the following address: 2000 Rue Peel, Suite 720, Montréal, Quebec H3A 2W5.

Very best regards,

*Denis Couture*

Denis Couture, Eng.  
General Manager  
Galaxy Lithium (Ontario) Ltd.

- Encl.: 1) Nine (9) paper copies, French version, of the responses to the COMEV questions and comments – Coniagas tailings site restoration project  
2) Three (3) digital copies, French version, of the responses to the COMEV questions and comments – Coniagas tailings site restoration project  
3) Eight (8) paper copies, English version, of the responses to the COMEV questions and comments – Coniagas tailings site restoration project  
4) Three (3) digital copies, English version, of the responses to the COMEV questions and comments – Coniagas tailings site restoration project  
5) Letter certifying that the digital copies are identical to the paper copies

**COMEV Questions and Comments  
Coniagas Tailings Site Restoration Project**

**QC - 1. The Proponent states that the already opened borrow pits (pits 1, 2, and 3) will be prioritized and should meet the work requirements. The Proponent should confirm whether it will be possible to limit the extraction of material only to already opened borrow pits, on areas to be cleared of less than 3 hectares**

Response:

The restoration scenario presented requires 12,000 m<sup>3</sup> of clay or till, 112,105 m<sup>3</sup> of sand and gravel Dmax200 and 10,586 m<sup>3</sup> of filter sand.

The pits that are already opened are pits 1, 2 and 3. Pit 1 has an estimated volume of till of 75,000 m<sup>3</sup>, while pits 2 and 3 have sand and gravel volumes of 300,000 and 75,000 m<sup>3</sup>, respectively.

Pit 2 occupies portions of an esker extending approximately 4 km in length by 200 m in width. This pit has been in operation since at least 1996, as observed from aerial photographs. Granular materials consist of sand and gravel to sandy gravel that sometimes have a trace of silt depending on the layers. There are many pebbles and blocks observed in the deposit (20 to 35%) and their maximum observed diameter is less than 30 cm. The projected portion of pit 2 has a surface area of approximately 30,000 m<sup>2</sup>, with a volume of granular materials estimated to more than 300,000 m<sup>3</sup>, assuming an estimated thickness of 10 m. It is easily accessible from the Chemin Bachelor and gravel road which leads to the Coniagas site and the Bachelor mine. This pit will meet sand and gravel needs as well as that of filter sand. The latter will be produced using a screener installed in the work footprint of the borrow pit.

The clay or till needed for the impervious core of the tailings' containment dike could also be found in the area, although this would mean opening a new pit. The source 2 corresponds to a till deposit of 60 m wide by 500 m long. This site has been recently deforested. This source extends over approximately 30,000 m<sup>2</sup> by a thickness varying from 1 m to more than 3 m, due to the presence of shallow bedrock. The estimated volume is approximately 35,000 m<sup>3</sup>. The project requires 12,000 m<sup>3</sup> of material for the dike core. Tests will have to be carried out to validate the permeability of these materials. The area to be opened will therefore be less than 3 ha. It is located approximately 1.5 km from the site to be restored. Another solution for the core would be to build it using sand and gravel from pit 2 and to cover it with a prefabricated geobentonite liner.

**QC - 2. The Proponent must indicate the land category (I, II, III) for each borrow pit and potential sources that the Proponent plans to exploit in accordance with the James Bay and Northern Québec Agreement.**

Response:

Pit 2 and source 2 are located on Category III lands that are approximately 7 or 8 km south of the Category II lands associated with the Waswanipi community.

**QC - 3. For each of the borrow pits and potential sources that are considered for exploitation, the Proponent will be required to submit and/or add the following information:**

- a. The area to be exploited (including exploitation, stripped and overflowed area, areas for construction trailers, crusher and screener, etc.);**

Response:

At the moment, there are no plans to keep construction trailers at the borrow pit. Only a screener will be required to ensure that the production of natural materials satisfies the granulometric requirements as required by the various layers to be placed. The areas will be re-evaluated once the earthwork contractor has been selected and the methodology and type of equipment have been determined by the contractor. It is estimated that the platform required for the production of granular materials enabling the loading of the screen and trucks by a loader will occupy an area of approximately 1,500 m<sup>2</sup> (25 m x 60 m). Rounding up the granular material requirements at borrow pit 2 to approximately 150,000 m<sup>3</sup> and assuming a 100-m wide excavation face, a height of 10 m and slopes with a repose in the order of 2H:1V, a surface area of approximately 24,000 m<sup>2</sup> (140 m x 170 m) would need to be cleared to extract the natural materials if no existing open area is available for the material. The maximum area required for natural material extraction, screening, temporary storage and truck loading could, therefore, be around 25,500 m<sup>2</sup>, including a contingency for granular material losses, deforestation and stripping required for the operation of borrow pit 2.

For borrow source 2, there are no plans to install a construction trailer and screener at this location. The natural material will be sorted using a hydraulic shovel in order to remove oversized blocks and pebbles before being loaded into trucks. The areas will be re-evaluated once the earthwork contractor has been selected and the methodology and type of equipment have been determined by the contractor. It is estimated that the initial platform required for truck loading and initial production of granular material by a hydraulic shovel will occupy an area of approximately 1,000 m<sup>2</sup> (20 m x 50 m). Rounding up the granular material requirements at borrow source 2 to approximately 14,000 m<sup>3</sup> and assuming a 60-m wide excavation face, an average deposit height of less than 2 m, and slopes with a repose of 2H:1V, approximately 8,000 m<sup>2</sup> (120 m x 68 m) of surface area would need to be cleared to extract the natural materials. The area required for natural material extraction, sorting, temporary storage and truck loading could, therefore, be around 9,000 m<sup>2</sup>, including a contingency for losses, deforestation and stripping required for the operation of borrow source 2.

**b. The type and volume of borrow material collected;**

As mentioned in the answer to question 1, the volume of sand and gravel required for various layers to be placed is of the order of 112,105 m<sup>3</sup> for sand and gravel, 10,586 m<sup>3</sup> for filter sand and 12,000 m<sup>3</sup> for till. It should be noted that for calculating the surface areas required for the extraction of natural materials (refer to answer to question 3(a)), it was assumed that there will be losses of the order of 20% during sorting and sieving activities. The particles not meeting specific granulometric requirements for each layer to be placed will be removed and returned back in the borrow pit/source.

**c. The presence of wetlands or water in the vicinity of the sites;**

The sites of the two potential pits are in a forest area. Source 2 is surrounded by streams.

**d. The depth of water table at the sites, or state whether operations are planned within one metre above the water table of the sites;**

In pit 2, no exploratory trenching has been carried out since observations of current operations have shown that the pit can be easily accessible and operated without water table resurgence at the surface.

At source 2, no water table was observed in the trenches that were dug where bedrock was reached.

**e. A description of the routes planned to access the extraction sites.**

No road needs to be built to access these two sites, as pit 2 is already in operation and source 2 is already accessible by a logging road that would likely need to be cleaned. This road starts 0.75 km from the intersection of Route 113 (at Desmaraisville) and from the road leading to the Coniagas site and Bachelor mine.

**QC - 4. The Proponent should describe the operating conditions of the extraction sites.**

Response:

Borrow pit 2 is located along a permanent access road, about 0.9 km south of the intersection with the road leading to the Coniagas site and Bachelor mine (Bonterra Resources). This deposit consists of sand and gravel. This pit is currently active in GESTIM under the number BNE23822. The vast majority of the land for pit operation is, therefore, already stripped and well known. Based on the observation of current operations, it was also determined that the pit can be easily accessible and operated without water table resurgence at the surface.

Borrow pit 2 is located east of the provincial Route 113 and is accessible from a logging road that starts about 0.5 km east of Desmaraisville, along the road leading to the Coniagas site and Bachelor mine. Source 2 deposit consists of morainal till in drumlinoid form directly in contact with the bedrock. No water table was observed in the trenches dug within the footprint of borrow source 2.

Grubbing, stripping and removing overburden may be required in certain areas of the pit and borrow source. All stumps, roots, logs, shrubs, humus and general vegetation, debris and other perishable materials will be removed and placed in one or more peripheral locations so that they can be easily reused when re-vegetating the pit or borrow source. For borrow sources that have been fully exploited, the above materials in temporary storage will be used for restoration.

The maximum speed limit permitted for hauling borrow materials will be the same as the one that permitted on the existing roads being used, and will be limited to a maximum of 10 km/h at the borrow source.

Environment

The earthwork contractor will comply with all applicable environmental protection laws and regulations.

Prior to the construction work, the machinery mobilized by the contractor will be inspected to detect any leak or defect that could lead to a spill into the environment.

Any accidental spill will be reported to the competent authorities as soon as possible (Environment Quality Act, Sections 20-21). In the event of a petroleum or hazardous material spill, the contractor will be required to immediately notify Galaxy and/or its representative. In addition to the mandatory notification of a spill, a report will be prepared outlining efforts to contain and recover the spilled contaminants, as well as their safe storage.

If required, the contractor will ensure that petroleum products and other environmentally hazardous products are stored in a safe and leak-proof storage site.

Each vehicle or machine will have a first aid kit and a fire extinguisher. The earthwork contractor will maintain an adequate stock of products (flanges, booms, sorbent pads, granular materials, etc.) at the site so that a quick intervention can be made in the event of an accidental spill on the ground or in the water.

The fuel supply for the machinery will be done at least 60 m from any water body or watercourse.

**QC - 5. The Proponent must describe the consultations carried out with the tallyman and community affected by the operation of the borrow pits. It should be outlined as to how the comments or concerns expressed have been considered. If there has been no consultation regarding borrow pits, the Proponent will be required to state when it intends to do so.**

Response:

The tallyman for the area of the two potential borrow pits is the same as that for the tailings stockpile area to be restored. The site is located on trapline W24A belonging to Mr. Frank Blacksmith of Waswanipi. He was contacted regarding the borrow pits by Ms. Gillian Roy on May 28, 2020 and his belief is that the site restoration will be beneficial even if materials are borrowed from the territory. His son, who often accompanies him to meetings, would like to be involved in the work.

**QC - 6. The Proponent must describe the restoration work that will be carried out on the sites at the end of operations and specify the completion schedule.**

Response:

The restoration of the used borrow pits will be done in accordance with the requirements of Section VII of the Regulation respecting sandpits and quarries (CQLR c Q-2, r 7) and the requirements that will be set forth when the certificate of authorization will be issued in accordance with Section 22 of the EQA (CQLR c Q-2).