

Aאל תיאיירוא Cree Nation Government Gouvernement de la Nation Crie

Québec City August 16, 2021

Gail Amyot Galaxy Lithium (Canada) Inc. 2000 Peel Street, Suite 720 Montréal, Quebec H3A 2W5 gail.amyot@gxy.com

SUBJECT: James Bay Lithium Mine Project
Response to the Second Information Request

Dear Ms. Amyot,

On July 29, 2021, the Joint Assessment Committee (the Committee) received a revised environmental impact statement (EIS) for the above-named project, which includes an optimized mine site development plan. The revised EIS is in the following document:

WSP, 2021. James Bay Lithium Mine. Environmental Impact Assessment – July 2021 (Version 2) Report prepared for Galaxy Lithium (Canada) Inc. 700 pages+ appendices.

The revised EIS includes the responses from Galaxy Lithium (Canada) Inc. (GLCI) to Part 2 of the Second Information Request, sent on July 8, 2020, and to the non-matching responses to Part 1 of the Second Information Request, sent on July 14, 2020.

After reviewing the document, the Committee, in cooperation with federal authorities involved in the environmental assessment, compared the Second Information Request with the responses in the revised EIS. Through this exercise, the Committee has determined that the information provided is incomplete. The Committee also identified some inconsistencies between the responses in the revised EIS and the responses provided previously. The information detailed in Appendix A and Appendix B must be provided so that the Committee can continue its analysis.

Next Steps

The federal environmental assessment timeline, currently paused, will restart when the Committee receives all of the information requested in this letter. In the meantime, the Committee is continuing with its analysis of the information in the matching responses.

After your response to the non-matching items listed in the appendices is received, the Committee may submit another information request to clarify certain points regarding optimization of the project and reassessment of its effects.

If you need further information, please contact Project Manager Guillaume Clément-Mathieu at 418-573-2306 or guillaume.clement-mathieu@iaac-aeic-gc.ca.

Sincerely,

John Paul Murdoch Co-Chair, Joint Assessment Committee Cree Nation Government

Geneviève Bélanger A/Co-Chair, Joint Assessment Committee Impact Assessment Agency of Canada

Enclosures: A – Non-matching responses to questions in the Second Information

Request

B – Inconsistent responses identified by the Committee

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Kelly LeBlanc, Cree Nation Government Kaitlin Lloyd, Cree Nation Government

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APPENDIX A. NON-MATCHING RESPONSES TO QUESTIONS IN THE SECOND INFORMATION REQUEST

It is the Committee's judgment that the proponent did not answer the questions below or that the answers provided did not match the expected information. For more background information on these questions, please see the letters that the Committee sent to the proponent on July 8 and 14, 2020.

Question CCE-18

Human Health – Toxicological Risk Assessment, Validation and Toxicological Follow-up

Background: The environmental follow-ups presented by the proponent are based exclusively on environmental criteria specified in provincial regulations, and not on human health protection criteria or on a methodology that would make it possible to verify the accuracy of the toxicological risk assessment. Compliance with provincial environmental regulations alone is not considered an adequate approach. Any choice should be described and justified sufficiently clearly that a determination can be made whether it is appropriate (e.g., measurement in plants, human health-based criteria).

Sub-question A: The proponent must provide an outline of an environmental monitoring and follow-up program for air, water (watercourses CE2 and CE3) and traditional food (plants and meats), based on human health protection criteria to validate the assumptions in the toxicological risk assessment.

Question CCE-47

Project Justification and Alternatives Considered, Water Balance in Construction Phase

Background: The proponent did not present a water balance for the construction phase. Although no effluent is expected for that phase, the balance must still include all other water usage by volume of water/unit of time (e.g., water withdrawal from Kapisikama Lake, concrete plant wastewater discharge, dust management, fire reserve).

Question: Complete the water balance by including the construction phase.

Question CCE-48

Project Description, Use of Waste Rock as Fill and Sealing of the Structures

Background: Although the proponent indicated that the diabase would not be used as construction material, no explanation is provided as to what will be done with the diabase situated in the pit's footprint and the associated effects.

Sub-question A: Describe what will be done with the diabase situated in the pit's footprint. In the event that this material were to be removed during mining operations, describe the

management that will be necessary (location and characteristics of the stockpile, runoff water management) and the potential effects, as applicable.

Background: The proponent does not explain the chronology of the work for the different ditches and roads if the waste rock were to be used as construction material. The proponent does not explain how the roads would be built before the pit has started operating.

Sub-question B: Explain the chronology of the work for the different ditches and roads if the waste rock were to be used as construction materials. According to the information provided, the beginning of operation of the pit from which the waste rock would come is subsequent to the construction work on the roads and ditches.

Background: No information is provided regarding leaching/acid generation potential or the effects associated with using borrow pits.

Sub-question D: If off-site quarries are used, explain how their materials do not present leaching potential or acid generation potential. Describe the additional environmental effects this would have due to the additional transportation volume related to this option.

Question CCE-49

Project Description, Selection of Borrow Pits

Background: The proponent has changed the selection of borrow pits since it submitted Part 2 of the Second Information Request. The proponent also indicated that some choices had not yet been confirmed. The proponent's response to the non-matching aspects of Question CCE-49 will need to cover these points.

The proponent provided a general list of some borrow pit selection criteria, such as the type (granulometry) and quantity of materials, the distance between the borrow pit and Billy Diamond Highway, and road infrastructure limitations. The proponent also stated that before a final selection is made, the composition and quality of the deposits, the thickness of the material and the water table would have to be checked. However, the selection of borrow pits was not explained in terms of the above criteria.

Sub-question B: Identify and explain the criteria for selecting borrow pits.

Background: No rationale was provided for changing the selection of borrow pits. The proponent did not explain the benefits of the change.

Sub-question C: Justify the use of the selected borrow pits instead of the borrow pits that were described and analyzed in the Environmental Impact Statement (WSP, October 2018) and the geomorphological study (WSP, Appendix CEAA-7, February 2019), explaining the benefits of this change.

Background: The proponent did not provide an environmental effects assessment based on the use of the selected borrow pits.

Sub-question D: Update the environmental effects assessment based on the use of the selected borrow pits.

Background: The proponent did not assess the impact of using the selected borrow pits on the air quality associated with the increased transportation volume. While it is understandable that the proponent is not prepared to make a final choice at this stage, it should nevertheless assess the effects under a prudent approach. If the proponent does not intend to carry out a detailed assessment or update the atmospheric contaminant dispersion modelling, a rationale must be provided.

Sub-question E: Assess the impact of using the selected borrow pits on the air quality associated with the increase in transportation volume, and update the atmospheric contaminant dispersion modelling. If there are no plans to do so, explain.

Question CCE-53

Water Quality, Water Management – Rehabilitation, Closure and Post-closure Phases

Background: The proponent did not present a water balance for the post-operation phases.

Sub-question C: Provide a water balance and an estimate of water quality on the site during the rehabilitation, closure and post-closure phases, accounting for the significant topographical changes generated by the increase in the volume of waste rock and tailings and overburden stockpiles and by the enlargement of the pit.

Background: Water management measures are not presented in chronological order for the decommissioning phase and the rehabilitation phase. The proponent does not demonstrate how the water management measures are tailored to the water flows and quality levels generated at the mine site during the rehabilitation phase.

Sub-question D: Explain the water management measures tailored to the water flows and quality levels generated at the mine site in the decommissioning phase and the rehabilitation phase.

Background: The proponent did not provide a map showing the progress of the work and changes in water management infrastructure during the rehabilitation, closure and post-closure phases, as specified in Sub-question F. The proponent provides only one map (4-12, post-rehabilitation), but topographical curves and surface water flow directions are not shown.

Sub-question F: Provide maps showing the progress of the rehabilitation work and changes in the associated water management infrastructure and the closure and post-

closure phases. On the maps, indicate the topographical curves and the direction of flow of surface water.

Background: The proponent did not include a plan for geochemical monitoring of waste rock and tailings samples.

Sub-question H: Provide a plan for geochemical monitoring of waste rock and tailings samples collected during operation of the mine and/or during rehabilitation, to track changes in water quality in the waste rock and tailings stockpile. This will be used to validate the estimates and adjust the mine site rehabilitation plan as required.

Question CCE-57

Water Quality, Water Treatment Plant Efficiency

Background: The proponent provided no details on the water treatment plant and the performance of its equipment.

Sub-question A: Describe the water treatment plant (WTP) in more detail, particularly the treatment equipment selected, and show its performance based on the water volumes to be treated and the contaminants of concern, especially mercury and arsenic.

Background: The proponent did not justify the WTP design criteria as requested in Subquestion B.

Sub-question B: Justify the WTP design criteria, considering the leaching level of the site's mining waste (ore, overburden, waste rock and tailings) and based on the water quality modelling results and the water balance.

Question CCE-60

Monitoring and Follow-up Programs, Environmental Surveillance and Monitoring Program

Background: The proponent indicates that the detailed monitoring and follow-up program will be developed once the governmental consultation process is completed. This response is not satisfactory; details on sampling frequency and locations and on corrective actions are required for the environmental assessment process.

Sub-question A: Specify the criteria that will be sought for suspended solids during the construction work, the sampling frequency and locations, and the corrective actions that will be taken in case of exceedance.

Sub-question B: Explain how the runoff water from leachable construction materials, such as waste rock, will be managed, and describe the specific monitoring and follow-up that will be done for problematic metals and the corrective actions to ensure compliance with the pollution prevention provisions of the *Fisheries Act* at all times.

APPENDIX B. INCONSISTENT RESPONSES IDENTIFIED BY THE COMMITTEE

In its analysis, the Committee noted some inconsistencies in four responses to Part 1 of the Second Information Request. Therefore, the Committee requests that the proponent submit updated responses to the questions detailed below. For more background information on these questions, please refer to Part 1 of the Second Information Request, sent to the proponent on March 27, 2020.

Question CCE-5

Wetlands, Effects of Wetland Loss on Migratory Birds

Background: The proponent did not provide any information regarding Question CCE-5 in the revised impact statement, although it did in its June 2020 response. The proponent must update the June 2020 response to reflect the optimization of the mine site development plan or explain why this is not necessary.

Question: Determine, for each migratory bird species likely to use the wetlands (including bird species at risk), the number of nesting pairs (average and maximum) per hectare that will be affected by the loss of each of the major types of wetlands and the surface area lost for each type.

Question CCE-11

Species at Risk, Mapping of the Habitat of the Woodland Caribou, Boreal Population

Background: With regard to Sub-question A, Map 6-16 in the revised impact statement does not include a 500-metre buffer zone. The proponent must add a 500-metre buffer zone to the map.

Sub-question A: Describe and map the habitats in the area of influence that have the biophysical attributes of the winter habitats frequented by the woodland caribou (*Rangifer tarandus caribou*), boreal population (boreal caribou), in carrying out their life processes listed in Appendix H of the caribou recovery strategy (Environment Canada, 2012).

Background: With regard to Sub-question B, the proponent's June 2020 response is different from and more complete than what is presented in the revised impact statement. The proponent must update the June 2020 response by incorporating the changes associated with optimization of the mine site development plan.

Sub-question B: On the basis of the map produced in A, quantify the potential losses of winter habitat associated with the project and the potential losses associated with the buffer zone, and revise the assessment of the project's residual effects on boreal caribou.

Question CCE-12

Species at Risk, Monitoring Program and Proposed Mitigation Measures to Minimize the Impact on the Woodland Caribou and its Habitat

Background: With regard to the four sub-questions, the proponent's June 2020 response is different from and more complete than what is presented in the revised impact statement. On page 48 of the June 2020 response, the proponent describes the residual effects on caribou, whereas in the revised impact statement, the residual effects are combined for all large wildlife. The proponent must update the June 2020 response by incorporating the changes associated with optimization of the mine site development plan. The proponent must also describe each of the residual effects for each species separately.

Sub-question A: Provide an outline of the environmental monitoring program for species at risk that the proponent intends to implement, especially for boreal caribou. For a list of the elements which such a program should contain, the proponent may refer to Section 8 (Follow-up and Monitoring Programs) of the *Guidelines for the Preparation of an Environmental Impact Statement*.

Sub-question B: Identify the measures that will be taken to minimize the project's impact on the woodland caribou if individuals of the species are detected in the project area or the project's area of influence.

Sub-question C: Revise and describe all of the project's impacts on the woodland caribou and its habitat, including disturbance, risk of collisions and pollution, and their potential consequences for the recovery strategy's objectives.

Sub-question D: Revise the proposed mitigation measures and the description of the residual effects.

Question CCE-13

Species at Risk, Cumulative Effects on Woodland Caribou, Boreal Population

Background: With regard to Question CCE-13, the proponent's June 2020 response is different from and more complete than what is presented in the revised impact statement. In the June 2020 response, the proponent provides an analysis of the cumulative effects on caribou, whereas in the revised impact statement, it states that caribou was not included as a valued component in the cumulative effects assessment. The proponent must update the June 2020 response by incorporating the changes associated with optimization of the mine site development plan. If the proponent still believes that caribou should not be included as a valued component in the cumulative effects assessment, it must provide a detailed rationale for this.

Sub-question A: Submit an assessment of the cumulative effects on woodland caribou taking into account the habitats within the 50 km study area that have the biophysical attributes required by caribou to carry out their life processes.

Sub-question B: For the 50 km study area, describe the consequences of the cumulative effects for the population and distribution objectives identified in the woodland caribou recovery strategy, which are as follows:

- Maintain the local population.
- Maintain the status of habitats in terms of area and undisturbed habitats to ensure that the local woodland caribou population is self-sustaining. The goal is to maintain a minimum of 65% undisturbed habitat and the availability of the biophysical attributes necessary for woodland caribou.