# Decision Statement Issued under Section 54 of the *Canadian Environmental Assessment Act,* 2012

to Nemaska Lithium Inc. c/o Guy Bourassa President and Chief Operating Officer

## 450 De la Gare-du-Palais Street, 1<sup>st</sup> Floor Quebec, Quebec G1K 3X2

for the Whabouchi Mine Project

## **Description of the Designated Project**

Nemaska Lithium Inc. is proposing to construct, operate and decommission an open-pit surface and underground spodumene mine for the purpose of producing lithium. The Designated Project is located 30 kilometres from Nemiscau and 280 kilometres north-northwest of the municipality of Chibougamau. As proposed, the Designated Project includes the operation of an open-pit and underground mine, a waste and tailings impoundment area, an ore concentrator, and administrative and maintenance buildings. The mine would have a production capacity of approximately 3,000 tonnes per day over an estimated mine life of 26 years.

### **Conduct of the Environmental Assessment**

The Canadian Environmental Assessment Agency (the Agency) conducted an environmental assessment of the Designated Project in accordance with the requirements of the *Canadian Environmental Assessment Act, 2012*. The Agency commenced the environmental assessment on January 29, 2013 and submitted its report to me in my capacity as Minister of the Environment.

# Decision on Environmental Effects referred to in subsection 5(1) of the Canadian Environmental Assessment Act, 2012

In accordance with paragraph 52(1)(a) of the *Canadian Environmental Assessment Act*, 2012, after considering the report of the Agency on the Designated Project and the implementation of mitigation measures that I consider appropriate, I determined that the Designated Project is unlikely to cause significant adverse environmental effects referred to in subsection 5(1) of the *Canadian Environmental Assessment Act*, 2012.

In accordance with subsection 53(1) of the *Canadian Environmental Assessment Act*, 2012, I have established the conditions below in relation to the environmental effects referred to in subsection 5(1) of the *Canadian Environmental Assessment Act*, 2012, with which Nemaska Lithium Inc. must comply.

# Decision on environmental effects referred to in subsection 5(2) of the Canadian Environmental Assessment Act, 2012

Carrying out of the Designated Project may require the following federal authority to exercise a power or perform a duty or function conferred under an Act of Parliament other than the *Canadian Environmental Assessment Act*, 2012:

• The Minister of Fisheries and Oceans may issue an authorization under paragraph 35(2)(b) of the *Fisheries Act*.

In accordance with paragraph 52(1)(b) of the *Canadian Environmental Assessment Act*, 2012, after considering the report of the Agency on the Designated Project and the implementation of mitigation measures that I consider appropriate, I determined that the Designated Project is not likely to cause significant adverse environmental effects referred to in subsection 5(2) of the *Canadian Environmental Assessment Act*, 2012.

In accordance with subsection 53(2) of the *Canadian Environmental Assessment Act*, 2012, I have established the conditions below in relation to the environmental effects referred to in subsection 5(2) of the *Canadian Environmental Assessment Act*, 2012, with which Nemaska Lithium Inc. must comply.

### 1 **Definitions**

- 1.1 Agency means the Canadian Environmental Assessment Agency.
- **1.2** *Baseline* means the environmental conditions immediately prior to initiating construction of the Designated Project.
- 1.3 *Construction* means the phase of the Designated Project during which physical activities in connection with site preparation, building or installation of any component of the Designated Project are undertaken by the Proponent prior to operation.
- 1.4 *Cree Nation Government* means the legal person established in the public interest under that name by the *Act respecting the Cree Nation Government.*
- 1.5 *Cree Nation of Nemaska* means the Nemaska Band incorporated under subsection 12(1) of the *Cree-Naskapi (of Quebec) Act.*
- 1.6 *Cree tallyman* means Cree tallyman as defined in paragraph 1(n) of *An Act Respecting Hunting and Fishing Rights in the James Bay and New Québec Territories.*
- 1.7 *Days* means calendar days.

- 1.8 *Decommissioning* means the phase of the Designated Project where the Proponent has permanently ceased commercial production and has commenced actions to remove from service any component of the Designated Project, and continues these actions until site restoration activities are complete.
- 1.9 *Designated Project* means the Whabouchi Mine Project as described in documents provided by the Proponent to support the environmental assessment under the *Canadian Environmental Assessment Act, 2012* (Canadian Environmental Assessment Registry Reference Number 80021).
- 1.10 *Effluent* means effluent as defined in subsection 1(1) of the *Metal Mining Effluent Regulations*.
- 1.11 *Environment Canada* means the Department of the Environment established under subsection 2(1) of the *Department of the Environment Act*.
- 1.12 *Fish* means fish as defined in subsection 2(1) of the *Fisheries Act*.
- 1.13 *Fish habitat* means fish habitat as defined in subsection 2(1) of the *Fisheries Act*.
- 1.14 *Fisheries and Oceans Canada* means the Department of Fisheries and Oceans established under subsection 2(1) of the *Department of Fisheries and Oceans Act*.
- 1.15 *Follow-up program* means follow-up program as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012*.
- 1.16 *Heritage value* means the aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations.
- 1.17 *Migratory bird* means migratory bird as defined in subsection 2(1) of the *Migratory Birds Convention Act, 1994*.
- 1.18 *Mitigation measures* means mitigation measures as defined in subsection 2(1) of the *Canadian Environmental Assessment Act, 2012.*
- 1.19 *Operation* means the phase of the Designated Project during which the commercial production takes place.
- 1.20 *Pit* means an excavation dug by the Proponent for the extraction of ore.
- 1.21 *Progressive reclamation* means a planned approach carried out concurrently with Designated Project activities aimed at progressively returning any physically disturbed areas to a state as close to the baseline as possible, as soon after the disturbance as practical.
- 1.22 *Project area* means the geographic area occupied by the Designated Project.
- 1.23 *Proponent* means Nemaska Lithium Inc. and its successors or assigns.
- 1.24 *Qualified individual* means someone who, through education, experience and knowledge relevant to a particular matter, may be relied on to provide advice within his or her area of expertise.

- 1.25 *Reporting year* means from July 1 of a calendar year through June 30 of the subsequent calendar year.
- 1.26 *Species at risk* means species at risk as defined in subsection 2(1) of the *Species at Risk Act*.
- 1.27 *Structure, site or thing that is of historical, archaeological, paleontological or architectural significance* means one that is determined, on the basis of heritage value, to be directly associated with an important aspect or aspects of human history or culture.
- 1.28 *Wildlife species of interest* means wildlife species hunted, trapped or fished for traditional, recreational and subsistence purposes by the Cree Nation of Nemaska.

### **Conditions**

These conditions are established for the sole purpose of the Decision Statement issued under the *Canadian Environmental Assessment Act, 2012*. They do not relieve the Proponent from any obligation to comply with other legislative or legal requirements of the federal, provincial or local governments. Nothing in this document should be construed as reducing, increasing, or otherwise affecting what may be required to comply with all applicable legislative or legal requirements.

### 2 General Conditions

- 2.1 The Proponent shall, throughout all phases of the Designated Project, ensure that its actions in meeting the conditions set out in this Decision Statement are informed by the best available information and knowledge, including community and Aboriginal traditional knowledge, are based on validated methods and models, are undertaken by qualified individuals and have applied the best available economically and technologically feasible mitigation measures.
- 2.2 The Proponent shall, where consultation is a requirement of a condition set out in this Decision Statement:
  - 2.2.1 provide a written notice of the opportunity for the party or parties being consulted to present their views on the subject of the consultation;
  - 2.2.2 provide sufficient information and a reasonable period of time to permit the party or parties being consulted to prepare their views;
  - 2.2.3 provide a full and impartial consideration of any views presented by the party or parties being consulted; and
  - 2.2.4 advise the party or parties that have provided comments on how the views and information received have been considered by the Proponent.
- 2.3 The Proponent shall, where consultation with the Cree Nation of Nemaska is a requirement of the conditions set out in this Decision Statement, and prior to initiating that consultation, communicate with the Cree Nation of Nemaska to determine the manner by which to satisfy the consultation requirements referred to in condition 2.2.
- 2.4 The Proponent shall, where a follow-up program is a requirement of a condition set out in this Decision Statement:
  - 2.4.1 undertake monitoring and analysis to verify the accuracy of the environmental assessment as it pertains to the particular condition and/or to determine the effectiveness of any mitigation measure(s);
  - 2.4.2 determine whether additional mitigation measures are required based on the monitoring and analysis undertaken pursuant to condition 2.4.1; and
  - 2.4.3 if additional mitigation measures are required pursuant to condition 2.4.2, implement and monitor these additional mitigation measures pursuant to condition 2.4.1.

- 2.5 The Proponent shall, from the reporting year where construction starts, submit to the Agency an annual report, including an executive summary of the annual report in both official languages. The annual report shall be submitted by the Proponent no later than October 31 following the reporting year. The Proponent shall document in the annual report:
  - 2.5.1 implementation activities undertaken in the preceding reporting year for each of the conditions set out in this Decision Statement;
  - 2.5.2 how it met condition 2.1 in the implementation of the conditions set out in this Decision Statement;
  - 2.5.3 for conditions set out in this document for which consultation with the Cree Nation of Nemaska is a requirement, how the Proponent has considered any views and information that the Proponent received during or as a result of the consultation;
  - 2.5.4 the results of the follow-up program requirements identified in conditions 3.7, 4.2, 5.1,6.2 and 7.4; and
  - 2.5.5 any additional mitigation measures implemented or proposed by the Proponent, as determined under condition 2.4.
- 2.6 The Proponent shall publish on the Internet, or any similar medium, the annual report and the executive summary referred to in condition 2.5, the plan to offset the loss of fish and fish habitat referred to in condition 3.4, the communication plans referred to in conditions 5.3, 6.3, 7.5 and 8.4, and the implementation schedule and any updates or revisions to that schedule referred to in condition 9, upon submission of these documents to the parties referenced in the respective conditions. The Proponent shall keep these documents publicly available for twenty-five years following the end of operation or until the end of decommissioning of the Designated Project, whichever comes first.
- 2.7 The Proponent shall notify the Agency in writing no later than 60 days after the day on which there is a transfer of ownership, care, control or management of the Designated Project in whole or in part.
- 2.8 In the event that another party becomes the Proponent of the Designated Project, it is bound by the conditions set out in this Decision Statement.

### 3 Fish and fish habitat

- 3.1 The Proponent shall manage effluent produced by the Designated Project by ensuring that effluent is collected and treated if required under condition 3.2 before being discharged into the environment.
- 3.2 The Proponent shall comply with the *Metal Mining Effluent Regulations*, the *Fisheries Act*, and any requirements of the Government of Quebec regarding the management of effluent discharges from the Designated Project, including the installation of a wastewater treatment unit at the mine water pond discharge point, to be operated to ensure compliance with those standards and requirements.

- 3.3 The Proponent shall avoid the burial, installation and disassembly of the mine effluent discharge pipe in Lac des Montagnes during the critical timing windows for northern pike, walleye, white sucker, and lake whitefish, and shall take measures to control the release of suspended solids in the water during those construction activities.
- 3.4 The Proponent shall, in consultation with Fisheries and Oceans Canada, develop and implement a plan to offset the loss of fish and fish habitat associated with the carrying out of the Designated Project.
- 3.5 For any fish habitat offsets area proposed in any offsetting plan under condition 3.4, prior to submitting the offsetting plan to Fisheries and Oceans Canada, and in consultation with the Cree Nation of Nemaska and the Cree Nation Government, the Proponent shall determine whether there are adverse effects on:
  - 3.5.1 migratory birds and their habitat;
  - 3.5.2 species at risk and their habitat;
  - 3.5.3 current use of lands and resources for traditional purposes by the Cree Nation of Nemaska; and
  - 3.5.4 sites of physical and cultural heritage importance to the Cree Nation of Nemaska.
- 3.6 The Proponent shall, if there are adverse effects on any of the elements of condition 3.5, avoid or lessen those adverse effects.
- 3.7 The Proponent shall develop and implement a fish and fish habitat follow-up program that shall include:
  - 3.7.1 monitoring whether implementation of the measures set out in the fish habitat offsetting plan is proving effective in achieving the objectives set out in that plan;
  - 3.7.2 determining the effectiveness of effluent mitigation measures in managing effluent quality and effects on the receiving environment, including benthic organisms and fish in Lac des Montagnes;
  - 3.7.3 monitoring effluent concentrations of lithium and beryllium, in accordance with the same requirements for the other substances specified in Schedule 5 of the *Metal Mining Effluent Regulations*, to verify the accuracy of water quality predictions in the environmental assessment;
  - 3.7.4 monitoring surface water quality annually in Lac du Spodumène and lakes 1, 2, 18 and 28, to verify the accuracy of the water quality predictions in the environmental assessment. Monitoring shall begin with construction and end five years after decommissioning. The monitoring shall include the following elements:
    - 3.7.4.1 analysis of the substances specified in the *Metal Mining Effluent Regulations*, Schedule 4 (column 1) and Schedule 5, subsection 4(1), with the addition of lithium and beryllium; and
    - 3.7.4.2 comparison of the concentrations measured with the chronic aquatic life criteria, as defined in Quebec's *Critères de qualité de l'eau de surface* and the

Canadian Council of Ministers of the Environment's *Canadian Water Quality Guidelines for the Protection of Aquatic Life;* 

- 3.7.5 monitoring water flows and levels in relation to brook trout spawning sites in Stream D, in the downstream section of Stream C, and in a control watercourse not affected by pumping of the pit, and monitoring water levels in Lac du Spodumène and accessibility to the potential brook trout spawning site in Stream G. Details of the monitoring to be conducted shall be determined in consultation with Fisheries and Oceans Canada.
- 3.8 The Proponent shall, before construction begins, conduct an analysis to confirm the environmental assessment prediction that metals and metalloids contained in the waste rock and the tailings from the Designated Project are not leachable, and submit the results of the analysis to the Agency and the Cree Nation Government. If metals or metalloids contained in the waste rock and tailings prove to be leachable, the Proponent shall add these new leachable substances to the follow-up program for the quality of effluent and its receiving environment and implement mitigation measures to protect groundwater.

### 4 Migratory birds

- 4.1 The Proponent shall carry out all phases of the Designated Project in a manner that protects and avoids harming, killing or disturbing migratory birds or destroying, disturbing or taking their nests or eggs. In this regard, the Proponent shall take into account Environment Canada's *Avoidance Guidelines*. The Proponent's actions in applying the Avoidance Guidelines shall be in compliance with the *Migratory Birds Convention Act, 1994* and with the *Species at Risk Act*.
- 4.2 The Proponent shall develop and implement a follow-up program to determine the effectiveness of the mitigation measures used to comply with condition 4.1 during all phases of the Designated Project.

### 5 <u>Current use of land and resources for traditional purposes by Aboriginal persons</u>

- 5.1 The Proponent shall, in consultation with the Cree Nation of Nemaska, develop and implement a follow-up program to monitor the presence of wildlife species of interest in the project area and to develop and implement corrective measures to mitigate adverse effects of the Designated Project on those wildlife species of interest. The follow-up program shall begin with the start of construction and end following decommissioning.
- 5.2 In consultation with the Cree tallyman, the Cree Nation of Nemaska and the Cree Nation Government, the Proponent shall determine the optimal location of the effluent pipe in the Lac des Montagnes, taking into consideration the fishing areas of the Cree Nation of Nemaska.
- 5.3 The Proponent shall develop and implement a communication plan in consultation with the Cree Nation of Nemaska in order to keep the Cree Nation of Nemaska informed of the project schedule and any updates or revisions to that schedule as stated in condition 9 and of the results of the wildlife species of interest follow-up program. Implementation of the communication plan shall begin with the start of construction and end following decommissioning.

- 5.4 In consultation with the Cree tallyman, the Cree Nation of Nemaska and the Cree Nation Government, the Proponent shall develop a program for the management of beaver and black bear, and the recuperation of harvested wood for the use of the Cree Nation of Nemaska in the project area prior to construction.
- 5.5 In consultation with the Cree Nation of Nemaska, the Proponent shall determine a safety zone with respect to the designated project for the purpose of ensuring public safety.
- 5.6 The Proponent shall prohibit its employees and contractors from hunting, fishing and trapping within the limits of the lands described in the mining lease and the surface use leases unless an employee or a contractor is provided access for traditional purposes or for exercising Aboriginal or treaty rights, in which case such access will be in accordance with all rules established by the Proponent with respect to the safety zone referred to in condition 5.5.
- 5.7 The Proponent shall, in consultation with the Cree Tallyman and the Cree Nation of Nemaska, undertake progressive reclamation of the habitats impacted by the Designated Project.

#### 6 Health and socio-economic conditions of Aboriginal persons

- 6.1 The Proponent shall, during all phases of the Designated Project, implement mitigation measures to manage air emissions of the Designated Project which shall include:
  - 6.1.1 use of dust control products;
  - 6.1.2 a 30 km/h speed limit for vehicles on the project site; and
  - 6.1.3 progressive reclamation of the waste rock and tailings pile.
- 6.2 In order to verify the accuracy of the environmental assessment of the Designated Project and to determine the effectiveness of the mitigation measures identified in condition 6.1, the Proponent shall develop and implement a follow-up program on health and socio-economic conditions that shall include:
  - 6.2.1 monitoring the air quality at the Bible Camp and at the hunting camp most likely to be affected by the Designated Project using the Canadian Council of Ministers of the Environment's *Canadian Ambient Air Quality Standards* and the Quebec *Clean Air Regulation* as benchmarks. Air quality monitoring shall be implemented from the beginning of construction until the completion of the decommissioning phase;
  - 6.2.2 notifying the Cree Nation of Nemaska if monitoring under condition 6.2.1 shows exceedances of the Canadian Council of Ministers of the Environment's *Canadian Ambient Air Quality Standards* or the Quebec *Clean Air Regulation*, and, if necessary, implementing additional mitigation measures; and
  - 6.2.3 monitoring, every three years, of heavy metal concentrations in the flesh and livers of walleye, northern pike and lake whitefish in Lac des Montagnes and Lac du Spodumène. The monitoring program shall be implemented when construction begins and end five years after the decommissioning phase is completed.

6.3 The Proponent shall, in consultation with the Cree Nation of Nemaska, develop and implement a plan for communicating the results of the monitoring programs specified in condition 6.2 to the Cree Nation of Nemaska, as well as any corrective measures to be taken. The Proponent shall implement this communication plan from the beginning of construction until the completion of decommissioning.

### 7 <u>Physical or cultural heritage, and any structure, site or thing that is of historical, archaeological,</u> paleontological, or architectural significance to Aboriginal peoples

- 7.1 In the event that archaeological remains or artefacts are discovered by the Proponent in the project area, the Proponent shall:
  - 7.1.1 halt work at the location of the discovery;
  - 7.1.2 have a qualified individual conduct an assessment at the location of the discovery;
  - 7.1.3 inform, in writing, the Cree tallyman directly affected by the Designated Project, the Cree Nation of Nemaska and the Cree Nation Government, forthwith; and
  - 7.1.4 comply with any legislative or legal requirements respecting the discovery of archaeological remains or artefacts.
- 7.2 The Proponent shall implement the following mitigation measures to reduce visual nuisance:
  - 7.2.1 burial of the effluent pipe at least 100 metres away from the shoreline and in the littoral zone in accordance with the Fisheries and Oceans Canada requirements, in order to prevent or reduce serious harm to fish;
  - 7.2.2 progressive re-vegetation of the waste rock and tailings pile; and
  - 7.2.3 reclamation of the mine site after decommissioning is completed.
- 7.3 The Proponent shall, subject to the safety requirements of the Designated Project and the safety zone established pursuant to condition 5.5, ensure access to Lac des Montagnes, in the north-east sector, so that the users of the Bible Camp can carry on all their activities on the lake and its shores, such as swimming and canoeing.
- 7.4 The Proponent shall, during all phases of the Designated Project, develop and implement a noiselevel follow-up program at the Bible Camp and the hunting camp most likely to be affected to verify that the noise levels originating from the Designated Project respect the noise levels set out in the *Note d'instructions du Québec 98-01 sur le bruit*.
- 7.5 The Proponent shall develop and implement a plan for communicating the results of the followup program in condition 7.4 to the Cree Nation of Nemaska and shall consult the Cree Nation of Nemaska concerning implementation of any corrective measures.

### 8 Accidents or malfunctions

8.1 The Proponent shall take all reasonable measures to prevent accidents and malfunctions that may result in adverse environmental effects and shall implement emergency response procedures and contingencies developed in relation to the Designated Project.

- 8.2 The Proponent shall, prior to construction, consult with the Cree Nation of Nemaska to identify potential accidents and malfunctions that may result in an adverse environmental effect, and the measures to be applied to prevent such accidents and malfunctions.
- 8.3 In the event of an accident or malfunction with the potential to cause adverse environmental effects, the Proponent shall:
  - 8.3.1 notify relevant federal and provincial authorities, including notifying the Agency in writing of the accident or malfunction as soon as possible in the circumstances;
  - 8.3.2 implement immediate measures to minimize any adverse environmental effects associated with the accident or malfunction;
  - 8.3.3 submit a written report to the Agency no later than 30 days after the day on which the accident or malfunction took place. The written report shall include:
    - 8.3.3.1 a description of the accident or malfunction and its adverse environmental effects;
    - 8.3.3.2 the measures that were taken by the Proponent to mitigate the adverse environmental effects of the accident or malfunction;
    - 8.3.3.3 a description of any residual environmental effects, and any additional measures required to address residual environmental effects; and
    - 8.3.3.4 if an emergency response plan was implemented, details concerning its implementation;
  - 8.3.4 no later than 90 days after the day on which the accident or malfunction took place, submit a written report to the Agency on the changes made to avoid a subsequent occurrence of the accident or malfunction, and on the implementation of any additional measures to mitigate residual environmental effects.
- 8.4 The Proponent shall develop and implement a communication plan in consultation with the Cree Nation of Nemaska that shall include:
  - 8.4.1 the type of accident or malfunction that requires a notification by the Proponent to the Cree Nation of Nemaska;
  - 8.4.2 the manner by which the Cree Nation of Nemaska shall be notified by the Proponent of an accident or malfunction, and of any opportunities for the Cree Nation of Nemaska to assist in the response to the accident or malfunction; and
  - 8.4.3 the contact information of the representatives of the Proponent that the Cree Nation of Nemaska may contact and of the representative of the Cree Nation of Nemaska to which the Proponent provides notification.

### 9 Project schedule

9.1 The Proponent shall submit an implementation schedule for conditions contained in this document to the Agency, or anyone designated pursuant to s. 89 of the *Canadian Environmental Assessment Act, 2012,* 30 days prior to construction. The implementation schedule shall indicate

the commencement and completion dates for each activity relating to conditions set out in this document.

- 9.2 The Proponent shall submit an update to this project schedule in writing to the Agency, or anyone designated pursuant to s. 89 of the *Canadian Environmental Assessment Act, 2012*, every two years on or before October 31, until completion of the activities.
- 9.3 The Proponent shall provide the Agency, or anyone designated pursuant to s. 89 of the *Canadian Environmental Assessment Act, 2012*, with a revised implementation schedule if any material change occurs from the initial schedule or any subsequent updates. The Proponent shall provide the revised implementation schedule at least 30 days prior to the implementation of the change.

#### 10 Record keeping

- 10.1 The Proponent shall maintain a written record, or a record in an electronic format compatible with that used by the Agency, and retain and make available that record to the Agency, or anyone designated pursuant to s. 89 of the *Canadian Environmental Assessment Act, 2012*, at a facility close to the Designated Project (local facility). The record shall include information related to the implementation of the conditions set out in this Decision Statement and the results of all associated monitoring including:
  - 10.1.1 the place, date and time of any sampling, as well as techniques, methods or procedures used;
  - 10.1.2 the dates and the analyses performed;
  - 10.1.3 the analytical techniques, methods or procedures used in the analyses;
  - 10.1.4 the names of the persons who collected and analyzed each sample and documentation of any professional certifications relevant to the work performed that they might possess; and
  - 10.1.5 the results of the analyses.
- 10.2 The Proponent shall retain and make available upon demand to the Agency, or anyone designated pursuant to s. 89 of the *Canadian Environmental Assessment Act, 2012*, the information contained in condition 10.1 at a facility close to the Designated Project (or at a location within Canada and agreed upon by the Agency, should the local facility no longer be maintained). The information shall be retained and made available throughout construction and operation, and for twenty-five years following the end of operation or until the end of decommissioning, whichever comes first.

#### **Issuance**

This Decision Statement is issued in Ottawa, Ontario by:

<Original signed by>

July 29, 2015

**The Honourable Leona Aglukkaq** Minister of the Environment Date