

September 8, 2015

**CERTIFICATE OF AUTHORIZATION**

Nemaska Lithium Inc.  
450, rue Gare-du-Palais, 1<sup>er</sup> étage  
Québec (Québec) G1K 3X2

O/Ref.: 3214-14-052

Re: Whabouchi Project – Exploitation and development of a spodumene ore body on the James Bay territory

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Madams,  
Sirs,

Following the filing of preliminary information dated August 2, 2011 and completed on June 1, 2015, regarding the Whabouchi project to develop a spodumene orebody on the James Bay territory, and after having followed the environmental and social impacts assessment and review process and after having consulted the Review Committee, and following the filing of the declaration required by virtue of section 115.8 of the Environment Quality Act (chapter Q-2), I authorize, in conformity with section 164 of the Environment Quality Act (chapter Q-2), the above-mentioned holder to carry out:

- the construction and operation of an open pit spodumene mine for approximately twenty (20) years, then the underground operation for approximately six (6) years, for a total duration of operation of approximately twenty-six (26) years, at a maximum daily extraction rate of 15,200 tons;
- the development of an ore processing complex of a maximum daily capacity of 3,475 tons/day;
- the development of a temporary ore pad of a capacity of 20,450 tons;
- the development of a tailings and waste rocks co-disposal pile of an area of approximately 84 hectares;
- the development of a system of industrial water treatment whose effluent will be discharged in the Mountain Lake;
- the development of infrastructures for the management and storage of hazardous materials.

Unless indicated to the contrary in the conditions described below, the project will have to be developed and operated in conformity with the following documents, which constitute an integral part of the present certificate of authorization:

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- Letter of Mr. Pierre Demers of Nemaska Exploration Inc. to Ms. Diane Jean, Deputy Minister of Sustainable Development, Environment and Parks, dated August 2, 2011, regarding the notice of project for the development of a spodumene orebody, 1 page and 1 attachment;
- Letter of Mr. Guy Bourassa of Nemaska Lithium, to Mr. Clément D'Astous, Deputy Minister of Sustainable Development, Environment and Parks, dated April 2, 2013, regarding the impact study of the Whabouchi Project for the development of a spodumene orebody, 1 page and 1 attachment;
- Letter of Mr. Guy Bourassa of Nemaska Lithium, to Mr. Clément D'Astous, Deputy Minister of Sustainable Development, Environment and Parks, dated May 17, 2013, regarding the additional information on the impact study of the Whabouchi Project for the development of a spodumene orebody, 1 page and 5 attachments;
- Letter of Mr. Guy Bourassa of Nemaska Lithium, to Mr. Clément D'Astous, Deputy Minister of Sustainable Development, Environment and Parks, dated June 26, 2013, regarding the modelling of the chemical composition, 1 page and 1 attachment;
- Letter of Mr. Guy Bourassa of Nemaska Lithium, to Mr. Clément D'Astous, Deputy Minister of Sustainable Development, Environment and Parks, dated July 5, 2013, regarding the English version of the impact study of the Whabouchi Project for the development of a spodumene orebody, 1 page and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Mr. Clément D'Astous, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated May 8, 2014, regarding the responses to the questions and comments of the COMEX on the Whabouchi Project, 1 page and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Mr. Clément D'Astous, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated May 15, 2014, regarding the schedule of maps to the responses to the questions and comments of the COMEX on the Whabouchi Project, 1 page and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Mr. Gilles Charland, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated June 19, 2014, regarding the update of the noise study on the Whabouchi Project, 1 page and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Mr. Gilles Charland, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated September 25, 2014, regarding the hydrological study on the Whabouchi Project, 1 page and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Mr. Gilles Charland, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated December 10, 2014, regarding three activity reports on the Whabouchi Project, 1 page and 3 attachments;

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- Letter of Mr. Simon Thibault of Roche Ltd, to Mr. Gilles Charland, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated December 15, 2014, regarding the activity report on the modelling of the dispersion of atmospheric emissions on the Whabouchi Project, 1 page and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Mr. Gilles Charland, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated December 18, 2014, regarding the activity report on the prediction on the quality of the mining effluent and the update of the summary of the impact study on the Whabouchi Project, 1 page and 2 attachments;
- Letter of Mr. Simon Thibault of Roche Ltd, to Mr. Gilles Charland, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated December 18, 2014, regarding the activity report on the validation of potential spawning areas for the walleye in the Mountain Lake for the Whabouchi Project, 1 page and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Mr. Gilles Charland, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated December 22, 2014, regarding the activity report on the modelling of the mining effluent of the Whabouchi Project, 1 page and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Ms. Chrystine Tremblay, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated January 29, 2015, regarding the English version of the summary of the impact study on the Whabouchi Project, 1 page and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Ms. Chrystine Tremblay, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated February 27, 2015, regarding the addendum to the responses of the questions from the COMEX, 14 pages and 4 attachments;
- Letter of Mr. Simon Thibault of Roche Ltd, to Ms. Chrystine Tremblay, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated April 29, 2015, regarding the transport of concentrate of the Whabouchi Project, 2 pages and 1 attachment;
- Letter of Mr. Simon Thibault of Roche Ltd, to Ms. Chrystine Tremblay, Deputy Minister of Sustainable Development, Environment and Fight Against Climatic Changes, dated June 1, 2015, regarding the evaluation of the contribution of sources to the receptors having experienced an exceedance of the PST norm on the Whabouchi Project, 12 pages and 2 attachments;
- Email from Mr. Simon Thibault of Roche Ltd, to Ms. Alexandra Roio of the Department of Sustainable Development, Environment and Fight Against Climatic Changes, sent on March 11, 2015 at 9:38, regarding the additional information on the modelling of atmospheric emissions, 7 pages and 1 attachment;

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- NEMASKA EXPLORATION INC. *Whabouchi Project – Project Notice– Final Version*, July 2011, 19 pages and 3 schedules;
- NEMASKA EXPLORATION INC. *Archaeological Potential Study* by Geodefor-Envirocree for Nemaska Exploration Inc., December 2011, 35 pages;
- NEMASKA LITHIUM INC. *Hydrological Study* by Wesa Envir-Eau for Nemaska Lithium Inc., April 2012, 31 pages and 5 schedules;
- NEMASKA LITHIUM INC. *Archaeological Inventory* by Archéo-08 for Nemaska Lithium Inc., September 2012, 59 pages;
- NEMASKA LITHIUM INC. *Whabouchi Project – Development and operation of a spodumene orebody in the James Bay territory – Environmental and Social Impact Assessment*, March 2013, multiple paginations and 44 schedules;
- NEMASKA LITHIUM INC. *Geochemical Characterization of Waste Rock, Ore and Tailing*, by Lamont Inc. for Nemaska Lithium Inc., March 2013, 45 pages and 5 schedules;
- NEMASKA LITHIUM INC. *Whabouchi Project – Development and operation of a spodumene orebody in the James Bay territory – Environmental and Social Impact Assessment, Summary*, May 2013, 65 pages;
- NEMASKA LITHIUM INC. *Results on the water quality and the modelling for the Whabouchi lithium mine* by Golder Associates Ltd. for Nemaska Lithium Inc., June 2013, 47 pages and 5 schedules;
- NEMASKA LITHIUM INC. *Environmental and Social Impact Assessment – Whabouchi Project- Responses to the questions and comments of the COMEX*, by Roche Ltd for Nemaska Lithium Inc., April 2014, multiple paginations and 12 schedules;
- NEMASKA LITHIUM INC. *Environmental and Social Impact Assessment – Whabouchi Project- Responses to the questions and comments of the COMEX- Schedule of Maps*, by Roche Ltd for Nemaska Lithium Inc., April 2014, 23 pages;
- NEMASKA LITHIUM INC. *Update of the Environmental and Social Impact Assessment*, by Yockell Associées Inc. for Nemaska Lithium Inc., June 2014, 31 pages and 2 schedules;
- NEMASKA LITHIUM INC. *Environmental and Social Impact Assessment – Whabouchi Project- Determination of the baseline groundwater quality – Activity Report*, by Roche Ltd for Nemaska Lithium Inc., October 2014, 21 pages and 3 schedules;
- NEMASKA LITHIUM INC. *Environmental and Social Impact Assessment – Whabouchi Project- Validation of potential spawning areas for the walleye in Mountain Lake – Activity Report*, by Roche Ltd for Nemaska Lithium Inc., October 2014, 13 pages and 2 schedules;

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- NEMASKA LITHIUM INC. *Environmental and Social Impact Assessment – Whabouchi Project- Results and compensation to serious harm to fish – Activity Report*, by Roche Ltd for Nemaska Lithium Inc., December 2014, 45 pages and 2 schedules;
- NEMASKA LITHIUM INC. *Environmental and Social Impact Assessment – Whabouchi Project- Baseline Surface Water and Sediment Quality – Activity Report*, by Roche Ltd for Nemaska Lithium Inc., December 2014, 78 pages and 14 schedules;
- NEMASKA LITHIUM INC. *Environmental and Social Impact Assessment – Whabouchi Project- Modelling of Atmospheric Emissions Dispersion – Activity Report*, by Roche Ltd for Nemaska Lithium Inc., December 2014, 131 pages and 1 schedule;
- NEMASKA LITHIUM INC. *Environmental and Social Impact Assessment – Whabouchi Project- Prediction of the Quality of the Mining Effluent – Activity Report*, by Roche Ltd for Nemaska Lithium Inc., December 2014, 42 pages and 2 schedules;
- NEMASKA LITHIUM INC. *Environmental and Social Impact Assessment – Whabouchi Project - Summary (Update)*, by Roche Ltd for Nemaska Lithium Inc., December 2014, 44 pages;
- NEMASKA LITHIUM INC. *Whabouchi Spodumene Mine Project – Modelling of Mining Effluent*, by WSP for Nemaska Lithium Inc., December 2014, 39 pages and 2 schedules;

In case of conflict between the provisions of the above-mentioned documents, the most recent provisions prevail.

The project will have to be realized and operated in conformity with this request for a certificate of authorization and with these documents.

The holder of the present certificate of authorization will have to comply with the following conditions:

### **Validity of the Certificate of Authorization:**

#### Condition 1:

This authorization is valid insofar as the main construction work on the mining project has begun within five (5) years following the date of authorization of the project by the Provincial Administrator. If the proponent has not begun the construction work by the end of the five-year deadline, it will have to submit an update of its project and the construction and operation schedule to the Administrator for approval.

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### **Reference State:**

#### **Condition 2:**

One year after the project's authorization, the proponent must submit, to the Administrator, the initial sediment characterization in the project study area as well as a sediment impact assessment.

#### **Condition 3:**

Eight months after the project's authorization, the proponent must submit to the Administrator, for approval, the results of further atmospheric modelling demonstrating the effectiveness of each of the mitigation measures referred to in the Environmental and Social Impact Assessment.

### **Treatment of Mining Effluent:**

#### **Condition 4:**

At the end of mine wastewater treatment testing, the proponent must submit the selected mine effluent treatment method to the Administrator for approval. It must be demonstrated that this method will ensure optimum treatment.

### **Occupation of the Land:**

#### **Condition 5:**

One year after the project's authorization, the proponent must submit an updated timetable for project implementation to the Administrator, for information purposes, and report on the steps taken to identify workforce training needs and hiring forecasts.

#### **Condition 6:**

Six months after the project's authorization, the proponent must submit the list of job opportunities and minimum qualifications required (education/training, diplomas/degrees, driver's licence, etc.) to the Administrator and the community of Nemaska for information purposes.

#### **Condition 7:**

One year after the project's authorization, the proponent must submit to the Administrator, for information purposes, a report on the steps taken to prohibit hunting, fishing and the shooting of firearms on the territory covered by its mining lease and location tickets. The report must discuss the action taken, the safety zone, and the contribution to the implementation of existing monitoring activities or continuation of oversight, as the case may be, such as that carried out in the Weh-Sees Indohoun Special Fishing and Hunting Zone. The report must also discuss talks initiated with the Eeyou Istchee James Bay Regional Government and other bodies concerned.

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### **Condition 8:**

One year after the project's authorization, the proponent must submit the conditions for relocating camps following construction of the mine to the Administrator for information purposes. Every five years, the proponent must submit the log of complaints about mining operations and relocation requests to the Administrator, including an analysis of the complaints and the action taken to address them. The proponent must also provide the information communicated to land users regarding blasting schedules.

### **Condition 9:**

The proponent must install signs on the Route du Nord or use other means to warn truck drivers carrying spodumene concentrate that a Cree camp is located nearby.

### **Communication with the Communities:**

#### **Condition 10:**

The proponent must craft a communication strategy to keep the Aboriginal and non-Aboriginal communities affected by the project regularly informed of activities on the mine site, environmental and social monitoring results, operational problems and business and employment opportunities. The proponent must submit its communication strategy to the Administrator, for approval, one year after the project's authorization.

#### **Condition 11:**

Three months before construction begins, the proponent must submit the mandate and composition of the Environment Committee and the Implementation Committee established pursuant to the Chinuchi Agreement to the Administrator for information purposes. It must also explain the proposed communication strategy for informing residents of Nemaska and Chibougamau about the committees' work.

### **Wetlands:**

#### **Condition 12:**

One year after the project's authorization, the proponent must submit a wetland loss compensation plan to the Administrator for approval.

#### **Condition 13:**

If a negative impact from construction and operation of the project is detected during monitoring of the Spodumene Lake peatland, the proponent must submit additional compensation measures specifically for this wetland to the Administrator for approval.

### **Fish Habitat:**

#### **Condition 14:**

Six months after the project's authorization, the proponent must submit an updated fish habitat compensation plan to the Administrator for approval. The plan must take into

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account all fish habitat losses and be developed in consultation with experts at the Ministère des Forêts, de la Faune et des Parcs. The compensation plan must also take into account the needs and concerns of Cree land users.

### **Alien Invasive Species:**

#### **Condition 15:**

If any invasive exotic species are positively identified during its summer monthly detailed inspections to verify the integrity and stability of mine structures, the proponent must send a copy of the report to the Administrator for information purposes.

### **Residual Materials:**

#### **Condition 16:**

The proponent must determine the feasibility of using small, closed thermophilic composting equipment. The compost produced can be used for the progressive restoration work. The results of the feasibility study must be submitted to the Administrator for information purposes six months after the project's authorization.

#### **Condition 17:**

Three months before construction begins, the proponent must submit to the Administrator, for information purposes, a document stating the amount of each type of residual material that will be generated on site during each phase of the project. The document must confirm the final disposal site selected, its capacity to receive residual materials generated by the Whabouchi project, and the needs of the community of Nemaska.

### **Emergency Measures Plan:**

#### **Condition 18:**

Six months before mine operation begins, the proponent must submit the final emergency measures plan to the Administrator for information purposes. The plan must cover all possible situations involving spills, fires, explosions and the release of toxic substances, as well as clearly and fully define all response measures in case of an accident, particularly in terms of communication with the government authorities concerned (Urgence-Environnement, Ministère de la Sécurité publique, Ministère des Transports du Québec, SOPFEU, etc.), potential closure of the Route du Nord and forest fires.

#### **Condition 19:**

The proponent must submit a copy of the final emergency measures plan and all subsequent updates to the community of Nemaska, the Ville de Chibougamau, the Ministère de la Santé et des Services sociaux, the Cree Board of Health and Social Services and the Direction régionale de la sécurité civile et de la sécurité incendie of the Ministère de la Sécurité Publique for the Outaouais, Abitibi-Témiscamingue and Nord-du-Québec administrative region.



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### **Closure and Site Rehabilitation:**

#### **Condition 20:**

The proponent must submit the five-year restoration plans required under the *Mining Act* (R.S.Q., chapter M-13.1) or, failing such a plan, the work it considers necessary, to the Administrator for information and comments.

#### **Condition 21:**

One year prior to the cessation of mining operations, the proponent must submit to the Administrator, for approval, the details of the dismantling of all project-related infrastructures and the planned rehabilitation work under the site restoration plan. The restoration plan must be prepared in consultation with the community of Nemaska and contain, in particular, physical rehabilitation of the site, renaturalization, cleanup, safety measures and possible mine effluent control measures. In addition to forest restoration objectives, the proponent must consider wildlife habitat enhancements and Cree land use and occupancy. The plan should include continued monitoring of the receiving environment following the cessation of mining operations.

#### **Condition 22:**

Except in unforeseen circumstances, if the proponent temporarily halts its mining activities for longer than one (1) month, it must notify the Administrator, the community of Nemaska, the Ville de Chibougamau and the Eeyou Istchee James Bay Regional Government at least one month in advance.

#### **Condition 23:**

In the event of a temporary mine closure, the proponent must uphold its commitment to continue all monitoring programs until the resumption of activities, if activities resume within 12 months. If the mine remains closed for longer than 12 months, the proponent must inform the Administrator about the planned actions to continue environmental monitoring and, as the case may be, begin restoration works.

### **Environmental and Social Monitoring Program:**

#### **Condition 24:**

One year after the project's authorization, the proponent must submit an updated environmental and social monitoring program to the Administrator for approval. The updated program must include the monitoring activities referred to in Directive 019, those the proponent committed to carry out and the monitoring required as a condition of authorization. The environmental and social monitoring program must explain the Nemaska Crees' involvement as well as that of the Environment Committee established pursuant to the Chinuchi Agreement. The proponent must specify the extent of Cree involvement in monitoring activities, especially those dealing with Mountain Lake. The monitoring program must also include post-operation and post-remediation monitoring.

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### Condition 25:

Following the approval of the environmental and social monitoring program entailed in condition 24, the proponent must submit all environmental and social monitoring reports to the Administrator for information purposes.

### Condition 26:

The proponent must incorporate the monitoring of cumulative effects proposed in its Environmental and Social Impact Assessment into the environmental and social monitoring program entailed in condition 24.

### Condition 27:

The environmental and social monitoring program entailed in condition 24 must include follow-up of its commitments to shut down the mine during Goose Break as well as the implemented measures to prevent drug and alcohol use on the mine site and prevent discrimination. In addition, the monitoring program must track training programs for the Crees. Monitoring must enable an assessment of the effectiveness and success rate of the measures implemented, as well as allow for measures to be adjusted where necessary based on monitoring results.

### Condition 28:

The proponent must include a watering plan in the environmental and social monitoring program entailed in condition 24. The watering plan must include, for each road segment, the number of trips per day, the length of the segment, the watered surface area, the unmitigated TSP emission rate, watering intensity, watering intervals, the amount of water sprayed, how effective the spraying is in controlling dust, and the mitigated TSP emission rate.

### Condition 29:

The proponent must include air quality monitoring in the environmental and social monitoring program entailed in condition 24. The planned sampling and analysis methods must be explained.

### Condition 30:

The environmental and social monitoring program entailed in condition 24 must track surface water quality in Mountain Lake. Parameters to be measured include total phosphorus at trace levels (method MA. 303-P 5.2 of CEAEQ), chlorophyll a and clearness of water (with a Secchi disk). Monitoring stations must be established such that the final effluent plume in Mountain Lake can be determined. Triplicate, or at the very least duplicate, water samples must be collected from the lake once a month during the ice melt. If the weather does not allow for the collection of three samples, the proponent must adjust the sampling frequency so as to meet this objective.

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### Condition 31:

Three years after the start of operations generating mine effluent, the proponent must submit a monitoring report to the Administrator. Monitoring must be conducted in accordance with the *Guide d'information sur l'utilisation des objectifs environnementaux de rejet relatifs aux rejets industriels dans le milieu aquatique* (or later versions) issued by the Ministère du Développement durable, de l'Environnement et des Parcs. The report must say whether the environmental discharge objectives have been met and discuss the treatment performance for phosphorus. If environmental discharge objectives have not been met, the proponent must propose realistic solutions, from an economic and technical standpoint, to work towards or comply with these objectives.

### Condition 32:

To protect the waters in Mountain Lake, the proponent must ensure that the average monthly concentration of total phosphorus in final effluent does not exceed 0.3 mg/L, and that the maximum concentration of total phosphorus never exceeds 0.6 mg/L. Total phosphorus in the final effluent, at a phosphorus detection limit of lower than or equal to 0.05 mg/L, must be monitored on a weekly basis.

### Condition 33:

The environmental and social monitoring program entailed in condition 24 must include groundwater monitoring for major ions, total dissolved solids and redox potential.

### Condition 34:

The environmental and social monitoring program entailed in condition 24 must include monitoring of the hydrological, ecological and habitat functions of the Spodumene Lake peatland and adjacent shrub swamp.

### Condition 35:

The environmental and social monitoring program entailed in condition 24 must include monitoring the water level in Spodumene Lake. The proponent must define adequate baseline conditions for that purpose.

### Condition 36:

The environmental and social monitoring program entailed in condition 24 must include monitoring of the integrity of the natural walleye spawning ground in Mountain Lake, at the mouth of Creek D. Monitoring must enable validation of continuous walleye spawning and recruitment conditions. Remedial measures must be implemented where necessary if monitoring reveals changes in spawning or egg incubation conditions.

### Condition 37:

The proponent must draw up the annual monitoring program for the Spodumene Lake little brown bat nursery colony in consultation with experts at the Ministère des Forêts, de la Faune et des Parcs. This monitoring program must be incorporated into the environmental and social monitoring program entailed in condition 24.

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Amongst others, this certificate of authorization does not absolve the holder from obtaining any other authorization required by any law or regulation and, as the case may be, those which could be required by virtue of chapter I of the Environment Quality Act.

The Deputy Minister

Chrystine Tremblay