

Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0881-C2FJNX Issue Date: July 23, 2021

Frontier Lithium Inc. 2736 Belisle Dr Val Caron, Ontario P3N 1B3

Site Location: PAK Lithium Project 175 km north of Red Lake Unsurveyed Territory (Kenora Area Office) Unorganized Area, District of Kenora P0V 2M0

You have applied under section 20.2 of Part II.1 of the <u>Environmental Protection Act</u>, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

the establishment of sewage works for the collection, transmission, treatment, and disposal of treated water from the advanced exploration activities at the PAK Lithium Project site in the form of an open pit located on crown lands, and in unorganised area, approximately 175 km north of the Town of Red Lake, Ontario in the Red Lake Mining Division, comprising of the following:

Open Pit Area

A 100,000 tonne bulk sample open pit to extract lithium ore samples to be conveyed to a 200 tonne per day pilot scale processing ore processing plant.

Containment Pond

A low permeability containment pond approximately 8,500 square metres in area, for collecting surface water drainage and groundwater seepage from the open pit, with provision for addition of flocculants to reduce suspended solids in the water discharged to the wastewater treatment plant described below.

Storage of Tailings

Tailings, approximately 75,000 tonnes in quantity to be stored in dewatering filter bags placed on an engineered low-permeability containment pad, with permeate and any runoff collected to be pumped to the containment pond.

Wastewater Treatment Plant

A package wastewater treatment plant having a maximum rated capacity of approximately 525 cubic metres per day, fully containerized and equipped with the following:

- pH adjustment system consisting of chemical feed pumps, serpentine pipe mixing array, pH probe controller, flowmeter and venturi.
- first stage chemical conditioning system consisting of chemical feed pumps, serpentine pipe mixing array and flowmeter.
- first-stage pressure filters consisting of one (1) triplex set of 1.2 meter diameter pressure filters with a filtrate pump tank with a duplex set of submersible pumps and controls.
- second stage chemical conditioning system consisting of chemical feed pumps, pH probe controller, serpentine pipe mixing array and flowmeter.
- second-stage pressure filters consisting of one (1) triplex set of 1.2 meter diameter pressure filters with a filtrate pump tank with a duplex set of submersible pumps and controls.
- an ion-exchange system for trace metal removal consisting of a triplex set of 1.2 meter diameter resin cells with brine regeneration system.
- ammonia removal system consisting of a triplex set of 1.2 meter diameter resin cells, a CR₃ media regeneration system consisting of a brine regeneration tank, regenerant make-up tank, air mixing blower for air stripping, and a pH control system including a pH probe, controller, acid feed pump and caustic feed pump.
- one (1) 1.2 meter diameter final effluent tank equipped with aeration, chemical feed pumps, pH probe controller and flowmeter.

Effluent Discharge

A 100 mm diameter pipeline, approximately 7,200 metres in length and laid at grade discharging effluent from the water treatment plant to a location on the shore of the Flanagan River lined with Rip-rap to reduce the velocity of water prior to entering the River,

all other controls, electrical equipment, instrumentation, piping, pumps, potential screening capabilities, valves and appurtenances essential for proper operation of the aforementioned sewage Works and provision of sampling equipment, monitoring and other instrumentation, for the proper operation of the aforementioned sewage Works.

all in accordance with the supporting documents listed in Schedule A.

For the purpose of this environmental compliance approval, the following definitions apply:

"Approval" means this entire document and any schedules attached to it, and the application;

"Daily Maximum Concentration" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;

"Daily Flow" means the cumulative total sewage flow from the sewage Works during a twenty four hour period during which sewage was flowing from the sewage Works;

"District Manager" means the District Manager of the Thunder Bay District Office of the Ministry;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"Effluent" means water that is collected, conveyed, treated, or discharged by the Works, whether it be non-contact water, contact water, or both;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Monthly Average Concentration" means the arithmetic mean of all daily maximum concentrations of a contaminant within a particular calendar month;

"Owner" means Frontier Lithium Inc. and its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

"Professional Engineer" means a person entitled to practise as a Professional Engineer in the Province of Ontario under a licence issued under the Professional Engineers Act;

"Works" means the sewage works described in the Owner's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the

Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

2. Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.

3. Where there is a conflict between a provision of any document in the Schedule A referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence, and where there is a conflict between the documents in the Schedule A, the document bearing the most recent date shall prevail.

4. Where there is a conflict between the documents listed in the Schedule A, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

5. The conditions of this Approval are severable. If any condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

6. This Approval is based upon a review of the Works in the context of its effect on the environment, its process performance using principles of sanitary and chemical engineering. The review did not include an evaluation of the architectural, mechanical, structural, electrical or instrumentation components of the sewage Works.

7. The issuance of, and compliance with the conditions of, this Approval does not:

(a) relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the Ministry of Natural Resources and Forestry and the Ministry of Energy, Northern Development and Mines to construct or operate the sewage Works; or

(b) limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

2. EXPIRY OF APPROVAL

1. This Approval will expire on July 01, 2024.

3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within 30 days of the change occurring:

(a) change of Owner;

(b) change of address of the Owner;

(c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act*, R.S.O. 1990, c.B17 shall be included in the notification to the District Manager;

(d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act*, R.S.O. 1990, c. C39 shall be included in the notification to the District Manager.

2. In the event of any change in ownership of the Works, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.

3. The Owner shall ensure that all communications made pursuant to this condition will refer to this Approval's number.

4. OPERATION AND MAINTENANCE

1. This Approval has been issued for the advanced exploration phase only (i.e., for the collection, transmission, treatment, and disposal of water to support construction activities during the advanced exploration phase).

2. The Owner shall notify the District Office in writing seven (7) days following the commencement of construction activities on-site.

3. The Owner shall ensure that at all times, the Works and related equipment and appurtenances, which are installed or used to achieve compliance with this Approval, are properly operated and maintained.

4. The Owner shall also ensure that all inspection, monitoring, and maintenance schedules for the Works and related equipment are complied with.

5. The Owner shall ensure that the design minimum liquid retention volumes in all Works are maintained at all times.

6. The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the site. The logbook shall include the following:

- (a) the name of the works;
- (b) the name of the person who conducted each inspection;

(c) the date and results of each inspection, maintenance and cleaning, including an estimate of the

quantity of any materials removed and method of clean-out of the Works; and

(d) upon request, make available the logbook for inspection and copying by Ministry personnel.

7. The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this Approval.

5. GENERAL INSPECTION / MONITORING ACTIVITIES, SPILL MITIGATION / PREVENTION

1. The Owner shall ensure that all mine-related structures and stockpiles that are adjacent to the Works (e.g. tailings impoundment structure, overburden and mine rock stockpiles, etc.) are physically stable.

2. The Owner shall collect representative samples of the on-site materials that have been excavated, exposed or otherwise disturbed by mining activities (e.g. open pit wall, overburden and mine rock stockpiles, construction rock, etc.) sufficient to determine the potential for acid generation and metal leaching. The information acquired will help inform on-site water management practices, to ensure that effective preventative, mitigation, and monitoring strategies are developed and implemented throughout the advanced exploration phase.

3. The Owner shall ensure that soil stripping and excavation is only conducted when there is no precipitation occurring that is substantial enough to cause stormwater runoff and sediment to bypass the Works and enter adjacent surface water features (e.g., wetlands, watercourses, and waterbodies).

4. The Owner shall conduct visual inspections of all construction areas during and after surface water runoff (i.e., snowmelt, precipitation, and stormwater) events to ensure that potentially contaminated runoff is being captured by the Works and that non-contact water is channelled away from the Works.

5. The Owner shall regularly conduct visual inspections of the Works for erosion, blockage or potential blockage caused by sediment, ice, debris accumulation or animal activity; and deterioration of materials.

6. During periods of discharge from filter bag / geotextile tube arrangements, the Owner shall conduct daily visual inspections of the discharge point and the overland flow path to verify erosion is not occurring. Should an inspection detect observable erosion, then erosion controls shall be implemented to mitigate the identified erosion issue. The observations made, erosion controls implemented, and effectiveness of erosion controls shall be recorded and included in quarterly reports.

7. The Owner shall ensure that adequate spill clean-up equipment and/or contingency supplies are available at the site for fuel, oil and lubricant spills, and that all on-site operators are familiar with the use of such equipment and/or supplies.

8. The Owner shall ensure that all adjacent surface water features (e.g., wetlands, watercourses, and waterbodies) are protected from potential fuel, oil and lubricant spills. Equipment used at the water taking sites are to be located as far away as reasonably practicable from surface water features and protected by

combinations of dykes and plastic, capable of containing all fuels and lubricants found at the site, to prevent spills from entering these features.

9. In the event of a spill or other contaminant release which could cause any detrimental effects on the quality of water discharging from the site, the Owner shall ensure that the discharge is immediately ceased. Furthermore, the Owner shall only resume discharging after an investigation of the incident is undertaken, remedial and preventive measures are taken, and the effluent discharged from the site is deemed not to cause any impairment to the receiver.

6. EFFLUENT OBJECTIVES

1. The Owner shall design and undertake everything practicable to operate the Works such that the effluent parameters listed in Table 1 do not exceed their corresponding Monthly Average Concentration Objectives.

Table 1 - Effluent ObjectivesCompliance location:discharge from the sewage treatment plant to Flanagan River			
Effluent Parameter	Monthly Average		
	Concentration Objective		
	(milligrams per litre unless otherwise indicated)		
Antimony	0.3		
Thallium	0.008		
Uranium	0.15		

7. EFFLUENT LIMITS

1. The Owner shall design, construct, and operate the Works such that the effluent parameters listed in Table 2 do not exceed their corresponding Monthly Average Concentration Limit or Daily Maximum Concentration Limit at the final effluent discharge locations.

Table 2 - Effluent Limits Compliance Locations:discharge from the sewage treatment plant to Flanagan River				
Effluent Parameter	Monthly Average Concentration Limit (milligrams per litre unless otherwise indicated)	Daily Concentration Limit (milligrams per litre unless otherwise indicated)		
Column 1	Column 2	Column 3		
Total Ammonia Nitrogen	5.0	10.0		
Antimony	1.0	-		
Arsenic	0.5	1.0		
Copper	0.3	0.6		
Lead	0.2	0.4		
Nickel	0.5	1.0		
Total Phosphorus	1.0	-		
Thallium	0.08	-		
Tungsten	2.9			
Uranium	1.5			
Zinc	0.5	1.0		
Total Suspended Solids	15	30.0		
Iron	0.4			
pH shall be maintained between 6.0 and 9.5 at all times				

2. For the purposes of determining compliance with and enforcing subsection (1) for the final effluent discharge locations.

(a) non-compliance with respect to a Daily Maximum Concentration Limit is deemed to have occurred when any single grab sample collected and analyzed for a parameter named in Column 1 is greater than the corresponding Daily Maximum Concentration Limit set out in Column 3 of subsection (1);

(b) non-compliance with respect to a Monthly Average Concentration Limit is deemed to have occurred when the arithmetic mean concentration of all grab samples collected and analyzed in a calendar month for a parameter named in Column 1 is greater than the corresponding Monthly Average Concentration Limit set out in Column 2 of subsection (1); and

(c) non-compliance with respect to pH is deemed to have occurred when any single measurement is

outside of the indicated range in Table 2.

3. The Owner shall operate and maintain the Works such that the effluent being discharged from the final effluent discharge locations is non-acutely lethal to *Daphnia magna* and Rainbow Trout. For the purposes of determining compliance and enforcing this subsection, the undiluted effluent from either of the final effluent discharge locations shall not result in >50% mortality when acute lethality tests are performed on *Daphnia magna* and Rainbow Trout.

8. EFFLUENT - VISUAL OBSERVATIONS

1. Notwithstanding any other condition in this Approval, the Owner shall ensure that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen, or foam on the receiving waters.

2. The Owner shall operate and maintain the Works such that the effluent being conveyed and discharged is adequately controlled to prevent undue erosion, scouring, or the unnecessary pooling or channelization of water. As such, the Owner shall conduct daily visual inspections of all effluent discharge locations. If erosion, scouring, or the unnecessary pooling or channelization of water is observed, the Owner shall employ suitable mitigation/remedial measures to address the issue and prevent future incidences (e.g. cease or reduce discharge rates; move the discharge point; construct rock-check berms, etc.).

3. The Owner shall ensure that the linear velocity of water discharged overland should not produce scouring, erosion or flooding of the land or receiver (e.g., wetland, watercourse, or waterbody). The use of standard diffusers or an energy dissipation device and a splash pad, in addition to a discharge rate which gives regard to the filtration characteristics and technical limitations will assist in achieving this goal. The Owner shall take all necessary measures for sediment and erosion control to limit degradation of the water quality and shall take continuous care to properly maintain the siltation control device.

9. EFFLUENT MONITORING PROGRAM

The Owner shall, upon commencement of operation of the Works, carry out the following effluent monitoring program:

1. All in-situ measurements and grab samples taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

2. In-situ temperature and pH measurements shall be collected weekly at both of the final effluent discharge locations during the active discharge period, and these measurements shall be taken on the same day and at the same time when grab samples are collected for total ammonia as required by subsection (4).

3. For the purposes of this condition, the following definitions apply:

- (a) Weekly means once every week;
- (b) Monthly means once every month; and

(c) Semi-annually means twice every year.

4. **Grab samples** shall be collected at the frequencies and locations specified in Table 3 during the active discharge period, and samples shall be analyzed for the effluent parameters specified in Table 3.

5. Grab samples shall be collected monthly at the final effluent discharge location during the active discharge period and acute lethality tests shall be performed on *Daphnia magna* and rainbow trout.

6. When grab samples are collected for acute lethality tests and chronic toxicity tests as required by subsection (5), they must be taken at the same time when monthly grab samples are collected for the effluent as required by subsection (4).

7. The monitoring requirements specified in subsection (4) through (6) are minimum requirements and may be modified by the Director in writing from time to time.

8. The owner shall monitor the water level in the Containment Pond weekly to ensure there is enough capacity within the pond without the risk of overtopping. The pond should be capable of accepting the 1 in 100-year return period event at the maximum operating water level without risk of overtopping.

Table 3 - Effluent Monitoring Parameters (Grab Samples)				
Final Effluent Discharge	Parameter	Frequency (During		
Location		Discharge)		
Discharge from Sewage	Total Suspended Solids (TSS) and pH	3x weekly		
Treatment Plant to the	Total ammonia nitrogen, antimony,	Weekly		
Flanagan River	arsenic, copper, iron, lead, nickel,			
	thallium, tungsten, uranium, zinc,			
	temperature, dissolved oxygen, hardness,			
	conductivity, alkalinity, nitrate, total			
	phosphorus, calcium, magnesium,			
	potassium, sodium, chloride, and sulphate			
	Acute lethality, dissolved and total			
	mercury, total oil and grease	Monthly		
	Chronic toxicity	Semi-Annually		

Table 4 - Surface Water Monitoring Parameters			
Parameter	Frequency & Sample		
	Туре		
Temperature, conductivity, dissolved oxygen, pH	Weekly Field		
	Measurements		
General parameters (total suspended solids, total dissolved solids,	Weekly Grab		
hardness, conductivity, turbidity, dissolved oxygen, acidity, alkalinity, pH);	Samples		
Ions (calcium, magnesium, potassium, sodium, chloride, fluoride, sulphate);			
unionized ammonia, total and soluble phosphorus); and,			
Metals (dissolved aluminum, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, dissolved mercury, molybdenum, nickel, potassium, selenium, silver, tellurium, titanium, tungsten, uranium, vanadium, zinc, zirconium)			

* Lake site (Station PLWS-07) field measurements for temperature, conductivity, dissolved oxygen, and pH sampling should occur at approximately 25 centimetres (cm) below the surface of the lake, at one-meter intervals down to near bottom with the last sample collected approximately 25 cm off the bottom sediment.

9. The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

(a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02 Ontario.ca/Environment, as amended from time to time by more recently published editions;

(b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions;

(c) the Environment Canada publications "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" (EPS 1/RM/13 Second Edition - December 2000) and "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to *Daphnia magna* " (EPS 1/RM/14 Second Edition - December 2000); and

10. The Owner shall measure, record and calculate the daily flow volume discharged to the Flanagan River, using flow measuring devices or other methods of measurement (calibrated at least once per year). The daily volume of water discharged under this approval shall be within +/- 15% accuracy as confirmed prior to the initial taking and then on an annual basis by an engineer licensed with the Professional Engineers of Ontario.

10. SURFACE WATER MONITORING PROGRAM

Upon issuance of this Approval, the Owner shall carry out the following :

1. The Owner shall develop effluent criteria, both effluent objectives and effluent limits for all parameters of concern that are reflective of treatment capabilities of the mine as well as values protective of aquatic life, once one of the following milestones are reached:

- mixing model is re-evaluated following two (2) to three (3) years of continuous data collection, or
- the project proceeds past the advanced exploration phase; approvals for the construction phase will require these effluent criteria be re-developed and approved by the Ministry.

2. The Owner shall continue to collect baseline data at PLWS-06 (monthly for two years) to adequately characterize the baseline condition of the receiver. The Owner shall also establish a water quality station downstream (near PLWL-07) of the discharge location and sample weekly for the duration of discharge.

Table 5 - Surface Water Quality Monitoring Stations				
Station ID	Location	Easting	Northing	Frequency
PLWS-06	Flanagan River Reference	481340	5826680	Monthly
	(Upstream of Discharge)			
PLWS-07	Whiteloon Lake (Downstream of	480910	5826970	Weekly
	Mixing Zone)			

3. The Owner shall continuously operate a hydrometric station at Flanagan River to ensure there is suitable flow in the receiver to provide sufficient mixing during effluent discharge to minimize impacts to the receiver.

Table 6 - Hydrometric Monitoring Station					
Station ID	Location	Easting	Northing	Frequency	In situ
					Frequency
##	Flanagan River	to be confirmed	to be confirmed	Monthly manual water level and monthly manual flow in ice-free season	Water level 15 minute

4. The Owner shall ensure that the biological and sediment quality monitoring programs are also consistent with requirements of the Environmental Effects Monitoring (EEM) programs required by the Metal Mining Effluent Regulations under the Fisheries Act.

5. To validate the assumed mixing within the receiver the Owner shall complete effluent plume delineations twice a year within the discharge season following the commencement of effluent discharge. The owner shall use best efforts to target low flow conditions in which mixing will be limited. The flow in

the receiver shall also be manually confirmed during the effluent plume delineation studies.

11. REPORTING AND NOTIFICATION

1. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation associated with this Approval available to Ministry staff for review and copying.

2. In the event that an effluent parameter exceeds its corresponding Monthly Average Concentration Objective, Monthly Average Concentration Limit, or Daily Maximum Concentration Limit as outlined within Condition 6 and 7, the Owner shall notify the District Manager as soon as possible during normal working hours, and submit to the District Manager, within fourteen (14) days, a report detailing the exceedance(s), potential cause(s), and mitigative/remedial measures that have been implemented to avoid further limit and/or objective exceedances.

3. The Owner shall prepare an annual performance report following the end of each calendar year and submit the report(s) to the District Manager by March 31 of each year. The reports shall contain, but shall not be limited to, the following information:

A surface water monitoring report including at least the following minimum information:

- a. a description and evaluation of any and all aquatic effects associated with the mining operations;
- b. tabulation and interpretation of effluent monitoring data and comparison to effluent objectives and limits Ontario Provincial Water Quality Objectives (PWQO), Interim PWQO and Canadian Water Quality Guidelines for the Protection of Aquatic Life;
- c. tabulation and interpretation of acute lethality tests and chronic toxicity tests as required by the methods and protocols outlined under Section 9 of Condition 8 of this Approval;
- d. tabulation and interpretation of current and historical receiver surface water monitoring data and a comparison to surface water benchmarks and the Ontario PWQO, Interim PWQO and Canadian Water Quality Guidelines for the Protection of Aquatic Life;
- e. tabulation and interpretation of current and historical sediment quality monitoring data, consistent with requirements of the Environmental Effects Monitoring (EEM) programs required by the Metal Mining Effluent, and comparison to Provincial Sediment Quality Guidelines and Canadian and Canadian Sediment Quality Guidelines for the Protection of Aquatic Life as required by Environment and Climate Change Canada's Environmental Effect Monitoring;
- f. tabulation and interpretation of current and historical biological monitoring data, consistent with requirements of the Environmental Effects Monitoring (EEM) programs required by the Metal Mining Effluent Regulations under the *Fisheries Act;*
- g. graphs illustrating current and historical temporal trends of key water quality parameters;

- h. hydrographs (from all hydrometric monitoring stations) and updated water balance for the site;
- i. tabulation of flow and concentration data used to determine compliance and minimum dilution ratios, with comparison of calculated and measured final mixed concentrations in the receiver;
- j. a summary of all incidence of non-compliance, exceedances of effluent objectives and exceedances of surface water benchmarks over the reporting period;
- k. a description of work undertaken to update acid mine drainage predictions;
- 1. site plan(s) of the entire site illustrating significant water features such as lakes, streams, ponds, seeps, ditches, collection and treatment facilities, as well as sampling locations with UTM coordinates; and
- m. after the Owner has submitted a minimum of three (3) annual surface water monitoring reports, the frequency of report submission may be changed to such frequency as the District Manager may specify in writing from time to time.

The plume delineation data and the annual report shall at minimum include the following:

- i. hourly flow in the receiver for the duration of the study;
- ii. hourly flow of the effluent for the duration of the study;
- iii. water quality data of the effluent during the study;
- iv. background water quality of the receiver (PLWS-06);
- v. water quality downstream of the mixing zone (PLWL-07);
- vi. the results of the conductivity survey; and
- vii. the associated analysis and results of the study.

4. The Owner shall prepare and submit a Sewage Works Performance Report to the District Manager on an annual basis by March 31st, detailing the performance of the Works for the preceding calendar year (January 1st to December 31st). The report shall be in a format acceptable to the District Manager, and contain, but not be limited to, the following:

- (a) a summary of the quarterly activity reports;
- (b) an overview of the success and adequacy of the sewage works;
- (c) a summary and interpretation, including quality assurance and quality control, of all monitoring data collected during the year of reporting;
- (d) an engineer's statement on the condition and stability of all dams and berms with respect to their ability to perform properly;
- (e) a description of any operating problems encountered and corrective actions taken;
- (f) a description of any further modifications to the system that are required to improve the operation of

the works, including a schedule for their implementation;

- (g) a summary of rehabilitation procedures undertaken to date;
- (h) data obtained from the hydrometric and surface water monitoring.

The reasons for the imposition of these terms and conditions are as follows:

- 1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which Approval was granted. This condition is also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
- 2. Condition 2 is imposed to ensure that no mining operation activities will take place during the Construction Phase of the Works to ensure the ongoing protection of the environment.
- 3. Condition 3 is imposed to ensure that the Ministry records are kept accurate and current with respect to approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
- 4. Conditions 4 and 5 are imposed to ensure that the Works will be constructed, operated, maintained, and inspected in a manner, such that the environment is protected and deterioration, loss, injury or damage to any person or property is minimised and/or prevented.
- 5. Condition 6 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
- 6. Conditions 7 and 8 are imposed to ensure that the effluent discharged from the Works meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
- 7. Condition 9 is imposed to ensure that domestic sewage is not received by the Works and the effluent is collected, conveyed, and discharged appropriately.
- 8. Conditions 10 is imposed to require the Owner to demonstrate on a continual basis that the quality of the effluent discharged from the approved Works is consistent with the effluent objectives and limits specified in the Approval and that the approved Works does not cause any impairment to the receiving environment.
- 9. Condition 11 is imposed to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

SCHEDULE A

1. Environmental Compliance Approval Application submitted by Trevor Walker, President/CEO Frontier Lithium Inc., dated February 3, 2020 and supporting documentation.

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the <u>Environmental Bill of</u> <u>Rights, 1993</u>, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

- 1. The name of the appellant;
- 2. The address of the appellant;
- 3. The environmental compliance approval number;
- 4. The date of the environmental compliance approval;
- 5. The name of the Director, and;
- 6. The municipality or municipalities within which the project is to be engaged in.

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

				The Director appointed for the purposes of
The Secretary*		The Minister of the Environment,		Part II.1 of the Environmental Protection Act
Environmental Review Tribunal		Conservation and Parks		Ministry of the Environment,
655 Bay Street, Suite 1500	AND	777 Bay Street, 5th Floor	AND	Conservation and Parks
Toronto, Ontario		Toronto, Ontario		135 St. Clair Avenue West, 1st Floor
M5G 1E5		M7A 2J3		Toronto, Ontario
				M4V 1P5

* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at https://ero.ontario.ca/, you can determine when the leave to appeal period ends.

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The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 23rd day of July, 2021

Fariha Parnu.

Fariha Pannu, P.Eng. Director appointed for the purposes of Part II.1 of the *Environmental Protection Act*

HV/

- c: Area Manager, MECP Kenora
- c: District Manager, MECP Thunder Bay District Jason Murphy, Frontier Lithium Inc.