

## AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3496-D6SQF5  
Issue Date: October 3, 2024

NorthX Nickel Corp.  
1200-200 Burrard Street  
Vancouver, British Columbia  
V7X 1T2

Site Location: Broken Hammer Mine  
Township of Wisner  
Lot 9, Concession 4  
Greater Sudbury City, District of Sudbury

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

amendment for changing the Owner's address and to replace treatment system for the construction of a permanent passive bioreactor treatment system at the Broken Hammer Mine. The proposed treatment system will replace options of the existing chemical treatment system (i.e. pH adjustment, coagulant addition, chemical lime treatment, etc.) and the use of a Mobile Treatment System. The proposed bioreactor treatment system is designed to operate at a maximum rate of 7.8 L/s and discharge effluent year round. The Works will continue to include collection, transmission, treatment and to meet the effluent limits in this Approval and disposal of mine wastewater from the open pit of the closed mine at an average rate a peak rate of approximately 2,880 cubic metres per day into the Unnamed Creek of Blueberry Lake, which in turn drains southwards ultimately discharges into Vermillion River to the south east of the site, consisting of the following:

### **Proposed Works:**

**1. Mine Water Treatment System:** Located within the existing decommissioned mine water basin and impounded by two rockfill dams on an area of 10,850 sq.m. with 3:1 side slope, lined internally and on pit lake face with one layer of 40 mil thick geomembrane; providing a controlled storage volume in a pond with south dam height at 397.12 m above sea level and north dam height at 395.5 m above sea level, complete with an emergency /overflow path 500 mm deep and 500 mm bottom width with 1.5:1 side slope, to receive overflow from the adjacent filled open pit via a 152.4 mm diameter PVC inlet pipe to the HCS-1 concrete inlet structure with a concrete headwall having five gate valves controlled orifice openings (45 to 50 mm inner diameter) to control flow up to a maximum combined flow rate of 7.8 L/s. Flows from the inlet control structure via a 200 mm diameter gravity pipe will go into the HCS-2 concrete inflow control structure where two weirs will split

flows into 150 mm PVC distribution pipes to flow into each of the two (2) bioreactor beds cells as described below:

**2. Bioreactor Bed Cells:** Two (2) proprietary designed treatment cells laid out in parallel, each with a gravel distribution layer areas of 2,410 m<sup>2</sup> and 2,153 m<sup>2</sup>, respectively; with a total depth 2.5 m, and a hydraulic retention time (HRT) of 48 hours for a 25-year return storm (25-year return period wet year annual) flow rate of up to 3.9 L/s; complete with perforated inflow PVC distribution pipes ranging diameters from 76.2 mm to 152.4 mm within the gravel media distribution layer and the following cell layers from top to bottom:

- 400 mm thick compost insulation;
- geotextile separation layer;
- 300 mm thick gravel distribution layer;
- 1.5 m thick organic treatment media;
- 300 mm thick gravel collection layer.

Effluent will downflow vertically from the surface distribution network through the 1.5 m thick organic treatment media where microbial mediation uses sulphate in the influent flow and organic carbon in the compost to produce sulphide, to combine with dissolved metals to precipitate and to be sequestered within the compost media layer. Effluent from the treatment media layer is intercepted by a gravel distribution layer in 100 mm diameter perforated PVC pipes that will convey flows from each bioreactor cell to the HCS-3 concrete out flow control structure via a 150 mm diameter collector pipe into a final polishing free water surface (FWS) wetland as described below:

**3. Free water surface (FWS) wetland:** On an area of 700 sq.m. with a flow depth of approximately 300 mm and complete with a forebay with an area of 175 sq.metre consisting of a 78 m<sup>3</sup> limestone filter berm to adjust the pH. The shallow wetland marsh discharges into a micropool and then through a 200 mm diameter PVC pipe to the HCS-4 concrete maintenance hole outflow structure onto a rip rap splash pad to drain into an unnamed Watercourse that empties into Blueberry Lake;

**4. Recirculation:** The HCS-4 outlet structure is complete with a gate valve to stop outflow if discharge does not meet effluent criteria and a 100 mm diameter PVC pipe connected to HCS-2 inlet to allow recirculation of treated water back to the bioreactor cells for additional treatment; all to work with the following existing arrangements:

**Existing Works to Stay:** all General Site Drainage Ditching comprise of wastewater from the waste rock storage area will be conveyed by gravity via general site drainage ditching into the open pit for treatment and disposal;

including erosion/sedimentation control measures and all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works.

**Works to be Abandoned and Disposed off:** optional treatment system which were used including any chemical treatment (i.e. pH adjustment, coagulant addition, etc.) units; settled solids and clarified sludge, neutralization equipment, pumping system and appurtenances and any Mobile Treatment System at the site;

all in accordance with supporting documents listed in **Schedule 'A'**.

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

1. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
2. "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;
3. "District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;
4. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended;
5. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;)
6. "Licensed Engineering Practitioner" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.S.O. 1990, c. P.28;
7. "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;
8. "Owner" means NorthX Nickel Corp. and its successors and assignees;
9. "OWRA" means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40, as amended;
10. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
11. "Works" means the approved sewage works, and includes Proposed Works and Existing Works.

*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 terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. The Owner shall design, construct, operate and maintain the Works in accordance with the

conditions of this Approval.

3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
4. 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 local conservation authority necessary to construct or operate the 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 cease to apply to those parts of the Works which have not been constructed within **five (5) years** of the date of this Approval.
2. In the event that completion and commissioning of any portion of the Works is anticipated to be more than five (5) years, the Owner shall submit an application for extension at least **twelve (12) months** prior to the end of the five (5) years from the day of issuance of this Approval. The application shall include the reason(s) for the delay, whether there is any design change(s) and a review of whether the standards applicable at the time of Approval of the Works are still applicable at the time of request for extension, to ensure the ongoing protection of the environment.

## **3. CHANGE OF OWNER**

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within **thirty (30) days** of the change occurring:
  - a. change of address of Owner;
  - b. change of Owner, including address of new 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. B.17 shall be included in the notification; or
  - d. change of name of the 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.

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 refer to the number of this Approval.

#### **4. CONSTRUCTION OF PROPOSED WORKS**

1. Upon the construction of the Works, the Owner shall prepare a statement, certified by a Licensed Engineering Practitioner, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry personnel.
2. Within **one (1) year** of the construction of the Proposed Works a set of as-built drawings showing the Works “as constructed” shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works for the operational life of the Works.

#### **5. OPERATION AND MAINTENANCE**

1. The Owner shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the Works do not constitute a safety, health or flooding hazard to the general public.
2. The Owner shall undertake an inspection of the condition of the Works, at least once a year, and undertake any necessary cleaning and maintenance to ensure that sediment, debris and excessive decaying vegetation are removed from the Works to prevent the excessive build-up of sediment, oil/grit, debris and/or decaying vegetation, to avoid reduction of the capacity and/or permeability of the Works, as applicable. The Owner shall also regularly inspect and clean out the inlet to and outlet from the Works to ensure that these are not obstructed.
3. The Owner shall construct, operate and maintain the Works with the objective 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, foam or discoloration on the receiving waters.
4. The Owner shall ensure the immediate clean-out of the Works after a fuel or oil spill capture.
5. The Owner shall ensure that equipment and material for the containment, clean-up and disposal of fuel and oil and materials contaminated with such, is on hand and in good repair for immediate use in the event of:
  - a. loss of fuel or oil to the Works; or

- b. a spill within the meaning of Part X of the EPA.
6. The Owner shall prepare an operations manual prior to the commencement of operation of the Works that includes, but is not necessarily limited to, the following information:
    - a. operating and maintenance procedures for routine operation of the Works;
    - b. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
    - c. repair and maintenance programs, including the frequency of repair and maintenance for the Works;
    - d. contingency plans and procedures for dealing with potential abnormal situations and for notifying the District Manager; and
    - e. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
  7. The Owner shall maintain an up to date operations manual and make the manual readily accessible for reference at the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
  8. 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 Works for inspection by the Ministry. The logbook shall include the following:
    - a. the name of the Works;
    - b. 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
    - c. the date of each spill within the catchment area, including follow-up actions and remedial measures undertaken.
  9. 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.

## **6. TEMPORARY EROSION AND SEDIMENT CONTROL**

1. The Owner shall install and maintain temporary sediment and erosion control measures during construction and conduct inspections **once every two (2) weeks** and after each significant storm event (a significant storm event is defined as a minimum of 25 millimetres of rain in any 24 hours period). The inspections and maintenance of the temporary sediment and erosion control

measures shall continue until they are no longer required and at which time they shall be removed and all disturbed areas reinstated properly.

2. The Owner shall maintain records of inspections and maintenance which shall be made available for inspection by the Ministry, upon request. The record shall include the name of the inspector, date of inspection, and the remedial measures, if any, undertaken to maintain the temporary sediment and erosion control measures.

## **7. EFFLUENT LIMITS**

1. The Owner shall design, construct and operate the Works such that the concentrations of the materials listed as effluent parameters in the effluent limits table in **Schedule B** are not exceeded in the effluent from the Works.
2. For the purposes of determining compliance with and enforcing subsection 1:
  - a. non-compliance with respect to a Daily Concentration Limit is deemed to have occurred when any single grab sample analyzed for a parameter named in Column 1 of Table 1 is greater than the corresponding maximum concentration set out in Column 2 of Table 1;
  - b. non-compliance with respect to an Monthly Average Concentration Limit is deemed to have occurred when the arithmetic mean concentration of all samples taken in a month and analyzed for a parameter named in Column 1 of Table 1 is greater than the corresponding average concentration set out in Column 3 of Table 1;
  - c. non-compliance with respect to pH is deemed to have occurred when any single measurement is outside of the indicated range; and
  - d. non-compliance with respect to acute lethality to *Daphnia Magna* or Rainbow Trout is deemed to have occurred when acute lethality test performed on any grab sample of effluent results in mortality of more than 50 per cent of the test organism in 100 per cent effluent.

## **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.

## **9. EFFLUENT MONITORING**

1. The Owner shall, upon commencement of operation of the Works, carry out a monitoring

program, and all samples and measurements 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. Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the effluent monitoring table in **Schedule B**.
3. 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, as amended;
  - 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. for any parameters not mentioned in the documents referenced in Paragraphs 3.a and 3.b, the written approval of the District Manager shall be obtained prior to sampling.
4. The measurement frequencies specified in the effluent monitoring table in Schedule B in respect of any parameter are minimum requirements which may, after **24 months** of monitoring in accordance with this Condition, be modified by the Director in writing from time to time.
5. 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 monitoring activities required by this Approval.

## 10. REPORTING

1. **One (1) week** prior to the start-up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.
2. The Owner shall report to the District Manager orally **as soon as possible** any non-compliance with the compliance limits, and in writing **within seven (7) days** of non-compliance.
3. The Owner shall, upon request, make all reports, manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
4. In addition to the obligations under Part X of the EPA and O. Reg. 675/98 (Classification and Exemption of Spills and Reporting of Discharges) made under the EPA, the Owner shall, within **fifteen (15) days** of the occurrence of any reportable spill as provided in Part X of the EPA and O. Reg. 675/98, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative



measures to be taken and a schedule of implementation.

5. The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager by March 31 of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:
  - a. a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 8, including an overview of the success and adequacy of the Works;
  - b. a description of any operating problems encountered and corrective actions taken;
  - c. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works, including an estimate of the quantity of any materials removed from the Works;
  - d. a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
  - e. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
  - f. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
  - g. a summary of all spill or abnormal discharge events; and
  - h. any other information the District Manager requires from time to time.
6. The Owner shall update the ground-water monitoring report prepared by a licensed independent Professional Geoscientist or Professional Engineer qualified in the field of hydrogeology, and shall include, but not limited to, the following:
  - a. a site plan or plans of the entire site illustrating significant site features such as lakes, rivers, seeps, ponds, ditches, collection and treatment facilities, and roadways, as well as all of the sampling locations.
  - b. a cross section of the subsurface soils, stratigraphy, displaying the ground-water elevations.
  - c. a ground-water contour map showing the ground-water elevations for each well and the ground-water flow directions.
  - d. tables summarizing all historical and current water level data and analytical results

for all parameters for each ground-water monitoring well.

- e. a copy of the borehole logs for all ground-water monitoring wells (may be provided electronically on CD).
- f. a copy of the original laboratory analytical results (may be provided electronically on CD).
- g. conclusions and recommendations for future monitoring and/or contingency measures.

7. The Owner shall provide a copy of the reports required under conditions 10, and 11 to the Atikameksheng Anishnawbek, Sagamok Anishnawbek, and the Wahnapiatae First Nations and the Sudbury Metis Council, within **thirty (30) days** of submission to the Ministry receipt of the Notice of Modifications.

## 11. SPILL CONTINGENCY PLAN

1. Within **six (6) months** from the issuance of this Approval , the Owner shall implement a spill contingency plan - that is a set of procedures describing how to mitigate the impacts of a spill within the area serviced by the Works. The Owner shall, upon request, make this plan available to Ministry staff. This plan shall include as a minimum:
  - a. the name, job title and location (address) of the Owner, person in charge, management or person(s) in control of the facility;
  - b. the name, job title and 24-hour telephone number of the person(s) responsible for activating the spill contingency plan;
  - c. a site plan drawn to scale showing the facility, nearby buildings, streets, catch-basins and manholes, drainage patterns (including direction(s) of flow in storm sewers), any receiving body(ies) of water that could potentially be significantly impacted by a spill and any features which need to be taken into account in terms of potential impacts on access and response (including physical obstructions and location of response and clean-up equipment);
  - d. steps to be taken to report, contain, clean up and dispose of contaminants following a spill;
  - e. a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and Ministry Spills Action Centre 1-800-268-6060;
  - f. Safety Data Sheets (SDS) for each hazardous material which may be transported or stored within the area serviced by the Works;

- g. the means (internal corporate procedures) by which the spill contingency plan is activated;
  - h. a description of the spill response training provided to employees assigned to work in the area serviced by the Works, the date(s) on which the training was provided and by whom;
  - i. an inventory of response and clean-up equipment available to implement the spill contingency plan, location and, date of maintenance/replacement if warranted; and
  - j. the date on which the contingency plan was prepared and subsequently, amended.
2. The spill contingency plan shall be kept in a conspicuous, readily accessible location on-site.
  3. The spill contingency plan shall be amended from time to time as required by changes in the operation of the facility.

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

1. Condition 1 is imposed to ensure that the Works are constructed and operated in the manner in which they were described 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. Condition 1.4 is included to emphasize that the issuance of this Approval does not diminish any other statutory and regulatory obligations to which the Owner is subject in the construction, maintenance and operation of the Works. The Condition specifically highlights the need to obtain any necessary conservation authority approvals. The Condition also emphasizes the fact that this Approval doesn't limit the authority of the Ministry to require further information.
2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the 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. Condition 4 is included to ensure that the Works are constructed in accordance with the approval and that record drawings of the Works "as constructed" are maintained for future references.
5. Condition 5 is included as regular inspection and necessary removal of sediment and excessive decaying vegetation from the Works are required to mitigate the impact of sediment, debris and/or decaying vegetation on the treatment capacity of the Works. The Condition also ensures that adequate storage is maintained in the Works at all times as required by the design. Furthermore, this Condition is included to ensure that the Works are operated and maintained to function as designed.
6. Condition 6 is included as installation, regular inspection and maintenance of the temporary sediment and erosion control measures is required to mitigate the impact on the downstream

receiving watercourse during construction until they are no longer required.

7. Condition 7 and 8 are imposed to ensure that the effluent discharged from the Works meets the Ministry's effluent quality requirements, as specified, on a continuous basis, thus minimizing environmental impact on the receiver.
8. Condition 9 is included to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved Works is consistent with the design and effluent objectives specified in the Approval and that the approved Works does not cause any impairment to the receiving watercourse.
9. Condition 10 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.
10. Condition 11 is included to ensure that the Owner will implement the Spill Contingency Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.

## **Schedule A**

1. Environmental Compliance Approval Application for Industrial Sewage Works submitted by Andrew Sinclair, P.Eng., of Stantec Consulting Ltd, dated August 1, 2023, and signed by Tom Meyer, President & Chief Executive Officer, Archer Exploration Corp.; duly authorised by the Owner of the company, and all supporting documentation and information.
2. Environmental Compliance Approval Application for Industrial Sewage Works submitted by Greg Harmer, Wood Environment & Infrastructure Solution, a division of Wood Canada Limited, and signed by Mr. Mike Weirmeir, Wallbridge Mining Company Limited, dated May 29, 2019, and all supporting documentation and information.

**Schedule B**

<b>Table 1 – Effluent Limits</b>		
<b>Effluent Parameter</b>	<b>Daily Concentration Limit</b> (milligrams per litre unless otherwise indicated)	<b>Monthly Average Concentration Limit</b> (milligrams per litre unless otherwise indicated)
Column 1	Column 2	Column 3
<b>Acute Lethality:</b> Rainbow Trout Daphnia Magna	-	< 50 percent mortality < 50 percent mortality
Arsenic	0.01	0.005
Copper	0.01	0.005
Cobalt	0.0018	0.0009
Cadmium	0.0002	0.0001
Lead*		
Nickel	0.05	0.025
Un-ionized Ammonia	0.04	0.02
Total Suspended Solids	30	15
Zinc	0.04	0.02
pH of the effluent maintained between 6.5 to 8.5, inclusive, at all times		

\* The limit for lead shall be based on the Canadian Water Quality Guideline (CWQG) for the protection of aquatic life, which is determined based on the hardness of water. The hardness at BP-3 shall be measured on a weekly basis during discharge from the Pit, and the effluent limit determined weekly based on this hardness value and the following criteria:

When the hardness is 0 to ≤ 60 mg/L, the CWQG is 1 µg/L

At hardness >60 to ≤ 180 mg/L the CWQG is calculated using this equation:

$$CWQG (\mu\text{g/L}) = e\{1.273[\ln(\text{hardness})]-4.705\}$$

At hardness >180 mg/L, the CWQG is 7 µg/L

## MONITORING AND RECORDING TABLES

<b>Table 1 – Effluent Monitoring</b> (Effluent discharge point from the HCS-4/Outfall Structure)		
<b>Effluent Parameter</b>	<b>Sample Type</b>	<b>Frequency ***</b>
Acute Lethality: Rainbow Trout Daphnia Magna	Grab	Monthly
Alkalinity	Grab	Weekly
Dissolved Oxygen	Grab/Probe	Weekly
Dissolved Organic Carbon	Grab	Weekly
Cations*	Grab	Weekly
Chloride	Grab	Weekly
Conductivity	Grab	Weekly
Hardness	Grab	Weekly
Metals**	Grab	Weekly
Oil and Grease	Grab	Monthly
pH	Grab/Probe	Weekly
Total Phosphorous	Grab	Weekly
Temperature	Grab/Probe	Weekly
Total Ammonia (ammonia + ammonium)	Grab	Weekly
Total Suspended Solids	Grab	Weekly
Sulphate	Grab	Weekly
Total Dissolved Solids	Grab	Weekly

\* calcium, sodium, magnesium, and potassium.

\*\* ICP metals scan: aluminium, antimony, arsenic, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, mercury, molybdenum, nickel, palladium, platinum, selenium, silver, thallium, uranium, vanadium and zinc. Analysis should be done for both total and dissolved metals.

\*\*\* weekly means once a week, monthly means once a month during times of discharge; the system may operate seasonally without monitoring if there is no discharge from it into the Drain to the unnamed Watercourse that flows to Blueberry Lake;

<b>Table 2A – Receiver Water Quality Monitoring</b> (at locations BP-2, BP-3, BLN-Deep, BLS-Deep, and BL-2)		
<b>Effluent Parameter</b>	<b>Sample Type</b>	<b>Frequency***</b>
Alkalinity	Grab	Monthly/Seasonal
Dissolved Oxygen	Grab/Probe	Monthly/Seasonal
Dissolved Organic Carbon	Grab	Monthly/Seasonal
Cations**	Grab	Monthly/Seasonal
Chloride	Grab	Monthly/Seasonal
Conductivity	Grab	Monthly/Seasonal
Hardness	Grab	Monthly/Seasonal
Metals**	Grab	Monthly/Seasonal
Oil and Grease	Grab	Monthly/Seasonal
pH	Grab/Probe	Monthly/Seasonal
Total Phosphorus	Grab	Monthly/Seasonal
Temperature	Grab/Probe	Monthly/Seasonal
Total Ammonia (ammonia + ammonium)	Grab	Monthly/Seasonal
Total Dissolved Solids	Grab	Monthly/Seasonal
Total Suspended Solids	Grab	Monthly/Seasonal
Sulphate	Grab	Monthly/Seasonal

\*\* calcium, sodium, magnesium, and potassium.

\*\* ICP metals scan: aluminium, antimony, arsenic, beryllium, bismuth, boron, cadmium, chromium, cobalt, copper, iron, lead, mercury, molybdenum, nickel, palladium, platinum, selenium, silver, thallium, uranium, vanadium and zinc. Analysis should be done for both total and dissolved metals.



<b>Table 2b – Receiver Water Quality Monitoring</b> (at locations BHP-2, BHP-3, BHP-4, BHP-5, and BHP-6)		
<b>Effluent Parameter</b>	<b>Sample Type</b>	<b>Frequency*</b>
Alkalinity	Grab	Seasonal
Dissolved Oxygen	Grab/Probe	Seasonal
Dissolved Organic Carbon	Grab	Seasonal
Cations**	Grab	Seasonal
Chloride	Grab	Seasonal
Conductivity	Grab	Seasonal
Hardness	Grab	Seasonal
Metals**	Grab	Seasonal
Oil and Grease	Grab	Seasonal
pH	Grab/Probe	Seasonal
Total Phosphorus	Grab	Seasonal
Temperature	Grab/Probe	Seasonal
Total Ammonia (ammonia + ammonium)	Grab	Seasonal
Total Dissolved Solids	Grab	Seasonal
Total Suspended Solids	Grab	Seasonal
Sulphate	Grab	Seasonal

\* **Seasonal** means once during Spring, Summer and Fall.

<b>Table 3 - Ground-water Monitoring</b> (at Wells locations: MW07-01S, MW07-01D, MW12-02, MW12-03, MW12-05, MW12-06, MW18-WWW013, and MW18-WIS207)	
<b>Frequency</b>	Once in Spring, Summer and Fall
<b>Sample Type</b>	Grab
<b>Parameters</b>	<p>field and lab pH, field conductivity, field temperature, hardness, dissolved organic carbon, total dissolved organic carbon, nitrate, total dissolved solids, alkalinity, acidity, hardness, ammonium, sulphate, phosphorous, aluminium, antimony, arsenic, beryllium, bismuth, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, palladium, platinum, potassium, selenium, silver, sodium, thallium, uranium, vanadium, zinc, and zirconium.</p> <p>Analysis for metals should be for dissolved metals and analysis should be completed on a filtered sample.</p>

**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s) 7483-BP6TLQ issued on May 18, 2020**

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land Tribunal and in accordance with Section 47 of the *Environmental Bill of Rights*, 1993, 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 ("the Notice") 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.

Pursuant to subsection 139(3) of the *Environmental Protection Act*, a hearing may not be available with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

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:

Registrar\*  
Ontario Land Tribunal  
655 Bay Street, Suite 1500  
Toronto, Ontario  
M5G 1E5  
OLT.Registrar@ontario.ca

and

The Minister of the Environment,  
Conservation and Parks  
777 Bay Street, 5th Floor  
Toronto, Ontario  
M7A 2J3

and

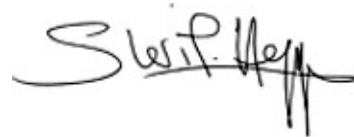
The Director appointed for the purposes of  
Part II.1 of the *Environmental Protection Act*  
Ministry of the Environment,  
Conservation and Parks  
135 St. Clair Avenue West, 1st Floor  
Toronto, Ontario  
M4V 1P5

\* **Further information on the Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or [www.olt.gov.on.ca](http://www.olt.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.

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

DATED AT TORONTO this 3rd day of October, 2024



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Sherif Hegazy, P.Eng.

Director

appointed for the purposes of Part II.1 of the  
*Environmental Protection Act*

MN/

c: District Manager, MECP Sudbury  
Andrew Sinclair, P.Eng., Stantec Consulting Ltd.