

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

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 4671-D4PGLH Issue Date: April 22, 2025

Northern Sun Mining Corp. 7030 Woodbine Ave, No. 405

Markham, Ontario

L3R 6G2

Site Location: Redstone Mine and Mill

South Porcupine

Part 1300, 1301, and 1302, Plan 6R-3763 City of Timmins, District of Cochrane

Ontario P0N 1H0

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:

alteration, usage and operation of sewage Works for the collection, transmission, and treatment of Process Effluent including wastewater effluent from milling process, accumulated site stormwater runoff drainage and collected seepage associated with Tailings Areas, as well as sanitary sewage, serving the metal mining and milling site named Redstone Mine and Mill located at the above Site Location, to enable a maximum total ore throughput of 1,500 tonnes per day (based on yearly average) of gold, nickel or copper ore, discharging, treated sanitary sewage into subsurface (groundwater), and treated Final Process Effluent with a Monthly Average Daily Volume of Effluent of 1,170 cubic metres per day, into Redstone River, consisting of the following:

PROPOSED WORKS

New Tailing Area (New Tailings Storage Facility - NTSF)

One (1) new Tailings Area - New Tailing Storage Facility (NTSF) designed for a total tailing storage capacity of approximately 6.6 million tones to an ultimate crest elevation of 316 metres above sea level (masl.) and located in the proximity to the east of existing Tailings Storage Facility (TSF), initially formed to the west by the existing East Dam of existing TSF, to the south-west by South-West Starter Dam (crest elevation: 305 masl. to 306 masl.), to the south-east and east by natural high ground, and to the north by North Starter Dam (crest elevation: 305 masl. to 306 masl.), for the storage of slurried tailings from milling floatation process, as well as the management of foundation seepage and stormwater runoff from the NTSF Catchment Area,

complete/associated with the following:

- pipelines for the conveyance and deposition of slurried tailings from the mill into the NTSF;
- one (1) water pond NTSF Water Pond in the tailings area located north of the new NTSF, complete with a 35 metre wide emergency spillway located on North Dam discharging Overflow Effluent via a spillway channel to the surface north of the dam;
- one (1) seepage collection systems located at the toes of the North and South-West Dams, each consisting of a ditch towards a series of sumps located at local topographic lows, collecting and pumping foundation seepage back to the NTSF;
- pipelines for the conveyance of the accumulated water in the NTSF Water Pond to the existing Thickener described below, or to the Water Pond of existing Tailings Storage Facility (TSF) where the water is pumped to the existing Thickener;
- one (1) Overflow Effluent Sampling Point located at the spillway channel, prior to discharging to the surface north of the dam; and
- one (1) ferric sulphate addition system for the injection of ferric sulphate to the tailings pipeline discharging to the TSF or NTSF.

New Final Process Effluent Disposal Facility

- one (1) pumping station located downstream of existing Final Process Effluent weir at the existing Treated Effluent Pond;
- approximately 750 metre long pipelines and an outfall including a rip-rap pad, discharging the Final Process Effluent, with a Monthly Average Daily Volume of Effluent of 1,170 cubic metres per day, into Redstone River;
- one (1) Final Process Effluent flow meter located on the discharge pipeline (approximately at chainage marker "670 m");
- one (1) Final Process Effluent Sampling Point located at the end of pipeline where the Final Process Effluent discharges on the rip-rap pad.

Miscellaneous

• all other mechanical system, electrical system, instrumentation and control system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the Proposed Works in accordance with this Approval, in the context of process performance and general principles of wastewater engineering only.

EXISTING WORKS

Tailings Storage Facility (TSF)

- one (1) 22.7 hectare Tailing Area Tailings Storage Facility (TSF) with a design final dam crest to an elevation of 313.0 masl., and a TSF freeboard of 0.5 metre, including a lined cell for gold ore tailing storage and a Water Pond, complete with discharging pipeline to discharge effluent from the Water Pond to a Thickener, as well as an 8-metre wide emergency spillway discharging Overflow Effluent via a spill chute to the Redstone Ditch (before commissioning of the NTSF), or discharging overflow into the NTSF (upon commissioning of the NTSF); and
- one (1) Overflow Effluent Sampling Point located at the spill chute, prior to discharging to the Redstone Ditch (before commissioning of the NTSF).

Effluent Treatment Facility

One (1) Effluent Treatment Facility with a treatment capacity of 1,200 cubic metres per day, receiving Process Effluent from the mining and mill process, consisting of the following:

Thickener

- one (1) high density thickener, having a volumetric capacity of 561 cubic metres and an estimated variable retention time from 1.65 to 9.9 hours for a feed rate of 95 to 12.6 litres per second respectively, receiving effluent from the Water Pond in the TSF and/or NTSF to provide primary treatment in reducing metal concentrations of the Process Effluent, discharging underflow to the TSF/NTSF and treated effluent (overflow) to the Recycling Pond, equipped with a pumping system, chemical feed system and pH control system;
- one (1) chemical addition system for the dosing of coagulates and Potassium Hydroxide into the inlet pipeline of the Thickener; and
- one (1) chemical addition system for the dosing of flocculant/polymer into the Thickener.

Recycle Pond

• one (1) Recycle Pond (lined as required) with 14,785 cubic metre capacity and with average surface area of 6,891 square metres and average storage depth of 2.23 metres, providing 4 days of hydraulic retention time under normal operating conditions, located southeast of the mill, receiving the treated effluent from the Thickener, recycling up to 81% of collected water to the milling process, or discharging to the Treated Effluent Pond.

Treated Effluent Pond

• one (1) Treated Effluent Pond with 10,787 cubic metre storage capacity, lined and with average surface area of 4,230 square metres and average storage depth of 2.55 metres, providing 22.3 days of hydraulic

retention time under normal operating conditions, located southeast of the Recycle Pond, receiving the effluent from the Recycle Pond, treated effluent from an Effluent Treatment Facility, and stormwater runoff from the site drainage area, discharging to the Final Process Effluent Disposal Facility described above as part of Proposed Works.

Clarifier

- one (1) 3.05 metre diameter high capacity Clarifier with 1.83 metres of operating water depth, designed to handle up to 20 litres per second of Minewater Effluent, equipped with 3 HP motor and a scrapper, a chemical feed system, and associated controls and appurtenances, discharging underflow to the TSF or NTSF, and the treated Process Effluent (up-flow) to a Mixing Tank;
- one (1) metal precipitation and polymer addition system consisting of 2500 litre capacity tank and 1.0 litres per minute capacity dosing pump adding polymer solution to the centre well of the Clarifier or to the Mixing Tank; and
- one (1) flocculent addition system consisting of 1400 litre capacity tank and 1.0 litre per minute capacity dosing pump adding flocculent solution to the centre well of the Clarifier.

Mixing Tank

• one (1) 6.1 metres long by 1.83 metres wide by 2.44 metres deep Mixing Tank equipped with chemical feed lines, discharging to a Settling Pond.

Settling Pond

• one (1) Settling Pond with 3,952 cubic metres of capacity, with dimensions of approximately 52 metres long by 38 metres wide by 2 metres storage depth, providing an estimated 8 days of retention period, located south of the Recycle Pond, discharging to the Recycle Pond.

Sanitary Sewage Treatment and Subsurface Disposal Systems

- one (1) sanitary sewage treatment and subsurface disposal system serving the Mill Facility, having a design capacity of 18,500 litres per day and consisting of one (1) 18,500 litre capacity septic tank, an eight hole distribution box and a raised subsurface disposal bed consisting of 160 metres of Equalizer 24 Chambers complete with a 15.0 metre wide mantle.
- one (1) sanitary sewage treatment and subsurface disposal system serving the Office/Dry Complex and Head Frame Facilities, having a design capacity of 19,750 litres per day and consisting of two (2) 30,000 litre capacity septic tanks in series, one (1) 4,500 litre capacity pump chamber equipped with two (2) 7 litres per minutes pumps and a dual alternating pump control system, two (2) eight hole distribution boxes and a raised subsurface disposal field consisting of two beds of 10 runs each of 30 metre long Infiltrator 36 absorption trenches at 1.8 metre spacing, on imported fill with design percolation time of approximately 6 minutes per centimetre, complete with a 15.0 metre wide mantle.

Miscellaneous

• all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned Existing Works.

All in accordance with the submitted 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. "Daily Volume of Effluent" for a stream volume is the volume that flowed past the sampling point maintained in this Approval on the stream during the twenty four (24)-hour period preceding the Pick-Up of the first sample picked up from the stream for the day.
- 3. "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;
- 4. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located, and it means the District Managers of the Timmins District Office in the Approval;
- 5. "Eight(8)-hour Period" means the period between:
 - a. midnight and 8 a.m.;
 - b. 8 a.m. and 4 p.m.; or
 - c. 4 p.m. and midnight.
- 6. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
- 7. "Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted;
- 8. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;
- 9. "Final Process Effluent" means Process Effluent that is discharged to the environment through the approved effluent disposal facilities, that are required to meet the compliance limits stipulated in the Approval for the effluent treatment facilities at the Final Process Effluent Sampling Point(s);
- 10. "Final Process Effluent Monitoring Stream" means a process effluent stream on which a sampling point is maintained under Condition 10 regarding monitoring and recording;
- 11. "Final Process Effluent Sampling Point" means a sampling point maintained on a process effluent stream under Condition 10 regarding monitoring and recording;
- 12. "Limited Operational Flexibility" (LOF) means the conditions that the Owner shall follow in order to

- undertake any modification that is pre-authorized as part of this Approval;
- 13. "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, as amended;
- 14. "Limited Parameter" means a parameter for which a limit is specified in **Schedule B** (Final Process Effluent Limits) in this Approval;
- 15. "Metal Mining Plant" means any opening or excavation in, or working of, the ground for the purpose of winning any metal, metal concentrate or metal-bearing substance and includes all associated,
 - a. ways, works, machinery, buildings or premises below or above the ground,
 - b. waste disposal sites, wastewater treatment facilities, and
 - c. roasting or smelting furnaces, refineries, concentrators or mills, wherever located, that are used in connection with washing, crushing, grinding, sifting, reducing, leaching, roasting, smelting, refining or treating of any metal, metal concentrate or metal-bearing substance;
- 16. "Minewater Effluent" means a process effluent in a stream,
 - a. that flows from any opening or excavation in, or working of, the ground at the plant for the purpose of winning any Metal, and
 - b. that does not flow from a Tailings Area or other Effluent Treatment Facility associated with a Tailings Area;
- 17. "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;
- 18. "Monthly Average Effluent Concentration" is the mean of all Single Sample Results of the concentration of a contaminant in the Final Process Effluent sampled or measured during a calendar month.
- 19. "Monthly Average Daily Volume of Effluent" means the cumulative total daily volume of effluent discharged during a calendar month divided by the number of days during which the stream effluent was discharged that month;
- 20. "Operating Agency" means the Owner or the entity that is authorized by the Owner for the management, operation, maintenance, or alteration of the Works in accordance with this Approval;
- 21. "Overflow Effluent" means effluent discharged from the Tailing Area through a spillway or other engineered structure designed to protect the Tailings Area from failure in the event of an extraordinary thaw or storm event:
- 22. "Overflow Effluent Monitoring Stream" means an overflow effluent stream on which a sampling point is

- maintained under Condition 6 regarding overflows;
- 23. "Overflow Effluent Sampling Point" means a sampling point maintained on an Overflow Effluent Monitoring Stream under **Condition 6** regarding overflows;
- 24. "Overflow Event" means an action or occurrence, at a given location within the Works that causes an Overflow Effluent. An Overflow Event ends when there is no recurrence of Overflow Effluent in the 12-hour period following the last Overflow Event;
- 25. "Owner" means Northern Sun Mining Corp., and its successors and assignees;
- 26. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
- 27. "Pick-Up", in relation to a sample, means pick-up for the purpose of storage, including storage within an automatic sampling device, and transportation to and analysis at a laboratory;
- 28. "plant" means the industrial facility that produces metal, metal concentrates or metal-bearing substances and the developed property, waste disposal sites, Tailings Area (Tailings Storage Facilities TSF and NTSF), Effluent Treatment Facilities and Final Process Effluent Disposal Facilities associated with it; and it is the Redstone Mine and Mill in this Approval;
- 29. "Process Effluent" means,
 - a. effluent that, by design, has come into contact with Process Materials other than Process Materials stored in a materials storage site, including but not limited to a waste rock storage site or a slag storage site,
 - b. effluent that results from cleaning or maintenance operations at the plant during a period when all or part of the plant is shut down, and
 - c. any effluent described in paragraphs (a) to (b) combined with Cooling Water Effluent or Storm Water Effluent;
- 30. "Process Change" means a change in equipment, production processes, Process Materials or treatment processes;
- 31. "Process Materials", in relation to Redstone Mine and Mill, means raw materials for use in an industrial process at the plant, manufacturing intermediates produced at the plant, or products or by-products of an industrial process at the plant, but does not include chemicals added to cooling water for the purpose of controlling organisms, fouling and corrosion;
- 32. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
- 33. "Single Sample Result" means the test result of a parameter in the effluent discharged on any day, as

measured by a probe, analyzer or in a composite or grab sample, as required;

- 34. "Tailings Area" means an area that is confined by artificial or natural structures or both and that is used for the disposal of finely divided solid waste materials produced as a result of the processing of metal, metal concentrates or metal-bearing substances; and
- 35. "Works" means the approved sewage works, and includes Proposed Works, Existing Works and modifications made under Limited Operational Flexibility.

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 approvals from the Ministry of Energy and Mines, and/or Ministry of Natural Resources, necessary 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. CHANGE OF OWNER AND OPERATING AGENCY

- 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;
- 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. C.39* shall be included in the notification.
- 2. The Owner shall notify the District Manager, in writing, of any of the following changes within **thirty** (30) days of the change occurring:
 - a. change of address of the Operating Agency;
 - b. change of the Operating Agency, including address of the new Operating Agency.
- 3. In the event of any change in ownership of the Works, the Owner shall notify the succeeding owner in writing, of the existence of this Approval, and forward a copy of the notice to the District Manager.
- 4. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this Approval.

3. CONSTRUCTION OF PROPOSED WORKS

- 1. All Proposed Works in this Approval shall be constructed and installed and must commence operation within **five (5) years** of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the Works not in operation. In the event that the construction, installation and/or operation of any portion of the Proposed Works is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).
- 2. Upon completion of construction of the Proposed Works, the Owner shall prepare and submit a written statement to the District Manager, certified by a Licensed Engineering Practitioner, that the Proposed Works is constructed in accordance with this Approval.
- 3. One (1) week prior to the commencement of the operation of the Proposed Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.
- 4. Within **one** (1) **year** of completion of construction of the Proposed Works, a set of record drawings of the Works shall be prepared or updated. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be readily accessible for reference at the Works.

4. PROCESS CHANGE

- 1. The Owner shall notify the District Manager in writing of any Process Change or redirection of or change in the character of an effluent stream that affects the quality of effluent at any sampling point maintained under this Approval, within thirty (30) days of the change or redirection.
- 2. The Owner need not comply with subsection 1 of this condition where the effect of the change or redirection on effluent quality is of less than one week's duration.
- 3. Prior to the milling of a new ore other than that approved by this Approval which are listed in the document entitled "Historical ore bodies and types processed at Northern Sun Mining Inc. Redstone Mill Site, Timmins, Ontario" dated August 1st 2024 and prepared by WSP Canada Inc., as amended, the Owner shall prepare and submit to the District Manager the following information and proceed with milling of the new ore upon receipt of a written approval from the District Manager:
 - a. A listing of the mineralogy of each ore currently milled, as well as the mineralogy of the proposed new imported ore to be milled at the Redstone Mine and Mill, to include but not limited to: the percentage composition each mineral in the ore (e.g. pyrite, pyrrotite, carbonate, etc.), the concentration of each metallic element in the ore:
 - b. The result and interpretation of standard Static Acid Base Accounting (ABA) testing consistent with the guidance set out by the MEND (2009) Prediction Manual for the Drainage Chemistry of Sulphidic Geologic Material, MEND Report 1.20.1, as updated time to time.
 - c. A laboratory or pilot scale process to simulate the effluent from the Works, including a simulation of the milling process for the new ore/blend of ores, and the wastewater treatment process as can reasonably accomplished. The chemical analysis of the effluent should be conducted for the following parameters:
 - i. pH, Alkalinity, Total Suspended Solids, Thiocyanates, BOD5, Conductivity, Sulphate, Fish Toxicity, Total Ammonia, Oil and Grease; and
 - ii. both total and total dissolved fractions of elements including Aluminium, Arsenic, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Selenium, Silver, Thallium, Uranium, Vanadium, Zinc.
 - d. an assessment statement as to how the deposition of tailing from the new ore may effect long-term management of the works upon the ultimate cessation of the tailing deposition.
- 4. Subject to the results of the information and testing described in the above Subsection 3 of this Condition, further information and/or testing may be required as a condition of approval to mill a new ore other than approved by this Approval. Such information and/or testing could include:
 - a. Kinetic testing to determine the leaching rate and the resulting drainage chemistry of the tailings

- generated from the milling of the proposed new ore. Testing, interpretation and reporting procedures should be consistent with the guidance set out by the MEND (2009), as updated from time to time.
- b. Predictive modelling of acid generation and metal leaching potential to aid in predicting the long-term effects on water quality of acid generating wastes.
- 5. An updated tailing deposition plan, including classification of tailings using appropriate criteria as described in the guidance set out by the MEND (2009), as updated from time to time, in the event that the information and testing results associated with above Subsections 3 and 4, herein, indicate the special tailings management and/or deposition strategies that differ from those in place at the mill are required to provide suitable environmental protection.
- 6. For process of a new ore up to 5,000 tonnes per month originating from any single source, the requirements of the Clause 3.c of Subsection 3 with respect to kinetic weathering of the new ore shall not apply. The Owner shall however conduct a standard Acid Base Accounting (ABA) test and leachate testing, prior to custom milling the new ore at the site, and shall provide the results to the District Manager.
- 7. Following receipt of the information pursuant to subsection 3, the District Manager may request that the Owner submit an application to the Director for an amendment to this Approval to allow milling of the proposed new ore.
- 8. Prior to a re-start of mining operation at the Redstone Mine and Mill, the Owner shall conduct water balancing analysis/calculations. Should the analysis calculations results show an increase of predicted Final Effluent discharging, the Owner shall submit an application to amend this Approval.

5. BYPASSES

- 1. The Owner shall not permit effluent that would ordinarily flow past a Final Process Effluent Sampling Point maintained under this Approval to be discharged from Redstone Mine and Mill without flowing past that Final Process Effluent Sampling Point, including during a maintenance operation, a breakdown in equipment or any scheduled or unscheduled event.
- 2. The Owner shall report orally, as soon as reasonably possible, and in writing, as soon as reasonably possible, any incident in which Process Effluent is discharged from Redstone Mine and Mill without flowing past a Final Process Effluent Sampling Point maintained on a process effluent stream in accordance with this Approval before being discharged.

6. OVERFLOWS

- 1. The Owner shall not permit Overflow Effluent to be discharged from Redstone Mine and Mill unless it is unavoidable as a result of an extraordinary thaw or storm event.
- 2. The Owner shall establish, an Overflow Effluent Sampling Point on each Overflow Effluent Monitoring Stream at Redstone Mine and Mill. The Owner shall, during each Eight(8)-hour Period in which

Overflow Event is discharged, collect a grab sample of the Overflow Effluent Sampling Point and shall analyze each sample for each Limited Parameter. Each grab sample collected shall be Picked-Up within four (4) hours of when it was collected.

- 3. At the beginning of an Overflow Event, the Owner shall immediately notify the Ministry Spills Action Centre (SAC) (telephone number: 1-800-268-6060). This notice shall include, at a minimum, the following information:
 - a. the date and time of the beginning of the overflow;
 - b. the point of the overflow from the Works, the treatment process(es) gone through prior to the overflow, and whether the overflow is discharged through the effluent disposal facilities or an alternate location; and
 - c. the effort(s) done to maximize the flow through the downstream treatment process(es) and the reason(s) why the overflow was not avoided.
- 4. Upon confirmation of the end of an Overflow Event, the Owner shall immediately notify the SAC. This notice shall include, at a minimum, the following information:
 - a. the date and time of the end of the Overflow Effluent;
 - b. the estimated or measured volume of the Overflow Effluent.
- 5. The Owner shall develop a notification procedure in consultation with the District Manager and SAC and notify the public and downstream water users that may be adversely impacted by any Overflow Events.
- 6. The Owner shall forthwith develop a response plan for any Overflow Events, and document it in a site Emergency Response, Spill Reporting and Contingency Plan.

7. DESIGN OBJECTIVES

- 1. The Owner shall design and undertake everything practicable to operate the Works in accordance with the following objectives:
 - a. Final Process Effluent 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 or sheen or foam or discolouration on the receiving waters.
 - b. Monthly Average Daily Volume of Effluent discharged from the Final Process Effluent Disposal Facility to the Redstone River is no more than 1,170 cubic metres.

8. COMPLIANCE LIMITS

1. The Owner shall operate and maintain the Works such that the compliance limits for the Final Process Effluent listed in the table included in **Schedule B** are met.

9. OPERATION AND MAINTENANCE

- 1. The Owner shall ensure that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate laboratory facilities, adequate staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and relevant regulations made under the OWRA, process controls and alarms and the use of process chemicals and other substances used in the Works.
- 2. The Owner shall prepare/update and implement the operations manual for the Works within **six (6) months** of completion of construction of the Proposed Works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for the Works under routine operating conditions;
 - 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. procedures for the inspection and calibration of monitoring equipment;
 - e. operating procedures for the Works to handle situations outside routine operating conditions and emergency situations such as a structural, mechanical or electrical failure, or an unforeseen flow condition, including procedures to minimize Overflow Events;
 - f. a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the Spills Action Centre (SAC) and District Manager;
 - g. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
- 3. 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.
- 4. The Owner shall undertake visual inspection of the Works once a year during the snow free period by a Professional Engineer. The scope of this inspection shall include, but not limited to, the following: the perimeter tailings dam, Recycle Pond, Treated Effluent Pond and on the integrity of the dams, and shall

provide a report stamped by the Professional Engineer to the District Manager by no later than March 31, of each year. The inspection shall also include inspection to identify the location and amounts of any seepage from the dams and collection of water quality samples, and analysis, of any observed seepage water.

- 5. The Owner shall ensure that each septic tank is pumped out every 3-5 years or when the tank is 1/3 full of solids and the effluent filter is cleaned out at minimum once a year (or more often if required).
- 6. The Owner shall ensure that grass-cutting is maintained regularly over the subsurface disposal bed(s), and that adequate steps are taken to ensure that the area of the underground beds is protected from vehicle traffic.
- 7. The Owner shall visually inspect the general area where the Sanitary Sewage Treatment and Subsurface Disposal Systems are located for break-out once every month during the operating season.
- 8. In the event a break-out is observed from a subsurface disposal bed, the Owner shall do the following:
 - a. sewage discharge to that subsurface disposal system shall be discontinued;
 - b. the incident shall be **immediately** reported verbally to the Spills Action Centre (SAC) at (416) 325-3000 or 1-800-268-6060;
 - c. submit a written report to the District Manager within one (1) week of the break-out;
 - d. access to the break-out area shall be restricted until remedial actions are complete;
 - e. during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to the environment; and
 - f. sewage generated at the site shall be safely collected and disposed of through a licensed waste hauler to an approved sewage disposal site.
- 9. The Owner shall maintain a logbook to record the results of operation and maintenance activities specified in the above subsections 5 to 8, and shall keep the logbook at the site and make it available for inspection by the Ministry staff.
- 10. The Owner shall ensure that the Operating Agency possesses the level of training and experience sufficient to allow safe and environmentally sound operation of the Works.
- 11. 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.

10. MONITORING AND RECORDING

- 1. The Owner shall, upon commencement of operation of the Works, carry out a scheduled Monitoring Program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the tables under the monitoring program included in **Schedule C** and record all results, as follows:
 - a. all samples and measurements are to be taken at a time and in a location characteristic of the quality and quantity of the sewage stream over the time period being monitored.
 - b. definitions and preparation requirements for each sample type are included in document referenced in Paragraph 3.a of Subsection 3.
 - c. definitions for frequency:
 - i. Thrice Weekly means three (3) days in every week;
 - ii. Weekly means once every week;
 - iii. Monthly means once every month;
 - iv. Quarterly means once every three months; and
 - v. Semi-annually means once every six months.
 - d. For Thrice Weekly sampling, there shall be an interval of at least twenty (24) hours between successive Pick-Up days; and all the samples picked up in a week shall be picked up on the same three (3) days in the week.
 - e. For Weekly sampling, there shall be an interval of at least four (4) days between successive Pick-Up days; and all the samples picked up in a week shall be picked up on the same day in the week.
 - f. For Monthly sampling, there shall be an interval of at least fifteen (15) days between successive Pick-Up days; and all the samples picked up in a month shall be picked up on the same day in the month.
 - g. For Quarterly sampling, there shall be an interval of at least forty-five (45) days between successive Pick-Up days; and all the samples picked up in a quarter shall be picked up on the same day in the quarter.
 - h. For Semi-annually sampling, there shall be an interval of at least ninety (90) days between successive Pick-Up days; and all the samples picked up in a semi-annual shall be picked up on the same day in the Semi-annual period.
 - i. Where picking-up samples are required for parameters requiring Thrice Weekly or Weekly sampling,

- the Owner shall pick up samples collected over the twenty-four (24) hour period immediately preceding the Pick-Up.
- j. For a Monthly acute lethality testing, the sample shall be collected on a day in a month that is also the day when Weekly sample is collected, and the Owner shall immediately pick up a grab sample and perform an acute lethality test on each sample.
- k. The Owner shall undertake the Final Process Effluent and surface water monitoring quality control measures as outlined in Table C-3 Quality Control Final Process Effluent and Surface Water Monitoring of **Schedule C**.
- 1. The sampling points, measurement frequencies, and sampling parameters specified in the monitoring program outlined in **Schedule** C in respect to any parameter may, after **one** (1) **year** of monitoring in accordance with this Condition 10 regarding monitoring and reporting, be modified by the Director in writing.
- 2. Despite Subsection 1, the Owner need not collect samples from each Process Effluent Monitoring Stream, on a day on which Final Process Effluent is not being discharged from the Works.
- 3. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:
 - 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", as amended;
 - c. the Environment Canada publications, as follow:
 - i. "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" (EPS 1/RM/13 Second Edition December 2000), as amended;
 - ii. "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to *Daphnia magna*" (EPS 1/RM/14 Second Edition December 2000), as amended;
 - iii. "Biological Test Method: Test of Larval Growth and Survival Using Fathead Minnows" Report EPS1/RM/22 (Second Edition, February 2011), as amended;
 - iv. "Biological Test Method: Test of Reproduction and Survival Using the Cladoceran *Ceriodaphnia dubia*", Report EPS 1/RM/21 (Second Edition, February 2007), as amended; and
 - d. for any parameters not mentioned in the documents referenced in Paragraphs 3.a, 3.b, and 3.c of Subsection 3, a written approval of the District Manager shall be obtained prior to sampling.
- 4. The minimum monitoring frequency with respect to acute lethality to Rainbow Trout and *Daphnia*

magna shall, after twelve (12) consecutive monthly monitoring results not indicating acute lethality, be reduced to Quarterly. If any Final Process Effluent sample indicates acute lethality to Rainbow Trout or Daphnia magna, the monitoring frequency shall revert back to Monthly/Weekly and the Owner shall carry out the following immediately:

- a. Review the following:
 - i. plant operations around the time of the toxicity event; and
 - ii. all data available regarding plant operations and Final Process Effluent quality.
- b. An investigation shall be undertaken to determine the cause or source of the toxicity.
- c. Upon determination of cause or source of acute lethality to Rainbow Trout or *Daphnia magna*, the Owner shall, in consultation with Ministry District Manager, identify appropriate control measures to achieve non-acutely lethal effluent, specify time lines for the implementation of these measures, and carry out their implementation.
- 5. The Owner shall notify the Director in writing of any change in the frequency of acute lethality testing under this Approval, within thirty (30) days after the day on which the change begins.
- 6. The Owner shall establish a program of monitoring aquatic biology (benthic invertebrates, fish) and sediment in Redstone River. The biological monitoring program can be harmonized with requirements of the federal Environmental Effects Monitoring (EEM) program, but the provincial requirement is not limited by the federal program. The study design report shall be submitted to District Manager in advance of each study and the final interpretive report shall be submitted to District Manager following each study, providing District Manager with the opportunity to provide technical input and requirements that are not necessarily confined by the federal EEM program.
- 7. The Owner shall monitor and record, in cubic metres a Daily Volume of Effluent for each day on which a sample is collected under this Approval for each Process Effluent Monitoring Stream, using continuous flow measuring devices and instrumentations/pumping rates calibrated to an accuracy within plus or minus fifteen per cent (+/- 15%).
- 8. The Owner shall use a flow measure method to an accuracy of plus or minus twenty per cent (+/- 20%) to determine in cubic metres a volume of effluent for each Overflow Effluent Monitoring Stream for each Eight(8)-hour Period for which a sample is collected under this Approval from the stream. A volume of effluent for an Overflow Effluent Monitoring Stream is the volume that flows past the Overflow Effluent Sampling Point on the stream during the Eight(8)-hour Period.
- 9. The Owner shall monitor and record the Redstone River flow at approximate UTM coordinates 17U 487722 E, 5351593 N. The level of the river shall be recorded hourly and the data collected monthly. The rating curve shall be developed by conducting manual flow and level measurements monthly (during ice free conditions) for two years and then reduced to quarterly thereafter. The District Manager may amend this hydrometric monitoring by letter. The amendment shall be effective immediately upon

- notification by the District Manager.
- 10. The Owner shall install a replacement monitoring for any well that may be overprinted by the NTSF in consultation and agreement with the District Manager. The overprinted monitoring well shall be decommissioned in accordance with O. Reg. 903.
- 11. The Owner shall determine by calibration or confirm by means of a certified report of a Licensed Engineering Practitioner that each flow measurement method used under above Subsections 7, 8 and 9 meets the accuracy requirements for each effluent stream.
- 12. Where the Owner uses a new flow measurement method or alters an existing flow measurement method, the Owner shall determine by calibration or confirm by means of a certified report of a Licensed Engineering Practitioner that each new or altered flow measurement method meets the accuracy requirements of Subsections 7, 8 and 9, as the case may be, within two weeks after the day on which the new or altered method or system is used.
- 13. The Owner shall develop and implement a maintenance schedule and a calibration schedule for each flow measurement system installed at Redstone Mine and Mill and shall maintain each flow measurement system according to good operating practices.
- 14. The Owner shall use reasonable efforts to set up each flow measurement system used for the purposes of this section Condition 10 regarding monitoring and reporting in a way that permits inspection by a provincial officer.
- 15. 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.

11. LIMITED OPERATIONAL FLEXIBILITY

- 1. The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works", included under **Schedule D** of this Approval, as amended.
- 2. Sewage Works under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.
- 3. The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.
- 4. For greater certainty, the following are <u>not</u> permitted as part of Limited Operational Flexibility:
 - a. Modifications to the Works that result in an increase of the approved rated capacity of the Works;

- b. Modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;
- c. Modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;
- d. Modifications to the Works approved under s.9 of the EPA, and
- e. Modifications to the Works pursuant to an order issued by the Ministry.
- 5. Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.
- 6. If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, provide a revised copy of this plan for approval to the local fire services authority prior to implementing Limited Operational Flexibility.
- 7. For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the *Environmental Protection Act, Lakes and Rivers Improvements Act* and the *Mining Act*.
- 8. At least thirty (30) days prior to implementing Limited Operational Flexibility, the Owner shall complete a **Notice of Modifications** describing any proposed modifications to the Works and submit it to the District Manager.
- 9. The Owner shall not proceed with implementation of Limited Operational Flexibility until the District Manager has provided written acceptance of the Notice of Modifications or a minimum of thirty (30) days have passed since the day the District Manager acknowledged the receipt of the Notice of Modifications.

12. REPORTING

- 1. 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.
- 2. 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.
- 3. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

- 4. On or before June 1 in each year, the Owner shall prepare a report Reports Available to the Public, submit to the District Manager upon request, and ensure this report is available to any person at Redstone Mine and Mill on request during the plant's normal office hours, in an electronic format related to the previous calendar year and including the following:
 - a. a summary of plant loadings calculated under sections 2 and 3 of **Schedule E**;
 - b. a summary of concentrations determined under sections 4 and 5 of **Schedule E**;
 - c. a summary of the results of monitoring performed under **Condition 10** regarding monitoring and reporting;
 - d. a summary of calculations performed for the volume of effluent for Overflow Effluent Monitoring Stream and Daily Volume of Effluent for each Final Process Effluent Monitoring Stream;
 - e. a summary of the concentrations or other results that exceeded limit prescribed in Schedule B; and
 - f. a summary of the Overflow Effluent incidents in which Process Effluent was discharged without flowing past a sampling point maintained on a Final Process Effluent Monitoring Stream in accordance with this Approval before being discharged.
- 5. The Owner shall prepare a Quarterly Report (in this subsection, "Quarter" means a period of three (3) consecutive months beginning on the first day of January, April, July or October), no later than forty five (45) days after the end of each Quarter, and submit to the District Manager in an electronic format via Ministry on-line submission platform/portal. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period (throughout the Quarter):
 - a. all information relating to reporting requirements of the Approval for bypasses, Overflow Events, and non-compliance during the Quarter;
 - b. for each month in the Quarter, the monthly average plant loadings and the highest and lowest daily plant loadings calculated under **Schedule E** for each Limited Parameter;
 - c. for each day in the Quarter, each daily Overflow Effluent stream loading calculated under **Schedule** E for each Limited Parameter;
 - d. for each month in the Quarter, the Monthly Average Effluent Concentrations and the highest and lowest analytical results for each Limited Parameter in the Final Process Effluent Monitoring Stream with Thrice Weekly or Weekly monitoring frequency;
 - e. for each day in the Quarter, the daily concentrations calculated and the highest and lowest analytical results for each Limited Parameter in each Overflow Effluent Monitoring Stream;
 - f. for each month in the Quarter, the monthly average Final Process Effluent plant volume and the

highest and lowest daily Final Process Effluent plant volumes;

- g. for each day in the Quarter, the daily Overflow Effluent stream volumes calculated;
- h. the number of days in each month in the Quarter on which Final Process Effluent or Overflow Effluent was discharged; and
- i. for each month in the Quarter, the highest and lowest pH results obtained for each Final Process Effluent Monitoring Stream.
- 6. The Owner shall prepare performance reports on a calendar year basis and submit to the District Manager in an electronic format 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 Final Effluent monitoring data, including concentrations/results, acute and chronic toxicity test results, Daily Volume of Effluent, Monthly Average Daily Volume of Effluent, and a comparison to the objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;
 - b. A surface water monitoring report including at least the following minimum information:
 - i. Description and evaluation of any and all aquatic environment effects associated with the mining operations;
 - ii. Tabulation and interpretation of current and historical receiver surface water monitoring data (including electronic file of historical and current data in Excel format), statistical trend analysis, and a comparison to Ontario Provincial Water Quality Objectives, Canadian Water Quality Guidelines, Federal Environmental Quality Guidelines, and for sulphate the British Columbia Water Quality Guideline;
 - iii. Graphs illustrating current and historical trends with time of key water quality parameters;
 - iv. Description, summary and discussion of fish, benthos and sediment sampling including but not limited to the following: reporting period activities summary; data collection methods; quality assurance and quality control outcomes; summary of monitoring data and comparison to guidelines for protection of aquatic life; and laboratory certificates of analysis;
 - v. Description, summary and discussion of the hydrometric program including but not limited to the following: reporting period activities summary; data collection methods; quality assurance and quality control outcomes; operations problems and corrective actions; summary of final effluent discharge volumes, including receiver: effluent discharge ratios; water level data (noting if the water level data is corrected for barometric pressure) and hydrographs with manual flow measurements; current rating curves with R2 values noting any rating curve shifts that were applied based on manually collected data; dates of manual flow and level measurements noting

- ice conditions within the waterbody; historical and current hydrometric data in electronic file (EXCEL format);
- vi. Description of any adverse ecological conditions and remedial actions taken in response;
- vii. A site plan(s) of the entire site illustrating significant features such as lakes, streams, ponds, seeps, ditches, collection and treatment facilities, and roadways, as well as all of the sampling locations; and
- viii. Universal transverse mercator (UTM) coordinates for all sampling locations, North American Datum (1983).
- c. a summary of all operating issues encountered and corrective actions taken;
- d. a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;
- e. a summary of any Final Process Effluent and Surface Water monitoring quality assurance or control measures undertaken;
- f. a summary of the calibration and maintenance carried out on all Process Effluent, Overflow Effluent, and Redstone River flow monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer;
- g. a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- h. a summary of any complaints received and any steps taken to address the complaints;
- i. a summary of all overflow and bypasses, other situations outside normal operating conditions and spills within the meaning of Part X of EPA and abnormal discharge events;
- j. a summary of all Notice of Modifications completed under subsection 8 of Condition 11 regarding limited operational flexibility, including a report on status of implementation of all modification; and
- k. any other information the District Manager requires from time to time.
- 7. The Owner shall submit an annual groundwater monitoring report prepared by a licensed independent Professional Geoscientist or Licensed Engineering Practitioner qualified in the field of hydrogeology, in an electronic format, to the District Manager on March 31st of each calendar year. This report can be merged with the annual report required pursuant to subsection (6) at the discretion of the District Manager. The annual groundwater monitoring report shall include the following minimum information:
 - 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 groundwater elevations;
- c. a groundwater contour map showing the groundwater elevations for each well, water table contours or potentiometric surface and the inferred groundwater flow directions;
- d. tables summarizing all historical and current water level data and analytical results for all parameters for each groundwater monitoring well with comparison to MECP Guideline B-7 Guidelines, Provincial Water Quality Objectives (PWQO) or Aquatic Protection Values (APV) where applicable;
- e. analysis of the groundwater data to identify spatial and temporal trends, as well as analysis of the data within the context of the site water quality Contingency Plan;
- f. graphs illustrating current and historical trends with time of key groundwater quality parameters;
- g. a copy of the borehole logs for all groundwater monitoring wells;
- h. a copy of the original laboratory analytical results; and
- i. conclusions and recommendations for future monitoring and/or contingency measures.

13. APPROVAL SUBJECT TO FINAL DRAWINGS

1. The Owner shall not construct any portion of the new Tailing Area - New Tailing Storage Facility (NTSF) development or allow its commencement, until detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of Works have been submitted to and approved by the Director.

Schedule A

1. Application for Environmental Compliance Approval dated May 14, 2021 and revised on March 12, 2024, submitted by Northern Sun Mining Corp. for the expansion of Tailings Area (Tailings Storage Facility) and alteration of the Final Process Effluent Disposal Facility, as well as the addition of a new process material - gold ore (for pre-processing) to the existing milling facility, including design reports, engineering drawings, specifications and other supporting information.

Schedule B

Final Process Effluent Compliance Limits

From the Final Process Effluent Disposal Facility, prior to discharging into the Redstone River

Parameter	Monthly Average Effluent Concentration (maximum unless otherwise indicated)	Single Sample Result (maximum unless otherwise indicated)
Total Suspended Solids (TSS)	15.0 mg/L*	30.0 mg/L
Unionized Ammonia Nitrogen	/	0.34 mg/L**
Phosphorus (total)	0.3 mg/L	0.6 mg/L
Arsenic (total)	0.081 mg/L	0.162 mg/L
Copper (dissolved)	0.054 mg/L	0.108 mg/L
Lead (total)	0.1 mg/L	0.2 mg/L
Nickel (total)	0.45 mg/L	0.90 mg/L
Selenium (total)	0.017 mg/L	0.034 mg/L
Zinc (total)	/	0.054 mg/L
pH (field)	/	between 6.0 - 9.5 inclusive
Toxicity to Rainbow Trout and Daphnia magna	/	Non-acutely lethal (no more than 50% mortality in 100% effluent)

Note*: mg/L means milligram per litre.

Note**: When Unionized Ammonia Nitrogen concentration is more than 0.2 mg/L, conduct weekly acute toxicity tests with Rainbow Trout and *Daphnia magna* until Unionized Ammonia Nitrogen concentration is no more than 0.2 mg/L.

Schedule C - Monitoring Program

Table C-1 Final Process Effluent Monitoring

Sample Point: The Final Process Effluent Sampling Point (RSD-3) located at the outfall of Final Process Effluent Disposal facility, prior to discharging into the Redstone River. Sample Parameter **Minimum Frequency** Sample Type Flow Rate Continuous Grab Total Suspended Solids Thrice Weekly Grab Total Dissolved Solids Grab Weekly **Turbidity** Weekly Grab Total Ammonia and Ammonium Nitrogen *1 Weekly Grab Nitrate and Nitrite Nitrogen Weekly Grab Unionized Ammonia Nitrogen (calculated) Grab Weekly Total Phosphorus Grab Weekly Total and Dissolved (0.45 micron filter) concentration Grab Weekly of metals*2 Hardness Grab Weekly Dissolved Organic Carbon Weekly Grab Weekly Alkalinity Grab Conductivity (field, lab) Weekly Grab Major ions (Chloride, Sulphate) Grab Weekly pH (lab, field) Thrice Weekly Grab Temperature (lab, field) Thrice Weekly Grab Acute Toxicity to Rainbow Trout Grab Weekly or Monthly*3 Acute Toxicity to Daphnia Magna Weekly or Monthly*3 Grab Sublethal/Chronic Toxicity to Semi-annually Grab Fathead Minnows - Multi concentration Sublethal/Chronic Toxicity to Grab Semi-annually

Note*¹: The temperature and pH of the Final Process Effluent shall be determined in the field at the time of sampling for Total Ammonia Nitrogen. The concentration of Un-ionized Ammonia Nitrogen shall be calculated using the total ammonia concentrations, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives (PWQO)" dated July 1994, as amended, for Ammonia (unionized).

Ceriodaphnia Dubia - Multi concentration

Note*²: Metals scan list of parameters: Aluminium, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silicon Silver, Sodium, Strontium, Tellurium, Thallium, Tin, Titanium, Tungsten, Uranium, Vanadium, Zinc and Zirconium

Note*3: Weekly when Unionized Ammonia Nitrogen concentrations exceed 0.20 mg/L, otherwise, Monthly

Table C-1A Treated Effluent Pond Content Monitoring

Sample Location	Treated Effluent Pond	
Minimum Frequency	one (1) sample within fifteen (15) days prior to the any planned discharge,	
	in circumstances when there has been no discharge from the Works in six	
	(6) months prior to the planned discharge	
Sample Type	Grab	
Sample Parameters	Total suspended Solids, Total Dissolved Solids, Turbidity, Total	
	Ammonia and Ammonium Nitrogen, Nitrate and Nitrite Nitrogen,	
	Unionized Ammonia Nitrogen (calculated), Total Phosphorus, Total and	
	Dissolved (0.45 micron filter) concentration of metals (Aluminium,	
	Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium,	
	Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium,	
	Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silicon	
	Silver, Sodium, Strontium, Tellurium, Thallium, Tin, Titanium, Tungsten,	
	Uranium, Vanadium, Zinc and Zirconium), Hardness, Dissolved Organic	
	Carbon, Alkalinity, Conductivity, Major ions (Chloride, Sulphate), pH	
	(lab, field), and Temperature (lab, field).	

Table C-2 Surface Water - Receiver Quality Monitoring (part 1)

Sample Location	As listed in Table C-2A	
Minimum Frequency	Monthly during ice free conditions; or	
	Once in May, July and October during no effluent discharge period of time	
Sample Type	Grab	
Sample Parameters	Total suspended Solids, Total Dissolved solids, Turbidity, Total Ammonia	
	and Ammonium Nitrogen, Nitrate and Nitrite Nitrogen, Unionized	
	Ammonia Nitrogen (calculated), Total Phosphorus, Total and Dissolved	
	(0.45 micron filter) concentration of metals (Aluminium, Antimony,	
	Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium,	
	Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese,	
	Mercury, Molybdenum, Nickel, Potassium, Selenium, Silicon Silver,	
	Sodium, Strontium, Tellurium, Thallium, Tin, Titanium, Tungsten,	
	Uranium, Vanadium, Zinc and Zirconium), Hardness, Dissolved Organic	
	Carbon (DOC), Alkalinity, Conductivity, Major ions (Chloride, Sulphate),	
	pH (lab, field), and Temperature (lab, field).	

Table C-2A Surface Water - Receiver Quality Monitoring (Part 2)

Site ID	Sample Location	UTM (NAD83 datum)
RS-5	Upstream of the Final Process Effluent discharge outfall	487660 E, 5351465 N
RBT-1	Tributary to Redstone River	487796 E, 5351471 N
RS-9	Downstream End of Mixing Zone	487758 E, 5351965 N
RS-11	Downstream of RS-9	487873 E, 5352178 N
RS-6	East Creek downstream	488760 E, 5353265 N
RS-10	East Creek adjacent to TSF	488812 E, 5352584 N

Table C-3 Quality Control - Final Process Effluent and Surface Water Monitoring

Final Process Effluent QA/QC

- 1. On one day in each year, on a day on which samples are picked up as in above Table C-1, the Owner shall collect and pick up a duplicate sample for each sample picked up on that day and shall analyze each duplicate sample for the parameters for which the frequency of monitoring, is "Thrice Weekly", or "Weekly".
- 2. The same Final Process Effluent Sampling Point shall be used for the purposes of sampling under subsection 1 of this Table in a year.
- 3. The Owner shall prepare a travelling blank and travelling spiked blank sample for each sample for which a duplicated sample is picked up at Redstone Mine and Mill under subsection 1 of this Table and shall analyzed the travelling blank and travelling spiked blank samples in accordance with the directions set out in the Ministry publication entitled "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended.
- 4. There shall be an interval of at least six (6) months between successive Pick-Up days at Redstone Mine and Mill under subsection 1 of this Table.

Surface Water QA/QC

1. QA/QC for surface water monitoring shall be 10% of all samples analyzed (frequency of every two (2) months during discharge) and will consist of one duplicate, to be analyzed for all parameters listed in Table C-2 and one field blank.

Table C-4 Groundwater Monitoring (part 1)

Sample Location	As listed in Table C-4A	
Minimum Frequency	Three (3) times every year, in the spring, summer and Autumn	
Sample Type	Grab	
Sample Parameters	Groundwater level, Alkalinity, Ammonia, Chloride, Nitrate, nitrite,	
	Sulfate, Dissolved Organic Carbon, Total Phosphorus, Total hardness, pH,	
	Conductivity, Acidity, Total Dissolved Solids, Dissolved Aluminium,	
	Dissolved Antimony, Dissolved Arsenic, Dissolved Barium, Dissolved	
	Beryllium, Dissolved Bismuth, Dissolved Boron, Dissolved Cadmium,	
	Dissolved Calcium, Dissolved Chromium, Dissolved Cobalt, Dissolved	
	Copper, Dissolved Iron, Dissolved Lead, Dissolved Lithium, Dissolved	
	Magnesium, Dissolved Manganese, Dissolved Mercury, Dissolved Nickel,	
	Dissolved Potassium, Dissolved Selenium, Dissolved Silicon, Dissolved	
	Silver, Dissolved Sodium, Dissolved Strontium, Dissolved Thallium,	
	Dissolved Tin, Dissolved Titanium, Dissolved Tungsten, Dissolved	
	Uranium, Dissolved Vanadium, and Dissolved Zinc.	

Table C-4A Groundwater Monitoring (Part 2)

Well ID	Sample Location	UTM (NAD83 datum)
RSMW 06-01	Southwest near Mine Vent Raise.	487837 E, 5351598 N
RSMW 06-02	South-central, south of portal ramp.	488148 E, 5351433 N
RSMW 06-04	East near Treated Effluent Pond.	488426 E, 5351433 N
RSMW 06-05*	Northeast near TSF dam.	488798 E, 5351967 N
RSMW 06-07	West near Redstone Mill and TSF.	488113 E, 5351975 N
RSMW 06-08	Off-site south near Redstone River.	487807 E, 5350893 N
RSMW 12-01	Northwest near TSF.	488323 E, 5352177 N
RSMW 12-02	Southwest Near Mine Vent Raise.	447816 E, 5351644 N
RSMW 12-03*	Northeast near TSF dam.	488758 E, 5351976 N
RSMW 12-04	North near TSF dam.	488659 E, 5352387 N
RSMW 23-01	South of Mine Vent Raise.	487765 E, 5351525 N
RSMW 23-02	North of TSF.	488727 E, 5352500 N
RSMW 23-03	Northeast of TSF and North of NTSF.	489445 E, 5352412 N
RSMW 24-01	Nested well Southwest of NTSF.	488489 E, 5351546 N
RSMW 24-02	Nested well North of NTSF.	488957 E, 5352283 N
RSMW 24-03	Nested well Northeast of NTSF.	489357 E, 5352178 N
RSMW 24-04	South of NTSF.	489462 E, 5351706 N
RSMW 24-05	South of NTSF.	489095 E, 5351432 N
RSMW 24-06	Southwest of NTSF.	488380 E, 5351504 N
RSMW 24-07	Nested background well far south of NTSF.	488565 E, 5350791 N

Note*: RSMW06-05 and RSMW12-03 may be decommissioned accordance with O.Reg.903, and a replacement well for each will have to be proposed and installed in consultation with the District Manager.

Schedule D

Limited Operational Flexibility Criteria for Modifications to Industrial Sewage Works

1. The modifications to sewage Works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the Limited Operational Flexibility conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the sewage Works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.

1. Sewage Pumping Stations

- i. Alter pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage treatment system or an existing sewage pumping station, provided that the modifications do not result in an increase of the sewage treatment design capacity and the existing flow process and/or treatment train are maintained, as applicable.
- ii. Forcemain relining and replacement with similar pipe size where the nominal diameter is not greater than 1,200 mm.

2. Sewage Treatment Process

- a. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.
- b. Expanding the buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent's land.
- c. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment design capacity is not exceeded and where no land acquisition is required.
- d. Optimizing existing sewage treatment equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the Works that result in an increase of the approved design capacity, and may have adverse effects to the effluent quality or location of the discharge.
- e. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that the firm capacity, reliability, performance standard, level of quality and redundancy of the group of equipment is kept the same or exceeded. For clarity purposes, the following equipment can be considered under this provision:

pumps, screens, grit separators, blowers, aeration equipment, sludge thickeners, de-watering equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

3. Effluent Disposal Facilities

a. Replacement of discharge pipe with similar pipe size or diffusers provided that the outfall location is not changed.

4. Sewers

a. Pipe relining and replacement with similar pipe size within Redstone Mine and Mill site, where the nominal diameter is not greater than 1,200 mm.

5. Pilot Systems

- a. Installation of pilot systems for new or existing technologies provided that:
 - i. any effluent from the pilot system is discharged to the inlet of the sewage treatment Works or hauled off-site for proper disposal,
 - ii. any effluent from the pilot system discharged to the inlet of the sewage treatment Works or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and
 - iii. the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and District Manager three months after completion of the pilot project.

6. Tailings Areas - Tailings Storage Facilities

- a. Routine dam raises and dam extensions to allow continued management of tailings and storage of mineral materials and sewage, provided that:
 - i. Routine dam raises and extensions are in adherence with a tailings management plan prepared by a Professional Engineer licensed under the *Professional Engineers Act* in Ontario.
 - ii. Routine dam raises and extensions are sealed by a Professional Engineer licensed under the *Professional Engineers Act* in Ontario.
 - iii. Routine dam raises and extensions have an associated Erosion and Sediment Control Plan applying best management practices that is to be implemented during construction.
- b. New dams are not eligible under Limited Operational Flexibility, unless already included as part of the Works for which an Environmental Compliance Approval or an amended Environmental Compliance Approval has already been issued describing how new Works would affect the

management of tailings and water at the site.

- c. Pipe replacement or extension with similar pipe size within the Tailings Areas, where the nominal diameter is not greater than 1,200 mm.
- d. Subsection 1.6 does not relieve the Owner 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 necessary approval from Ministry of Energy and Mines, and/or Ministry of Natural Resources to proceed with the undertaking.
- 2. Sewage works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.
- 3. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved sewage Works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.
- 4. The modifications noted in section 3 above are <u>not</u> required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.

This page contains an image of the form entitled "Notice of Modification to Sewage Works". A digital copy can be obtained from the District Manager.



Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA ON-SITE PRIOR TO THE SCHEDULED IMPLEMENTATION DATE

oliance Approval (EC	
	A) with Limited Operational Flexibility th should start with "01" and consecutive numbers thereafter) Notice number (if applicable)
	Municipality
odifications as part	of the Limited Operational Flexibility
nental effects are negligible. ts to, all relevant technical docu	works (e.g. sewage work component, location, size, equipment ments that are affected by the modifications as applicable, i.e. cuments is (design brief, drawings, emergency plan, etc.)
essional Engineer who is licens e Limited Operational Flexibility ry's Design Guidelines, adherin npliance with s.53 of the Ontario	modification and confirm that the design: and to practice in the Province of Ontario; as described in the ECA; to engineering standards, industry's best management by Water Resources Act, and other appropriate regulations. Information contained in this form is complete and accurate
Signature	
nor .	
this Declaration; and re proposed in accordance with irements of the Environmental.	the Limited Operational Flexibility as described in the ECA. Issessment Act. Information contained in this form is complete and accurate
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Schedule E

1. CALCULATION OF LOADINGS — GENERAL

- 1. For the purposes of performing a calculation under sections 2 to 5 of this Schedule, the Owner shall use the actual analytical result obtained by the laboratory.
- 2. Despite subsection 1 of this section, where the actual analytical result is less than one-tenth of the analytical method detection limit set out in the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended, the Owner shall use the value zero for the purpose of performing a calculation under sections 2 to 5 of this Schedule.
- 3. The Owner shall ensure that each calculation of a Process Effluent loading required by section 2 and each calculation of a Process Effluent concentration required by section 4 is performed as soon as reasonably possible after the analytical results on which the calculation is based become available to the Owner.
- 4. The Owner shall ensure that each calculation of an Overflow Effluent loading required by section 3 is performed in time and each calculation of an Overflow Effluent concentration required by section 5 is performed in time to comply with Quarterly Reports to the District Manger requirements.

2. CALCULATION OF LOADINGS — FINAL PROCESS EFFLUENT

- 1. The Owner shall calculate, in kilograms, a daily Final Process Effluent stream loading for each Limited Parameter (excluding pH and Toxicity), in each Final Process Effluent Monitoring Stream for each day on which a sample is collected under this Approval from the stream for analysis for the parameter.
- 2. When calculating a daily stream loading under subsection 1, the Owner shall multiply, with the necessary adjustment of units to yield a result in kilograms, the analytical result obtained from the sample for the parameter by the Daily Volume of Effluent, as determined under **Condition 10** regarding monitoring and reporting, for the stream for the day.
- 3. The Owner shall calculate, in kilograms, a daily process effluent plant loading for each Limited Parameter (excluding pH and Toxicity), for each day for which the Owner is required to calculate a daily process effluent stream loading for the parameter under subsection 1 of this section.
- 4. For the purposes of subsection 3 of this section, a daily process effluent plant loading for a parameter for a day is the sum, in kilograms, of the daily process effluent stream loadings for the parameter calculated under subsection 1 of this section for the day.
- 5. Where the Owner calculates only one daily process effluent stream loading for a parameter for a day under subsection 1 of this section, the daily process effluent plant loading for the parameter for the

- day for the purposes of subsection 3 of this section is the single daily process effluent stream loading for the parameter for the day.
- 6. The Owner shall calculate, in kilograms, a monthly average process effluent plant loading for each Limited Parameter (excluding pH and Toxicity) for each month in which a sample is collected under this Approval more than once from a Final Process Effluent Monitoring Stream for analysis for the parameter.
- 7. For the purposes of subsection 6 of this section, a monthly average process effluent plant loading for a parameter for a month is the arithmetic mean of the daily process effluent plant loadings for the parameter calculated under subsection 3 of this section for the month.

3. CALCULATION OF LOADINGS — OVERFLOW EFFLUENT

- 1. The Owner shall calculate, in kilograms, an Overflow Effluent stream loading for each Limited Parameter (excluding pH and Toxicity), in each Overflow Effluent Monitoring Stream for each Eight (8)-hour Period during which a sample is collected under this Approval from the stream for analysis for the parameter.
- 2. When calculating a stream loading under subsection 1 of this section, the Owner shall multiply, with the necessary adjustment of units to yield a result in kilograms, the analytical result obtained from the sample for the parameter by the volume of effluent, as determined under **Condition 10** regarding monitoring and reporting, for the stream for the Eight (8)-hour Period.
- 3. The Owner shall calculate, in kilograms, a daily Overflow Effluent stream loading for each Limited Parameter, in each Overflow Effluent Monitoring Stream for each day for which the Owner is required to calculate an Overflow Effluent stream loading for the parameter under subsection 1 of this section.
- 4. For the purposes of subsection 3 of this section, a daily Overflow Effluent stream loading for a parameter for a day is the sum, in kilograms, of all the Eight (8)-hour period Overflow Effluent stream loadings for the parameter calculated under subsection 1 of this section for the day.
- 5. Where the Owner calculates only one Overflow Effluent stream loading for a parameter under subsection 1 of this section for a stream for a day, the daily Overflow Effluent stream loading for the parameter for the day for the purposes of subsection 3 of this section is the single Overflow Effluent stream loading calculated for the parameter under subsection 1 of this section.

4. CALCULATION OF CONCENTRATIONS — PROCESS EFFLUENT

1. The Owner shall calculate, in milligrams per litre, a Monthly Average Effluent Concentration for each Limited Parameter (excluding pH and Toxicity) in each Final Process Effluent Monitoring Stream for each month.

5. CALCULATION OF CONCENTRATIONS — OVERFLOW EFFLUENT

- 1. The Owner shall calculate, in milligrams per litre, a daily concentration for each Limited Parameter (excluding pH and Toxicity), in each Overflow Effluent Monitoring Stream for each day on which a sample is collected under this Approval from the stream for analysis for the parameter.
- 2. For the purposes of subsection the above subsection 5.1, a daily concentration for a parameter for a stream for a day is the arithmetic mean of the analytical results obtained for the parameter from the samples collected under **Condition 6** regarding overflows from the stream for the day.
- 3. Where there is only one analytical result obtained for a parameter from the stream for a day, the daily concentration for the parameter for the stream for the day for the purposes of subsection (1) of this condition is the single analytical result obtained for the parameter.

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

- 1. Condition 1 regarding general provisions 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.
- 2. Condition 2 regarding change of Owner and Operating Agency is included to ensure that the Ministry records are kept accurate and current with respect to ownership and Operating Agency of the 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.
- 3. Condition 3 regarding construction of Proposed Works is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction to ensure the ongoing protection of the environment, and that prior to the commencement of construction of the portion of the Works that are approved in principle only, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, to determine capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval, and also ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.
- 4. Conditions 4 regarding process change is included to ensure that the Works are operated in accordance with the information submitted by the Owner relating to the process and materials which are served by the Works, and to ensure that any contemplated changes in them which could potentially affect the characteristics of effluent from the Works will be properly reviewed and approved.
- 5. Condition 5 regarding bypasses is included to indicate that Bypass is prohibited, except in circumstances where the failure to Bypass could result in greater damage to the environment than the bypass itself.
- 6. Condition 6 regarding overflows is included to indicate that overflow of untreated or partially treated sewage to the receiver is prohibited, except in circumstances where the failure to overflow could result in greater damage to the environment than the overflow itself. The notification and documentation requirements allow

the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Overflow Events.

- 7. Condition 7 regarding design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
- 8. Condition 8 regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.
- 9. Condition 9 regarding operation and maintenance is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Works.
- 10. Condition 10 regarding monitoring and recording is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and compliance limits.
- 11. Condition 11 regarding Limited Operational Flexibility is included to ensure that the Works are constructed, maintained and operated in accordance with the Approval, and that any pre-approved modification will not negatively impact on the performance of the Works.
- 12. Condition 12 regarding reporting 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 this Approval.
- 13. Condition 13 regarding approval subject to final drawings is included due to the provisional nature of the supporting documentation submitted by the Owner with the application for approval. The Director has only approved the Works in principle for the New Tailing Storage Facility (NTSF)) development, and this condition will ensure that, prior to the commencement of construction of these portions of the Works, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, in order to determine the Proposed Works' capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 6790-AW6RCL, and 3123-794LB3 issued on April 19, 2018, and November 20, 2007.

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.

and

This Notice must be served upon:

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

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

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 22nd day of April, 2025



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

NH/

c: District Manager, MECP Timmins District Office Tim Doskotch, Northern Sun Mining