AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1590-DF6K89
Issue Date: May 15, 2025

Silver Lake Ontario Inc.
113 Turkanee Lake Road
White River, Ontario
P0M 3G0

Site Location: Sugar Zone Mine Project
Sugar Zone Project located within the
Townships of Odlum, Strickland, Gourlay, Tedder,
and Unorganized Township of Hambleton, District of Algoma

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:

sewage works for the collection, transmission, treatment and surface disposal of treated wastewater (i.e., process wastewater, contact and non-contact stormwater, and groundwater seepage) discharging via treated effluent discharge pipeline with eight (8) submerged port diffuser (at a maximum average monthly rate of 2,100 cubic metres per day) to Gagegenha Lake, Gagegenha Lake drains via Gagegenha Creek, which subsequently joins with Dayohessarah Creek, Dayohessarah Creek then flows north and joins the Strickland River, which later joins the Shabotik River before it enters White Lake, White Lake drains to White River, which flows to Lake Superior, consisting of the following:

Proposed Sewage Works

NORTH TAILINGS MANAGEMENT FACILITY (NTMF)

Interim Raises

1. Crest elevations increased from 405.0 masl to 406.0 masl in 2020, and subsequently to 408.0 masl in 2022 to provide additional water and tailings storage.

Stage 2 Dam Raise

1. One (1) engineered dam raise of the existing North Tailings Management Facility (NTMF)

to an ultimate crest elevation of 411.6 metres above sea level (masl), with 2.5H:1V upstream slopes and 2.2H:1V downstream slopes, a bituminous geomembrane liner on the upstream embankments sealed to plinth over treated bedrock, designed to contain slurry tailings and supernatant water at the increased final design elevation.

2. One (1) emergency overflow spillway at the East Dam designed to accommodate the Probable Maximum Flood (PMF) event with a minimum base width of 10 metres, side slopes of 4H:1V, and incorporating an energy dissipation zone at the downstream toe.

3. One (1) seepage collection sump and pump-back system located at the toe of the East Dam, continuously pumping seepage back to the NTMF Reclaim Pond (to maintain a net inward groundwater gradient and prevent seepage into the natural environment).

NTMF Reclaim Pond Aeration Equipment

1. One (1) new linear diffuser arrangement, with multiple lines (up to six) anchored to the opposite NTMF perimeter. Each linear diffuser is connected to a common compressor manifold and consists of heat-resistant hose and self-sinking Bubble Tubing® (or Equivalent Equipment) which is suspended by adjustable buoys to minimize burial in tailings, significantly reducing maintenance and operational issues compared to the existing spiral diffusers

2. One (1) new compressor (or Equivalent Equipment) providing sufficient flow (±57 CFM or site-specific requirements) to the diffuser arrangement for continuous aeration coverage in the Reclaim Pond.

NTMF Reclaim Pond Pumps

1. Two (2) skid-mounted, 150 HP Pioneer brand centrifugal pumps (or Equivalent Equipment), each capable of delivering up to 375 USgpm (750 USgpm total), replacing the existing three barge-style reclaim pumps. Flexible suction lines, with foot valves suspended by buoys, will extend into the Reclaim Pond, reducing the need for personnel to work on or over water.

Note: Each pump features standard Pioneer components (mechanical seal kit, bearing frame kit) allowing on-site repairs and rebuilds. The combined pumping capacity meets or exceeds the site's current Mill, Effluent Treatment Plant, and underground water demands.

NTMF Evaporators

1. Up to four (4) portable water evaporators (e.g., EcoMister® or equivalent equipment) installed on floating or shoreline platforms, to evaporate surplus water in the NTMF Reclaim Pond or Containment Pond.

Note: The evaporators will be installed and used as needed.

WEST WASTE ROCK EXTENSION

1. One (1) extension of the existing West Waste Rock Dump, progressively constructed to an ultimate crest elevation of approximately 464 metres above sea level (masl), with 2H:1V side slopes, designed to accommodate up to 790,000 tonnes (approximately 395,000 cubic metres) of non-acid generating (NAG) waste rock.

Note: All development rock is subject to geo-chemical screening (including acid-base accounting). Any potentially acid-generating (PAG) rock is either left underground as backfill or fully encapsulated in the NTMF to ensure environmental protection. Final configuration will be graded and contoured to direct contact water into the NTMF or existing Containment Pond system, mitigating potential off-site drainage.

STORMWATER MANAGEMENT

1. One (1) new system of collection swales (East Swale, West Swale, and Combined Swale), sized for the 100-year design storm, collecting and conveying run-off from the proposed Workers Accommodation Camp area to the existing Containment Pond.

2. One (1) stormwater collection swale to be installed in Year Four of the West Waste Dump Extension operation, intercepting and directing runoff from the portion of the dump outside the existing NTMF watershed to the NTMF.

SITE SURFACE PIPING

Camp Sewage Collection

1. One (1) dedicated collection system (gravity or pressure piping) transmitting domestic sewage from the Workers Accommodation Camp to the proposed on-site Camp Wastewater Treatment System (see Domestic Sewage Treatment System).

Containment Pond Overflow Transfer

1. One (1) new submersible pump and 4-inch HDPE pipeline installed (as needed) to transfer surplus water from the Containment Pond Expansion to the Containment Pond, facilitating management of fluctuating water levels.

Note: The overflow transfer piping will be installed and used as needed.

Dewatering and Reclaim Piping Enhancements

1. Two (2) new 4-inch (or larger) HDPE pipelines conveying reclaim water from the NTMF to the Mill, supplementing the existing reclaim line for enhanced reliability and capacity.

2. One (1) new 4-inch pipeline from the bottom of the mine through the Return Air Raise

(RAR) to improve underground dewatering efficiency.

3. One (1) new 4-inch pipeline from the underground workings directly to the Effluent Treatment Plant (ETP), allowing bypass of the NTMF Reclaim Pond under adverse winter or low-water conditions.

Underground Process Water Supply System

1. One (1) new 4-inch pipeline delivering clarified reclaim water from the NTMF (via the Mill) to underground workings for drill process water; water returning to the NTMF via standard mine dewatering.

DOMESTIC SEWAGE TREATMENT SYSTEM

One (1) modular Rotating Biological Contactor (RBC) system (or equivalent treatment system) with a design capacity of up to 200,000 litres per day (to service up to 220 occupants), consisting of the following in treatment sequence:

1. **Primary Clarifier**: receiving raw domestic sewage from the camp, settling heavier solids before biological treatment.

2. **RBC Treatment Unit:** rotating media supporting fixed-film bacterial growth to reduce biochemical oxygen demand (BOD) and ammonia.

3. **Final Clarifier:** for secondary solids settling and effluent clarification, with chemical addition as needed for phosphorus removal.

4. **Tertiary Treatment:** comprising a multi-media filter for polishing of suspended solids followed by ultraviolet disinfection (UV) to inactivate pathogens.

5. **Discharge Pump and Flowmeter:** pumping treated domestic effluent to the existing Containment Pond, which in turn is conveyed to the NTMF for final treatment via the Effluent Treatment Plant prior to discharge to the environment.

EFFLUENT TREATMENT PLANT (ETP)

Contingency Treatment Options (on as needed basis)

Calcite Filter: One (1) calcite filled steel pressure vessel (or equivalent equipment) downstream of the ion-exchange units, for raising alkalinity in the final effluent and mitigating residual toxicity.

Bag Filter: One (1) bag filter system positioned downstream of the multimedia filters for polishing total suspended solids (TSS) when elevated levels are detected in the final effluent.

Reverse Osmosis System: One (1) portable or skid-mounted reverse osmosis system for short-term or seasonal deployment when critical parameters exceed typical ETP capability; reject stream returned to the NTMF or appropriate process circuit for management.

Lamella Clarifiers: Up to two (2) pre-manufactured lamella clarifier units for additional suspended solids removal, particularly when reclaim water or underground water shows high turbidity; clarifier underflow/sludge is recirculated to the NTMF or process circuit.

DISCHARGE PERIOD (YEAR-ROUND DISCHARGE)

Year-round discharge of treated effluent via the existing 4-inch diameter pipeline with eight (8) submerged port diffuser in Gagegenha Lake.

Existing Sewage Works

NORTH TAILINGS MANAGEMENT FACILITY (NTMF)

A Tailings Management Facility designed to contain dewatered tailings from the on-site conventional flotation process plant. The Stage 1 Tailings Management Facility has dam crest elevations of 405 metres above sea level, storage capacity of 340,000 cubic metres to the spillway invert elevation and consists of the following:

1. Northwest saddle dam and Southwest saddle dam are compacted granular embankments with 2.5H:1V side slopes and bituminous liner on the upstream embankments that are sealed to a concrete plinth over grouted bedrock.

2. East dam is a compacted granular embankment with 2.5H:1V side slopes and bituminous liner on the upstream embankment that is sealed to a concrete plinth over grouted bedrock, with a downstream toe berm to elevation 391.1 metres above sea level.

3. An emergency overflow spillway at the East dam with an invert elevation of 403.9 metres above sea level, base width of 10 metres, side slopes of 4H:1V and depth of 1.1 metres, discharging onto an energy dissipater at the downstream toe.

4. Four (4) Turbo-Mister® evaporators (or Equivalent Equipment) to evaporate surplus water in the NTMF.

Note: The evaporators will be used as needed.

CONTAINMENT PONDS

1. Containment Pond: one (1) low-permeability cutoff wall with a crest elevation of 454 metres above sea level with an estimated storage capacity of 4,000 cubic metres, with surplus water pumped to a vegetated overland flow path adjacent to the Tailings Management Facility.

2. Containment Expansion Pond: one (1) compacted granular embankment with 3H:1V side slopes and geosynthetic clay liner on the upstream embankment sealed to a concrete plinth over bedrock with a crest elevation of 453 metres above sea level east of the Containment Pond with an estimated storage capacity of 1,500 cubic metres and discharging to the Containment Pond.

3. Two (2) Octo-Air 10® industrial air diffusers (or Equivalent Equipment) in the Containment Pond (*to minimize ice cover, increase oxygen content, reduce phosphorus solubilization from bottom sediment, oxidize potential toxicants and support biological oxidation of ammonia and nitrite*).

DOMESTIC SEWAGE TREATMENT SYSTEM

A Waterloo Biofilter® proprietary sanitary sewage treatment system with a design capacity of 20,000 litres/day to treat domestic sewage and comprised of the following components in treatment sequence:

Component 1: one (1) 4,500 L, three (3) compartment FOG (fats, oils, grease) interceptor tank receiving sewage from the laundry facility, with effluent flowing to the septic tank described below along with all other domestic sewage.

Component 2: two (2) pre-manufactured fibreglass septic tanks in series, one (1) 45,400 L followed by one (1) 22,700 L with one (1) Polylok PL-525 Effluent Filter on the final outlet, flowing by gravity to the pump tank described below.

Component 3: one (1) pre-manufactured 22,700 L fibreglass pump tank with two (2) one (1) horsepower effluent pumps, with SJE Rhombus alternating duplex time dosing control panel, equipped with audio/visual high-level alarm with time doses to the Waterloo Biofilter® treatment unit.

Component 4: one (1) SC-20 containerized Waterloo Biofilter® treatment unit, with effluent flowing by gravity to the pump tank below.

Component 5: one (1) pre-manufactured 22,700 L fiberglass pump tank with two (2) submersible one (1) horsepower effluent pumps, controlled by SJE Rhombus alternating duplex time dosing control panel, with audio/visual high level alarm and one (1) 0.5 horsepower submersible effluent pump for re-circulation, connected to SJE Rhombus simplex timed dosing control panel, with 1:1 split of flow back to the septic tank described above and to the Tailings Management Facility.

Component 6: metal-salt based coagulant addition for phosphorus reduction that is added to treated effluent (**as needed**) before discharged to the Tailings Management Facility.

EFFLUENT TREATMENT PLANT (ETP)

A wastewater treatment system within the process plant building to treat surplus water from

the NTMF consisting of the steps:

Step 1: Chemical Conditioning System, consisting of

1. one (1) approximately 24 cubic metre flat bottomed polyethylene feed/chemical conditioning tank with pH, ammonia, conductivity, and level probes, aeration mixing system, and three (3) chemical feed pumps for acid, caustic and coagulant.

2. one (1) approximately 24 cubic metre flat bottomed polyethylene chemical conditioning tank with level probes, mechanical mixer, and one (1) chemical feed pump for flocculant.

Step 2: Filtration System, consisting of

1. one (1) duplex set of skid mounted 7.5 horsepower centrifugal filter feed pumps, with totally enclosed fan cooled motor, local disconnect, and pipe/valve package.

2. one (1) duplex set of 1.2 metre diameter pressure multimedia filters with the required influent manifold, distribution header, filtrate collection manifold, backwash piping array, control valves and local controls.

3. online turbidity analyzer with automated bypass valve if turbidity is above the setpoint.

Completed Upgrades

1. Three (3) epoxy-coated carbon steel pressure vessels in parallel (T-200A/B/C), each loaded with four layers of inert filtration media (gravel, garnet, sand, anthracite).

2. Automated backwash sequence initiated upon reaching a 10–15 psi differential pressure or elapsed runtime.

3. A portion of filtered water is diverted upward to dislodge accumulated solids, which are routed via the ETP sump back to the NTMF.

4. Two (2) additional media filters remain installed on-site and can be brought online as needed for redundancy or to manage high TSS loading, ensuring consistent throughput even if the primary filters are offline or under maintenance.

Step 3: Ammonia Removal and Media Regeneration System, consisting of

1. four (4) 31 cubic metre cone bottomed polyethylene fluidized bed media (manufactured resin and/or zeolite) reactors with liquid distribution header, air diffusion header, recirculation air lift pumps, media regeneration withdrawal and return connections and required connection ports; reactors configured as two (2) parallel trains with a lead and lag reactor in each train or as four (4) parallel reactors.

2. one (1) 24 cubic metre intermediate pH adjustment polyethylene tank with a pH

probe/controller, ammonium probe, acid feed pump, sample port, air mix system and level controls.

3. one (1) duplex set of skid mounted three (3) horsepower centrifugal ion exchange feed pumps, with totally enclosed fan cooled motor, local disconnect and pipe/valve package.

4. duplex set of skid mounted air operated media transfer pumps, with local air controls, on/off solenoid and pipe/valve package from the media reactor to the media regeneration tank.

5. One (1) approximately 30 cubic metre flat bottomed polyethylene regenerant make-up tank with pH and ammonia probes, aeration mixing system, media transfer airlift pump, and effluent weir.

6. one (1) approximately 31 cubic metre cone bottomed polyethylene spent regenerant tank with pH and ammonia probes, media recirculation piping, two (2) chemical feed pumps for acid and caustic, and a pipe/valve package.

7. duplex set of skid mounted air operated media transfer pumps, with local air controls, on/off solenoid, and pipe/valve package.

8. one (1) 10 horsepower mixing blower, and one (1) 20 horsepower ammonia stripping blower, both to be positive displacement rotary lobe type with totally enclosed fan cooled motors.

Note: During low water levels or in spring before ice melts in the NTMF Reclaim Pond, water is pumped directly to the ETP for treatment, bypassing the NTMF to minimize effluent toxicity risks.

Completed Upgrades

1. One (1) enhanced brine system including additional strong/weak brine tanks (10,000 gallons tanks each), improved brine mixing and desaturation tanks, pumps, and instrumentation, to be activated (as needed) for higher regeneration capacity of ion-exchange media.

2. One (1) two-step desaturation and clarification system (T-503 and T-504), used (as needed) if calcite solids form in the brine circuit, with settled solids pumped (P-504) and blended with mill tailings as needed.

3. One (1) primary six-foot diameter air-stripping tower (20,000 CFM blower), installed in 2023, and one (1) backup three-foot diameter air-stripping tower (installed in 2020 under LOF) which is used as needed.

TREATED EFFLUENT DISCHARGE SYSTEM

1. One (1) treated effluent discharge system discharging to Gagegenha Lake via a 4 inch diameter pipeline with eight (8) submerged port diffuser installed off lake bottom to provide even distribution and mixing in Gagegenha Lake, having a maximum approved flow capacity of 2,100 cubic meters per day.

Including all other controls, electrical equipment, instrumentation, piping, valves and appurtenances essential for the proper operation of the aforementioned sewage works.

All in accordance with the supporting documentation submitted to the Ministry as listed in the **Schedule A** of this Approval.

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. "BOD5" (also known as $TBOD_5$) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;

3. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

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

5. "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;

6. "District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;

7. "*E. coli* " refers to coliform bacteria that possess the enzyme beta-glucuronidase and are capable of cleaving a fluorogenic or chromogenic substrate with the corresponding release of a fluorogen or chromogen, that produces fluorescence under long wavelength (366 nm) UV light, or color development, respectively. Enumeration methods include tube, membrane filter, or multi-well procedures. Depending on the method selected, incubation temperatures include 35.5 $\pm$ 0.5 °C or 44.5 $\pm$ 0.2 °C (to enumerate thermotolerant species). Depending on the procedure used, data are reported as either colony forming units (CFU) per 100 mL (for membrane filtration methods) or as most probable number (MPN) per 100 mL (for tube or multi-well methods);

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

9. "Existing Works" means those portions of the Works included in the Approval that have

been constructed previously;

10. "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;

11. "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;

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. "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;

14. "Modifications" means any addition, replacement, alteration, expansion or optimization for the Works as specified under Limited Operational Flexibility;

15. "Monthly Average Concentration" means the arithmetic mean of all Daily Concentrations of a contaminant in the effluent sampled or measured, or both, during a calendar month;

16. "Monthly Geometric Mean Density" is the mean of all Single Sample Results of *E. coli* measurement in the samples taken during a calendar month, calculated and reported as per the methodology specified in Schedule E;

17. "Notice of Modifications" means the form entitled "Notice of Modifications to Sewage Works";

18. "Owner" means Silver Lake Ontario Inc., and its successors and assignees;

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

20. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed; and

21. "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 CONDITION**

1. The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

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

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

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

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

6. 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 other provincial units, the federal government, municipal authority, etc., necessary to construct, operate or maintain 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. 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 Owner or operating authority, or both.

    b. change of address of Owner or operating authority or address of new Owner or operating authority.

    c. change of partners where the Owner or operating authority is or at any time becomes a partnership, and a copy of the most recent declaration filed under the

Partnerships Registration Act .

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. 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.

3. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this Approval.

3. 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. If 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.

4. CHANGES IN PROCESSES OR PROCESS MATERIALS

1. The Owner shall give written notice to the District Manager of any plans to change the processes or process materials in the Owner's enterprise serviced by the Works where the change may significantly alter the quantity or quality of the influent to or effluent from the Works, and no such change(s) shall be made unless with the written concurrence of the District Manager and approval of the Director.

5. CONSTRUCTION OF WORKS

1. Upon the construction of the Proposed Works, the Owner shall prepare a statement, certified by a Licensed Engineering Practitioner, that the Proposed 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 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.

6. OPERATION'S MANUAL

1. The Owner shall prepare an operation's manual prior to the commencement of operation of the Works, that includes, but not necessarily limited to, the following information:

    a. operating 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 spill, bypasses and any other abnormal situations and for notifying the District Manager,

    e. best management practices (BMPs) for the use and handling of explosives, including Ammonium Nitrate and Fuel Oil (ANFO), for ammonia control at all times, and

    f. complaint procedures for receiving and responding to public complaints.

2. The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the Works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

7. EFFLUENT OBJECTIVES

1. The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials listed as effluent parameters in the **Effluent Objectives Table** in **Schedule B** are not exceeded in the effluent from the Works.

2. The Owner shall include in all reports submitted in accordance with the REPORTING condition a summary of the efforts made and results achieved under this condition.

8. 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 the Effluent Limits Table listed in Schedule B is greater than the corresponding maximum concentration set out in Column 2 of the Effluent Limits Table listed in Schedule B.

b. non-compliance with respect to an Average Concentration Limit is deemed to have occurred when the arithmetic mean concentration of all samples taken in a (day, month, ...) analyzed for a parameter named in Column 1 of the Effluent Limits Table listed in Schedule B is greater than the corresponding average concentration set out in Column 2 of the Effluent Limits Table listed in Schedule B.

c. non-compliance with respect to pH is deemed to have occurred when any single measurement is outside of the indicated range.

3. The Owner shall operate and maintain the Works such that the effluent from the Works is not acutely lethal to Rainbow Trout and *Daphnia magna* by ensuring that each Rainbow Trout acute lethality test and each *Daphnia magna* acute lethality test performed on any grab sample of effluent shall result in mortality for no more than 50 percent of the test organism in 100 percent effluent.

9. EFFLUENT - VISUAL OBSERVATIONS

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

2. In the event of an occurrence, as defined in subsection 1., the Owner shall inform the District Manager as soon as reasonably possible, and again in writing within **seven (7) days** of the occurrence. The Owner shall implement appropriate mitigation measures and a sampling program to confirm mitigation measures are adequate.

10. MONITORING AND RECORDING

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

a. Thrice Weekly means three times each week,

b. Weekly means once each week, and

c. Monthly means once every month.

3. Samples shall be collected and analyzed at the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the Tables included in Schedule C:

4. 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" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions.

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

   c. The Environment Canada publications, 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.

   d. In respect of any parameters not mentioned in (a) - (c), the written approval of the District Manager, which approval shall be obtained prior to sampling.

   e. The temperature and pH of the effluent from the Works shall be determined in the field at the time of sampling for total ammonia. The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended, for ammonia (un-ionized).

   f. The Owner shall install and maintain a continuous flow measuring device, to measure the flowrate of the mine water leaving the groundwater working areas and the flowrate of the effluent from the wastewater treatment system, with an

accuracy to within plus or minus 15 per cent (+/- 15%) of the actual flowrate for the entire design range of the flow measuring device, and record the flowrate at a weekly frequency.

g. The groundwater sampling protocols outlined in the Groundwater Monitoring Plan, Sugar Zone Mine Township of Odlum, District of Algoma, Ontario, prepared by Pinchin Limited and dated November 11, 2024.

5. 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 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 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.

6. 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.

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

11. REPORTING

1. One (1) week prior to the start up of the operation of the Proposed Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.

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

3. The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in the EFFLUENT LIMITS condition orally, as soon as reasonably possible, and in writing within **seven (7) days** of the exceedance.

4. In addition to the obligations under Part X of the EPA and Ontario Regulation 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 Ontario Regulation 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 in an electronic format by **March 31st** of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information:

    a. an **Effluent and Surface Water Monitoring Report**, which shall contain, but shall not be limited to, the following information:

        i. a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in the EFFLUENT LIMITS condition, including an overview of the success and adequacy of the Works.

        ii. description and evaluation of any and all aquatic environmental effects associated with the mining operation.

        iii. tabulation and interpretation of current and historical receiver surface water monitoring data and comparison to Ontario Provincial Water Quality Objectives.

        iv. graphs illustrating current and historical trends with time of key water quality parameters.

        v. 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.

        vi. universal transverse Mercator (UTM) coordinates for all sampling locations, North American Datum 1983.

        vii. a summary of any effluent quality assurance or control measures undertaken in the reporting period.

    b. a **Groundwater Monitoring Report**, which shall contain, but shall not be limited

to, the following information:

i. a site description and background.

ii. a discussion of the geology and hydrogeology of the site.

iii. a section detailing the field sampling protocols and QA/QC program.

iv. a discussion and interpretation of the results of the groundwater sampling and whether the results indicate potential impact to nearby surface water features.

v. evaluation of monitoring results with respect to trigger thresholds identified in the contingency plan, and a discussion related to requirements for contingency measures to be implemented.

vi. conclusions and recommendations for future monitoring and/or remedial actions.

vii. a scale site plan or plans of the entire site illustrating significant site features such as surface water bodies, seeps, ponds, ditches, collection and treatment facilities, and roadways, as well as all of the sampling locations.

viii. a groundwater contour map showing the groundwater elevations for each well and the groundwater flow direction.

ix. stratigraphic cross-sections which clearly illustrate the subsurface distribution of geological materials.

x. tables summarizing all of the historical and current water chemistry and water level data.

xi. graphs illustrating historical water quality trends with time for the key analytical parameters.

xii. a copy of the borehole logs for all groundwater monitoring wells (may be provided electronically on CD).

xiii. a copy of the original laboratory analytical results (may be provided electronically on CD).

c. a description of any operating problems encountered and corrective actions taken.

d. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works.

e. a summary of any complaints received during the reporting period and any steps

taken to address the complaints.

f. a summary of all By-pass, spill or abnormal discharge events.

g. a copy of all Notice of Modifications submitted to the District Manager as a result of Schedule D, Section 1, with a status report on the implementation of each modification.

h. a report summarizing all modifications completed as a result of **Schedule D**, Section 3.

i. any other information the District Manager requires from time to time.

6. The Owner shall prepare and submit an activity report to the District Manager on a quarterly basis, within forty-five (45) days after the last day of the quarter being reported upon. The reports shall contain, but shall not be limited to, the following information.

   a. the status, storage capacity occupied and remaining volume in the tailings pond and estimate of total effluent discharged from the works during the reporting period.

   b. a summary and interpretation of all monitoring data collected during the reporting period and a comparison to the effluent limits outlined in Condition 5 as required.

   c. a summary and interpretation of all calibration and maintenance procedures undertaken during the reporting period.

7. The Owner shall provide a copy of the annual performance report required under above subsection 5., to each of the aboriginal communities: Biigtigong Nishnaabeg (Pic River First Nation), Pic Mobert First Nation, Batchewana First Nation, Garden River First Nation and Michipicoten First Nation, within **thirty (30) days** of the submission to the District Manager.

12. 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 Works", included under Schedule D of this Approval, as amended.

2. 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.

    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 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, Niagara Escarpment Planning and Development Act, Oak Ridges Moraine Conservation Act, Lake Simcoe Protection Act* and *Greenbelt 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.

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

2. Condition 2 is included to ensure that the Ministry records are kept accurate and current with respect to approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.

3. Condition 3 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.

4. Conditions 4 regarding changes in process or materials 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 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.

6. Condition 6 is included to ensure that a comprehensive operation’s manual governing all significant areas of operation, maintenance and repair is prepared, implemented, and kept up to date by the Owner and made available to the Ministry. 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.

7. Condition 7 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action pro-actively and voluntarily before environmental impairment occurs.

8. Conditions 8 and 9 are imposed to ensure that the effluent discharged from the Works to the Gagegenha Lake meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.

9. Condition 10 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 effluent limits specified in the Approval and that the approved Works does not cause any impairment to the receiving watercourse.

10. Condition 11 is included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

11. Condition 12 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These Conditions are also included to ensure that a Professional Engineer has reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility and provide assurance that the proposed modifications comply with the Ministry's requirements stipulated in the Terms and Conditions of this Approval, MOE policies, guidelines, and industry engineering standards and best management practices.

Schedule A

1. Application for Environmental Compliance Approval submitted by Jonathan Chester, Silver Lake Ontario Inc., received on April 8, 2024 for the proposed Amendment to the Environmental Compliance Number **8479-B3QHJZ**, including design report, final plans, specifications and all supporting documentation.

2. Application for Environmental Compliance Approval dated December 22, 2016 and submitted Tim Campbell, Vice President and Secretary, Harte Gold Corp. together with the following supporting documentation:

    a. Application to Amend Environmental Compliance Approval (Sewage) 3215-9ZXM5X Volume 1 of 2.

    b. Application to Amend Environmental Compliance Approval (Sewage) 3215-9ZXM5X Volume 2 of 2.

    c. Supplemental information submitted in a folder with covering letter from Harte Gold Corp. dated January 16, 2018 and signed by Darryl Boyd, Environmental Manager, Harte Gold Corp.

Schedule B

Effluent Objectives Table
(measured at the discharge outlet from the discharge pipeline)

Effluent Objective Table	
Effluent Parameter	**Concentration Objective**
Column 1	Column 2
E Coli (monthly geometric mean density)	200 CFU/100mL

Effluent Limits Table
(measured at the discharge outlet from the discharge pipeline)

Effluent Limits Table		
Effluent Parameter	**Daily Concentration** (milligrams per litre unless otherwise indicated)	**Monthly Average Concentration** (milligrams per litre unless otherwise indicated)
Column 1	Column 2	Column 3
Total Suspended Solids	30	15
Total Ammonia Nitrogen	10	5
Copper	0.1	0.05
Nickel	0.6	0.3
Lead	0.08	0.04
Zinc	0.4	0.2
Arsenic	0.1	0.05
Boron	5	2.5
Cobalt	0.014	0.007
$CBOD_5$	40	20
Total Phosphorus	0.26	0.13
pH of the effluent maintained between 6.5 to 8.5, inclusive, at all times		

* means milligrams per litre unless otherwise indicated

Schedule C

Influent and Effluent Monitoring Table

(Influent measured at ETP-IN. Effluent measured at outlet of the discharge pipeline ETP-EF)

Influent and Effluent Monitoring Table		
Parameters	**Sample Type**	**Frequency**
pH	Grab, field measurement	Thrice Weekly
Total Suspended Solids	Grab	Thrice Weekly
Total Ammonia Nitrogen	Grab	Weekly
Copper	Grab	Weekly
Nickel	Grab	Weekly
Lead	Grab	Weekly
Zinc	Grab	Weekly
Arsenic	Grab	Weekly
Temperature	Grab, field measurement	Thrice Weekly
$CBOD_5$ (effluent only)	Grab	Monthly
E. coli (effluent only)	Grab	Monthly
Total Phosphorus	Grab	Monthly
Acute Toxicity (effluent only) (Rainbow Trout and *Daphnia Magna*)	Grab	Monthly

Surface Water Monitoring Table

Surface Water Monitoring Table	
Sampling Stations	**Station Name**: Sample Site, (Easting, Northing) **GL-MZ**: Gagegenha Lake, Outside Mixing Zone (647500E 5406550N) **GL-MID**: Gagegenha Lake, Mid-Lake (647403E 5407646N) **GL-OUT**: Gagegenha Lake, Outlet (647324E 5408795N) **GC-CUL**: Gagegenha Creek at Culvert (648319E 5413043N) **GL-TRIB**: Gagegenha Creek Tributary (647588E 5406101N) **SL-MID**: Strickland Lake (649521E 5401377N)
Sample Type	Grab
Sample Frequency	Monthly during ice-free season
Sample Parameters	**General Parameter**: Acidity, Alkalinity, BOD, Chlorophyll a, COD, Conductivity, DOC, Hardness (calculation), TDS, TOC, TSS and Turbidity. **Ions**: Chloride, Fluoride, Sodium and Sulphate. **Nutrients**: Nitrate Nitrogen, Nitrite Nitrogen, Soluble Phosphorous (0.45 micrometre filtration), Total Ammonia Nitrogen, Total Kjeldahl, Total Phosphorous and Un-ionized Ammonia (calculation). **Metals** (dissolved and total): Aluminum, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Tellurium, Titanium, Tungsten, Uranium, Vanadium, Zinc, and Zirconium.

Ground Water Monitoring Table

Ground Water Monitoring Table	
Sampling Stations	**Station Name**: Sample Site, (Easting, Northing) **MW104**: West of Mine Access Road, South of Road (646572E 5406660N) **MW3**: West of Upper Yard (646202E 5407184N) **MW4**: Northern Edge of Upper Yard (646299E 5407332N) **MW7**: West of Upper Yard, North-west of MW 3 (646069E 5407226N) **MW8**: North of Upper Yard (646329E 5407398N) **MW16-01A/B**: South-western Edge of NTMF (645798E 5407483N) **MW16-03A/B**: North-east of NTMF (646297E 5407963N) **MW16-04A/B**: East of NTMF (646376E 5407796N) **MW16-05A**: Eastern End of Containment Pond (646588E 5407250N) **MW19-01**: South of Containment Pond Expansion (646605E 5407160N) **MW19-03**: North-eastern Edge of Upper Yard (646403E 5407369N) **MW19-04**: Next to the Mechanical Shop (646347E 5407208N) **MW24-01A/B**: Nested Well 200 metres Downgradient of MW 16-03 (646521E 5408008N) **MW24-02A/B**: Nested Well 200 metres Downgradient of Seep 2 & 3 (646654E 5407735N) **MW24-03A/B**: North of the facility (645742E 5407945N) **MW24-04**: Background monitoring well (646809E 5406620N) **MW24-05A/B**: Downgradient of MW16-01A/B (645388E 5407295N) **MW24-13A/B:** Downgradient of MW16-05A (646661E 5407300N)
Sample Type	Grab
Sample Frequency	Three (3) time per year (Spring, Summer, Fall)
Sample Parameters	**General Parameter**: Acidity, Alkalinity, Cyanide, Dissolved Organic Carbon, Dissolved Phosphorous, Hardness (calculation), pH (field), Sulphate, Total Dissolved Solids, TAN, and Total Suspended Solids. **Petroleum Hydrocarbon**: Benzene, Ethylbenzene, Petroleum Hydrocarbon (PHC) Fractions 1-4, Toluene, and Xylenes. **Dissolved Metals**: Aluminum, Antimony, Arsenic, Barium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Selenium, and Zinc.

Schedule D

Limited Operational Flexibility Criteria for Modifications to Works

1. The modifications to 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 LOF conditions in the Approval and require the submission of the Notice of Modifications. If there is a conflict between the 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

        a) Alter pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the modifications do not result in an increase of the sewage treatment plant Rated Capacity and the existing flow process and/or treatment train are maintained, as applicable.

        b) 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 plant rated capacity is not exceeded and where no land acquisition is required.

        d) Optimizing existing sewage treatment plant 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 rated 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, dewatering equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

3. Sewage Treatment Plant Outfall

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

4. Sanitary Sewers

    a) Pipe relining and replacement with similar pipe size within the Sewage Treatment Plant 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 plant or hauled off-site for proper disposal,

        ii. any effluent from the pilot system discharged to the inlet of the sewage treatment plant 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 Management 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 Licensed Engineering Practitioner licensed under the *Professional Engineers Act* in Ontario.

        ii. Routine dam raises and extensions are sealed by a Licensed

Engineering Practitioner 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.

iv. Routine dam raises and extensions are designed in compliance with the *Lakes and Rivers Improvement Act* (LRIA) and as required by the LRIA Permit that is in place.

b) New dams are not eligible under LOF, unless pre-approved under the tailings management plan.

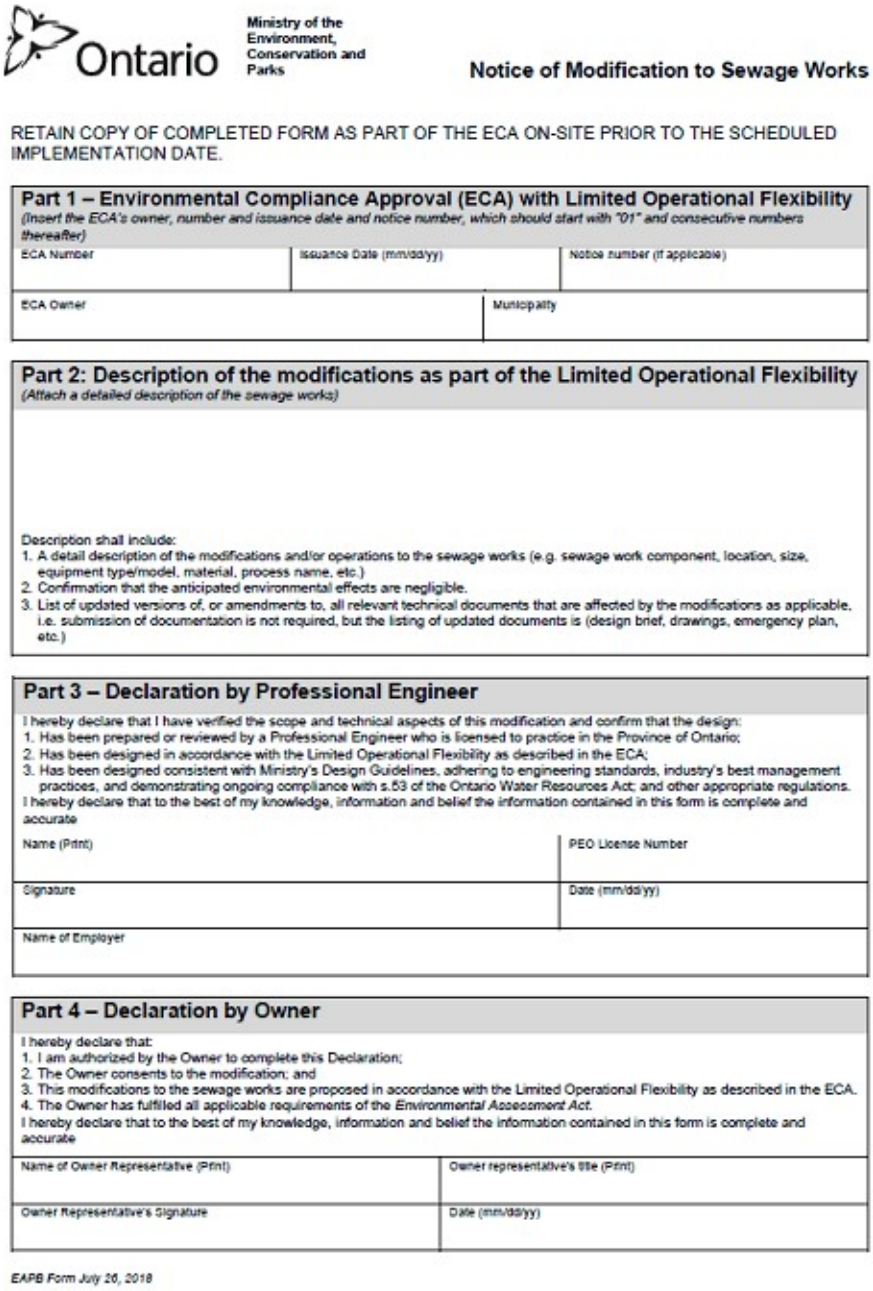
c) Pipe replacement or extension with similar pipe size within the Tailings Management area, where the nominal diameter is not greater than 1,200 millimetres.

2. Works that are exempt from section 53 of the OWRA by Ontario Regulation 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 Works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.

4. The modifications noted in section 3 above are **not** 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”.



Ontario

Ministry of the Environment, Conservation and Parks

Notice of Modification to Sewage Works

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

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

(Insert the ECA's owner, number and issuance date and notice number, which should start with "01" and consecutive numbers thereafter)

ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)

ECA Owner	Municipality

Part 2: Description of the modifications as part of the Limited Operational Flexibility

(Attach a detailed description of the sewage works)

Description shall include:
1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.)
2. Confirmation that the anticipated environmental effects are negligible.
3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

Part 3 – Declaration by Professional Engineer

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:
1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
2. Has been designed in accordance with the Limited Operational Flexibility as described in the ECA;
3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name (Print)	PEO License Number

Signature	Date (mm/dd/yy)

Name of Employer

Part 4 – Declaration by Owner

I hereby declare that:
1. I am authorized by the Owner to complete this Declaration;
2. The Owner consents to the modification; and
3. This modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.
4. The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name of Owner Representative (Print)	Owner representative's title (Print)

Owner Representative's Signature	Date (mm/dd/yy)

EAPB Form July 26, 2018

Note: A digital copy can be obtained from the District Manager.

Schedule E
Methodology for Calculating and Reporting Monthly Geometric Mean Density

1. Monthly Geometric Mean Density

Geometric mean is defined as the n^{th} root of the product of n numbers. In the context of calculating Monthly Geometric Mean Density for *E. coli*, the following formula shall be used:

$$\sqrt[n]{x_1 x_2 x_3 \cdots x_n}$$

in which,

"n" is the number of samples collected during the calendar month; and

"x" is the value of each Single Sample Result.

For example, four weekly grab samples were collected and tested for *E. coli* during the calendar month. The *E. coli* densities in the Final Effluent were found below:

Sample Number	*E. coli* Densities* (CFU/100 mL)
1	10
2	100
3	300
4	50

The Geometric Mean Density for these data:

$$\sqrt[4]{10 \times 100 \times 300 \times 50} = 62$$

*If a particular result is zero (0), then a value of one (1) will be substituted into the calculation of the Monthly Geometric Mean Density. If the MPN method is utilized for *E. coli* analysis, values in the table shall be MPN/100 mL.

Schedule F

Notice due to MISA Revocation

This Schedule is to provide for the substantially equivalent requirements that were set out in Ontario Regulation 560/94 as it read prior to its revocation on July 1, 2021 such that there is a continued protection of the environment.

This Schedule applies both to effluent streams that discharge continuously and to effluent streams that discharge intermittently.

This Schedule shall come into force on the day it is issued.

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

1. "Assessment Parameter" means a parameter that is listed in **Schedule H or I** in this Approval;

2. "Blowdown Water" means water that is discharged from a recirculating cooling water system or a boiler system for the purpose of controlling the level of water in the system or for the purpose of discharging from the system materials contained in the system the further build-up of which would impair the operation of the system;

3. "Cooling Water Effluent" means water and associated material that is used in an industrial process for the purpose of removing heat and that has not, by design, come into contact with Process Materials, but does not include Blowdown Water;

4. "Cooling Water Effluent Monitoring Stream" means a cooling water effluent stream on which a sampling point is maintained under Condition 3;

5. "Cooling Water Effluent Sampling Point" means a sampling point maintained on a cooling water effluent stream under Condition 3;

6. "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;

7. "Discharger" means Silver Lake Ontario Inc., or person in occupation or having the charge, management or control of the plant to which this Approval applies;

8. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Plant is geographically located;

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

10. "Eight (8)-hour Period" means between,

a. midnight and 8 a.m.,

b. 8 a.m. and 4 p.m., or

c. 4 p.m. and midnight;

11. "Limited Parameter" means a parameter for which a limit is specified in Column 3 or 4 of **Schedule G** in this Approval;

12. "Metal" means antimony, bismuth, cadmium, chromium, cobalt, copper, gold, iron, lead, manganese, mercury, molybdenum, niobium, nickel, palladium, platinum, silver, tantalum, tellurium, thorium, tin, titanium, tungsten, uranium, vanadium or zinc, or any combination thereof;

13. "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;

14. "Minewater Effluent Monitoring Stream" means a process effluent monitoring 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 Wastewater Treatment Facility associated with a Tailings Area;

15. "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;

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

17. "Overflow Effluent" means effluent discharged from a Tailings 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;

18. "Overflow Effluent Monitoring Stream" means an overflow effluent stream on which a

sampling point is maintained under Condition 3;

19. "Overflow Effluent Sampling Point" means a sampling point maintained on an overflow effluent stream under Condition 3;

20. "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;

21. "Plant" means the industrial facility that produces Metal, Metal concentrates or Metal-bearing substances and the developed property, waste disposal sites and wastewater treatment facilities associated with it;

22. "Process Change" means a change in equipment, production processes, Process Materials or treatment processes;

23. "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. Blowdown Water,

    c. 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

    d. any effluent described in paragraphs (a) to (c) combined with Cooling Water Effluent or Storm Water Effluent;

24. "Process Effluent Monitoring Stream" means a process effluent stream on which a sampling point is maintained under Condition 3;

25. "Process Effluent Sampling Point" means a sampling point maintained on a process effluent stream under Condition 3;

26. "Process Materials", in relation to the Discharger’s plant, 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;

27. "Quarter" means a period of three (3) consecutive months beginning on the first day of January, April, July or October;

28. "Semi-annual Period" means a period of six (6) months beginning on the first day of January

or July;

29. "Storm Water Effluent" means run-off from a storm event or thaw that is not used in any industrial process;

30. "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;

31. "Wastewater Treatment Facility" includes a Tailings Area.

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

TERMS AND CONDITIONS

1. BYPASSES

1. The Discharger shall not permit effluent that would ordinarily flow past a sampling point maintained under this Approval to be discharged from the Discharger's plant without flowing past that sampling point, regardless of whether it would be convenient to do so because of a maintenance operation, a breakdown in equipment or any scheduled or unscheduled event.

2. The Discharger shall not permit Overflow Effluent to be discharged from the Discharger's plant unless it is unavoidable as a result of an extraordinary thaw or storm event.

2. SAMPLING AND ANALYTICAL PROCEDURES

1. Subject to Condition 21, the Discharger shall carry out the maintenance of sampling point obligations of this Approval and the sampling and analysis obligations of this Approval, including quality control sampling and analysis obligations, in accordance with the procedures described in the Ministry publication entitled "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater", as amended from time to time.

2. The Discharger shall maintain the sampling equipment used at the Discharger's plant for sampling required by this Approval in a way that ensures that the samples collected at the plant under this Approval accurately reflect the level of discharge of each Limited Parameter and Assessment Parameter from the plant.

3. SAMPLING POINTS

1. The Discharger shall maintain, a sampling point on each Process Effluent, Cooling

Water Effluent and overflow effluent stream at the Discharger's plant, as necessary so that the plant loadings calculated under Conditions 7, 8 and 9 for each Limited Parameter and Assessment Parameter and the concentrations determined under Conditions 10, 11 and 12 for each Limited Parameter and Assessment Parameter accurately reflect the level of discharge of each such parameter from the plant.

2. Despite subsection (1) of this condition, the Discharger need not maintain a sampling point on a by-pass.

3. If circumstances change so that a new sampling point is necessary at the Discharger's plant in order to permit the calculation of plant loadings under Conditions 7, 8 and 9 for each Limited Parameter and Assessment Parameter and the determination of concentrations under Conditions 10, 11 and 12 for each Limited Parameter and Assessment Parameter that accurately reflect the level of discharge of each such parameter from the plant, the Discharger shall, within thirty (30) days of the change, establish the new sampling point and notify the District Manager in writing.

4. The Discharger may, after notifying the District Manager in writing, eliminate a sampling point maintained under subsection (1) or established under subsection (3) of the this condition if the sampling point is no longer necessary to permit the calculation of plant loadings under Conditions 7, 8 and 9 for each Limited Parameter and Assessment Parameter and the determination of concentrations under Conditions 10, 11 and 12 for each Limited Parameter and Assessment Parameter that accurately reflect the level of discharge of each such parameter from the Plant.

5. The plant loading for a parameter or the concentration for a parameter that is based on analytical results that are significantly affected by dilution or masking due to the merging of streams upstream of a sampling point at the plant is not a loading or a concentration that accurately reflects the level of discharge of the parameter from the plant.

4. REPORTS ON SAMPLING POINTS

1. The Discharger shall keep an updated list and plot plan showing the sampling points maintained under this Approval at the Discharger's Plant and submit to the Ministry upon request.

5. USE OF SAMPLING POINTS

1. Subject to Condition 20, the Discharger shall use the sampling points maintained under this Approval for all sampling required by this Approval.

6. CALCULATION OF LOADINGS — GENERAL

1. For the purposes of performing a calculation under Condition 7 to 12, the Discharger

shall use the actual analytical result obtained by the laboratory.

2. Despite subsection (1) of this condition, where the actual analytical result is less than one-tenth of the analytical method detection limit set out in the Ministry publication entitled "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater", as amended from time to time, the Discharger shall use the value zero for the purpose of performing a calculation under Conditions 7 to 12.

3. The Discharger shall ensure that each calculation of a process effluent loading required by Condition 7 and each calculation of a process effluent concentration required by Condition 10 is performed as soon as reasonably possible after the analytical results on which the calculation is based become available to the Discharger.

4. The Discharger shall ensure that each calculation of a cooling water effluent loading required by Condition 8 is performed in time to comply with Condition 33(4) and each calculation of a cooling water effluent concentration required by Condition 11 is performed in time to comply with Condition 33(7).

5. The Discharger shall ensure that each calculation of an overflow effluent loading required by Condition 9 is performed in time to comply with Condition 33(5) and each calculation of an overflow effluent concentration required by Condition 12 is performed in time to comply with Condition 33(8).

7. CALCULATION OF LOADINGS — PROCESS EFFLUENT

1. The Discharger shall calculate, in kilograms, a daily process effluent stream loading for each Limited Parameter in each Process Effluent Monitoring Stream of the Discharger 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) of this condition, the Discharger 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 26, for the stream for the day.

3. The Discharger shall calculate, in kilograms, a daily process effluent plant loading for each Limited Parameter for each day for which the Discharger is required to calculate a daily process effluent stream loading for the parameter under subsection (1) of this condition.

4. For the purposes of subsection (3) of this condition, 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 condition for the day.

5. Where the Discharger calculates only one daily process effluent stream loading for a parameter for a day under subsection (1) of this condition, the daily process effluent plant loading for the parameter for the day for the purposes of subsection (3) of this condition is the single daily process effluent stream loading for the parameter for the day.

6. The Discharger shall calculate, in kilograms, a monthly average process effluent plant loading for each Limited Parameter for each month in which a sample is collected under this Approval more than once from a Process Effluent Monitoring Stream at the Discharger's plant for analysis for the parameter.

7. For the purposes of subsection (6) of this condition, 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 condition for the month.

8. CALCULATION OF LOADINGS — COOLING WATER EFFLUENT

1. The Discharger shall calculate, in kilograms, a daily cooling water effluent stream loading for each Assessment Parameter, in **Schedule H** in this Approval, in each Cooling Water Effluent Monitoring Stream of the Discharger 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) of this condition, the Discharger 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 26, for the stream for the day.

3. The Discharger shall calculate, in kilograms, a daily cooling water effluent plant loading for each Assessment Parameter, in **Schedule H** in this Approval, for each day for which the Discharger is required to calculate a daily cooling water effluent stream loading for the parameter under subsection (1) of this condition.

4. For the purposes of subsection (3) of this condition, a daily cooling water effluent plant loading for a parameter for a day is the sum, in kilograms, of the daily cooling water effluent stream loadings for the parameter calculated under subsection (1) of this condition for the day.

5. Where the Discharger calculates only one daily cooling water effluent stream loading for a parameter for a day under subsection (1) of this condition, the daily cooling water effluent plant loading for the parameter for the day for the purposes of subsection (3) of this condition is the single daily cooling water effluent stream loading for the parameter for the day.

6. The Discharger shall calculate, in kilograms, a monthly average cooling water effluent plant loading for each Assessment Parameter, in **Schedule H** in this Approval, for

each month in which a sample is collected under this Approval more than once from a Cooling Water Effluent Monitoring Stream at the Discharger's plant for analysis for the parameter.

7. For the purposes of subsection (6) of this condition, a monthly average cooling water effluent plant loading for a parameter for a month is the arithmetic mean of the daily cooling water effluent plant loadings for the parameter calculated under subsection (3) of this condition for the month.

9. CALCULATION OF LOADINGS — OVERFLOW EFFLUENT

1. The Discharger shall calculate, in kilograms, an overflow effluent stream loading for each Assessment Parameter, in **Schedule I** in this Approval, in each Overflow Effluent Monitoring Stream of the Discharger 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 condition, the Discharger 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 26, for the stream for the Eight (8)-hour Period.

3. The Discharger shall calculate, in kilograms, a daily overflow effluent stream loading for each Assessment Parameter, in **Schedule I** in this Approval, in each Overflow Effluent Monitoring Stream of the Discharger for each day for which the Discharger is required to calculate an overflow effluent stream loading for the parameter under subsection (1) of this condition.

4. For the purposes of subsection (3) of this condition, 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 condition for the day.

5. Where the Discharger calculates only one overflow effluent stream loading for a parameter under subsection (1) of this condition 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 condition is the single overflow effluent stream loading calculated for the parameter under subsection (1) of this condition.

10. CALCULATION OF CONCENTRATIONS — PROCESS EFFLUENT

1. The Discharger shall calculate, in milligrams per litre, a monthly average concentration for each Limited Parameter in each Process Effluent Monitoring Stream of the Discharger for each month.

2. For the purposes of subsection (1) of this condition, a monthly average concentration

for a parameter for a month is the arithmetic mean of the analytical results obtained for the parameter from the samples collected under Condition 17 or 18, as the case may be, from the stream for the month.

11. CALCULATION OF CONCENTRATIONS — COOLING WATER EFFLUENT

1. The Discharger shall calculate, in milligrams per litre, a monthly average concentration for each Assessment Parameter, in **Schedule H** in this Approval, in each Cooling Water Effluent Monitoring Stream of the Discharger for each month.

2. For the purposes of subsection (1) of this condition, a monthly average concentration for a parameter for a month is the arithmetic mean of the analytical results obtained for the parameter from the samples collected under Condition 24 from the stream for the month.

12. CALCULATION OF CONCENTRATIONS — OVERFLOW EFFLUENT

1. The Discharger shall calculate, in milligrams per litre, a daily concentration for each Assessment Parameter, in **Schedule I** in this Approval, in each Overflow Effluent Monitoring Stream of the Discharger 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 (1) of this condition, 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 25 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.

13. PARAMETER LIMITS

1. The Discharger shall ensure that each analytical result obtained for each Limited Parameter from each sample collected from a Process Effluent Monitoring Stream at the Discharger's plant does not exceed the daily concentration limit specified for the parameter in Column 3 of **Schedule G** in this Approval.

2. The Discharger shall ensure that each monthly average concentration calculated for a Limited Parameter under Condition 10 in connection with the Discharger's plant does not exceed the monthly average concentration limit specified for the parameter in Column 4 of **Schedule G** in this Approval.

3. Subject to subsection (4) of this condition, the Discharger shall control the quality of each Process Effluent Monitoring Stream at the Discharger's plant to ensure that the

pH value of any sample collected at a Process Effluent Sampling Point at the plant is within the range of 6.0 to 9.5.

4. Throughout any day on which the Discharger has used an alternate sampling point on a Process Effluent Monitoring Stream for sampling, as permitted by Conditions 20(7) and (8), the Discharger,

    a. shall control the quality of the stream to ensure that the pH value of any sample collected at the alternate sampling point on the stream is within the range of 6.0 to 9.5; and

    b. need not comply with subsection (3) of this condition with respect to the stream.

14. LETHALITY LIMITS

1. The Discharger shall control the quality of each Process Effluent Monitoring Stream and each Cooling Water Effluent Monitoring Stream at the Discharger's plant to ensure that each rainbow trout acute lethality test and each *Daphnia magna* acute lethality test performed on any grab sample collected at a Process Effluent Sampling Point or Cooling Water Effluent Sampling Point at the plant results in mortality for no more than fifty (50) per cent of the test organisms in hundred (100) per cent effluent.

15. MONITORING - GENERAL

1. Despite Conditions 17 to 25, the Discharger need not collect samples from any stream at the Discharger's plant on a day on which Process Effluent is not being discharged from the plant.

2. Despite Conditions 17, 19 and 25, the Discharger need not collect or analyze samples for total cyanide if cyanide is not used at the Discharger's plant.

3. Despite Condition 17 and 19, the Discharger need not collect or analyze samples for total cyanide from a Minewater Effluent Monitoring Stream.

4. Where the Discharger is required by this Approval to pick up a set of samples and analyze it for certain parameters, the Discharger shall pick up a set of samples sufficient to allow all the analyses to be performed.

5. The Discharger shall use all reasonable efforts to ensure that all analyses required by this Approval are completed as soon as reasonably possible and that the results of those analyses are made available to the Discharger as soon as reasonably possible.

6. Subject to subsection (7) of this condition, the Discharger shall pick up all samples required to be picked up at the Discharger's plant under Conditions 17, 18 and 24

between the hours of 7 a.m. and 10 a.m.

7. If the District Manager is satisfied, on the basis of written submissions from the Discharger, that the circumstances at the Discharger's Plant are such that it would be impractical to pick up a set of samples from each sampling point maintained at the Plant under this Approval within the time period specified in subsection (6), the District Manager may give the Discharger a written notice in respect of the Plant, varying the time period specified in subsection (6).

8. Subject to subsections (9) of this condition, where the Discharger is required by Condition 17, 18 or 24 to pick up samples, the Discharger shall pick up samples collected over the twenty four (24)-hour period immediately preceding the Pick-Up.

9. The twenty four (24)-hour period referred to in subsection (8) of this condition may be shortened or enlarged by up to three (3) hours to permit the Discharger to take advantage of the three(3)-hour range specified in subsection (6) of this condition or of a different three (3)-hour period.

16. MONITORING – ALTERNATE SAMPLING PROCEDURES

1. Where the Discharger is, in accordance with Condition 2(1), required by the Ministry publication entitled "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater", as amended from time to time, to collect a composite sample for any sample required to be picked up at a stream at the Discharger's plant under this Approval, the Discharger may collect the composite sample by collecting three (3) equal volume grab samples from the stream at intervals of at least two (2) hours and combining them.

2. Instead of collecting composite sample from a Process Effluent Monitoring Stream under Condition 17 or 18 the Discharger may collect a single grab sample from the stream if,

    a. the Process Effluent Monitoring Stream flows from a Tailings Area or any other Wastewater Treatment Facility associated with a Tailings Area and the retention time calculated under subsection (3) of this condition in relation to the stream is thirty (30) days or more; or

    b. the Process Effluent Monitoring Stream does not flow from a Tailings Area or any other Wastewater Treatment Facility associated with a Tailings Area and the retention time calculated under subsection (3) of this condition in relation to the stream is five (5) days or more.

3. Retention time in relation to a Process Effluent Monitoring Stream is the period of time in days that results from dividing the total available volume, expressed in cubic metres, of the wastewater treatment facilities on the stream by the average daily flow,

expressed in cubic metres, of the stream.

4. For the purposes of subsection (3) of this condition, the total available volume of the wastewater treatment facilities on the Process Effluent Monitoring Stream is the volume of the wastewater treatment facilities that may be occupied by water on any day within the ninety (90)-day period preceding the date of the calculation of the retention time, taking into account,

    a. any requirements that apply in respect of the operation of those facilities in any Act or in any approval, order, direction or other instrument issued under any Act; and

    b. any solid waste or sludge contained within those facilities on the day of the calculation of the total available volume of those facilities.

5. For the purposes of subsection (3) of this condition, the average daily flow of the Process Effluent Monitoring Stream is the arithmetic mean of the thirty (30) highest daily volumes calculated under Condition 26 in relation to the stream within the ninety (90)-day period preceding the date of the calculation of the retention time.

6. The Discharger may sample at a Process Effluent Monitoring Stream in the manner described in subsection (2) of this condition for the period of time during which the retention time calculated in relation to the stream is in effect.

7. A retention time calculated under this condition expires 365 days after the date on which the calculation is made or on the date that a new retention time is calculated under this condition, whichever date is sooner.

17. MONITORING – PROCESS EFFLUENT – THRICE WEEKLY

1. The Discharger shall, on three (3) days in each week, pick up a set of samples collected at each Process Effluent Sampling Point at the Discharger's plant and shall analyze each set of samples for the parameters for which the frequency of monitoring, as set out in Column 2 of **Schedule G** in this Approval, is thrice weekly.

2. There shall be an interval of at least twenty (24) hours between successive Pick-Up days at the plant under subsection (1) of this condition.

3. All samples picked up under subsection (1) of this condition in a week shall be picked up on the same three (3) days in the week.

18. MONITORING – PROCESS EFFLUENT – WEEKLY

1. The Discharger shall, on one day in each week, pick up a set of samples collected at each Process Effluent Sampling Point at the Discharger's plant and shall analyze each set of samples for the parameters for which the frequency of monitoring, as set out in

Column 2 of **Schedule G** in this Approval, is weekly.

2. There shall be an interval of at least four days between successive Pick-Up days at the plant under subsection (1) of this condition.

3. All samples picked up under subsection (1) of this condition in a week shall be picked up on the same day in the week.

19. MONITORING – PROCESS EFFLUENT – QUALITY CONTROL

1. On one day in each year, on a day on which samples are picked up at the plant under Condition 17(1), the Discharger shall collect and pick up a duplicate sample for each sample picked up on that day under Condition 17(1) at one Process Effluent Sampling Point at the Discharger's plant and shall analyze each duplicate sample for the parameters for which the frequency of monitoring, as set out in Column 2 of **Schedule G**, is thrice weekly.

2. On one day in each year, on a day on which samples are picked up at the plant under Condition 18(1), the Discharger shall collect and pick up a duplicate sample for each sample picked up on that day under Condition 18(1) at one Process Effluent Sampling Point at the Discharger's plant and shall analyze each duplicate sample for the parameters for which the frequency of monitoring, as set out in Column 2 of **Schedule G**, is weekly.

3. The Discharger shall ensure that the same Process Effluent Sampling Point is used at the Discharger's plant for the purposes of sampling under subsections (1) and (2) of this condition in a year.

4. The Discharger shall prepare a travelling blank and travelling spiked blank sample for each sample for which a duplicate sample is picked up at the plant under subsection (1) or (2) of this condition and shall analyze 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", as amended from time to time.

5. There shall be an interval of at least six (6) months between successive Pick-Up days at the plant under subsections (1) and (2) of this condition.

20. MONITORING – PROCESS EFFLUENT – pH MEASUREMENT

1. The Discharger shall, on three (3) days in each week, during the time period applicable to the plant under Condition 15(6) or (7), collect a grab sample from each Process Effluent Monitoring Stream at the Discharger's plant and shall analyze each sample for the parameter pH.

2. There shall be an interval of at least twenty four (24) hours between each of the three

(3) collections at a stream under subsection (1) of this condition in each week.

3. All samples collected under this condition shall be collected at the same time as samples collected under Condition 17.

4. Each grab sample collected under subsection (1) of this condition shall be picked up within four (4) hours of when it was collected.

5. All samples picked up under subsection (1) of this condition in a week shall be picked up on the same three (3) days in the week.

6. The Discharger shall ensure that each grab sample picked up under subsection (1) of this condition is analyzed within four (4) hours of when it is picked up.

7. Instead of collecting a grab sample under subsection (1) of this condition from a stream, the Discharger may use an on-line analyzer at the sampling point on the stream and analyze the effluent at the sampling point for the parameter pH once on each of three (3) days in each week during the time period applicable to the plant under Condition 15(6) or (7).

8. For the purposes of this condition, the Discharger shall use either the sampling point maintained under Condition 3 on the stream or an alternate sampling point located downstream of the sampling point but before the point of discharge of the stream to surface water or to an industrial sewer used in common with another plant.

9. Before using an alternate sampling point under subsection (8) of this condition, the Discharger shall give the District Manager a written notice describing the location of the alternate sampling point, together with a revised version of the list and plot plan referenced under Condition 4 showing the alternate sampling point.

21. MONITORING – ACUTE LETHALITY TESTING – RAINBOW TROUT

1. Where the Discharger is required by this condition to perform a rainbow trout acute lethality test, the Discharger shall perform the test according to the procedures described in the Environment and Climate Canada publication entitled "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout", as amended from time to time.

2. Each rainbow trout acute lethality test required by this condition shall be carried out as a single concentration test using hundred (100) per cent effluent.

3. On one day in each month, on a day on which samples are picked up at the plant under Condition 18(1), the Discharger shall collect and immediately pick up a grab sample at each Process Effluent Sampling Point at the Discharger’s plant and shall perform a rainbow trout acute lethality test on each sample.

4. There shall be an interval of at least fifteen (15) days between successive Pick-Up days at the plant under subsection (3) of this condition.

5. All samples picked up under subsection (3) of this condition in a month shall be picked up on the same day in the month.

6. Where the Discharger has performed tests under subsection (3) of this condition for twelve (12) consecutive months, in accordance with MISA Regulation 560/94 before this amendment is issued, on samples collected from the same sampling point and the mortality of the rainbow trout in each test did not exceed fifty (50) per cent, the Discharger is relieved of the obligations under subsection (3) of this condition relating to the sampling point and shall instead collect and immediately pick up a grab sample at the sampling point on one day in each Quarter and perform a rainbow trout acute lethality test on each sample.

7. Samples picked up at the plant under subsection (6) of this condition shall be picked up on a day on which samples are picked up at the plant under subsection (3) of this condition.

8. If no samples are being picked up at the plant under subsection (3) of this condition during a Quarter, samples picked up at the plant during the Quarter under subsection (6) of this condition shall be picked up on a day on which samples are picked up at the plant under Condition 18(1).

9. There shall be an interval of at least forty five (45) days between successive Pick-Up days at the plant under subsection (6) of this condition.

10. All samples picked up under subsection (6) of this condition in a Quarter shall be picked up on the same day in the Quarter.

11. If a rainbow trout acute lethality test performed under subsection (6) of this condition on any sample from a sampling point results in mortality of more than fifty (50) per cent of the test rainbow trout, subsections (6) to (10) of this condition cease to apply in respect to samples from that sampling point, and the Discharger shall instead comply with the requirements of subsection (3) of this condition relating to the sampling point, until the tests performed under subsection (3) of this condition on all samples collected from the sampling point for a further twelve (12) consecutive months result in mortality for no more than fifty (50) per cent of the rainbow trout for each test.

12. The Discharger shall notify the Director in writing of any change in the frequency of acute lethality testing under this Approval at the Discharger’s plant, within thirty (30) days after the day on which the change begins.

13. Subsections (2) to (12) of this condition apply with necessary modifications to each Cooling Water Effluent Sampling Point and, for the purpose, the reference in subsection (3) of this condition to each Process Effluent Sampling Point shall be

deemed to be a reference to each Cooling Water Effluent Sampling Point and the reference in subsections (3) and (8) of this condition to Condition 18(1) shall be deemed to be a reference to Condition 24(1).

22. MONITORING – ACUTE LETHALITY TESTING – *DAPHNIA MAGNA*

1. Where the Discharger is required by this section to perform a *Daphnia magna* acute lethality test, the Discharger shall perform the test according to the procedures described the Environment and Climate Change Canada publication entitled "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to *Daphnia magna* ", as amended from time to time.

2. Conditions 21(2) to (13) apply with necessary modifications to *Daphnia magna* acute lethality tests and, for the purpose, a reference to rainbow trout shall be deemed to be a reference to *Daphnia magna* .

3. The Discharger shall pick up each set of samples required to be collected from a sampling point at the Discharger's plant under this condition on a day on which the Discharger collects a sample from the sampling point under Condition 21, to the extent possible having regard to the frequency of monitoring required at the sampling point under this condition and Condition 21.

23. MONITORING – CHRONIC TOXICITY TESTING – FATHEAD MINNOW AND *CERIODAPHNIA DUBIA*

1. Where the Discharger is required to perform a seven-day fathead minnow growth inhibition test, the Discharger shall perform the test according to the procedure described in the Environment and Climate Change Canada publication entitled "Biological Test Method: Test of Larval Growth and Survival Using Fathead Minnows", as amended from time to time.

2. Where the Discharger is required to perform a seven-day *Ceriodaphnia dubia* reproduction inhibition and survivability test, the Discharger shall perform the test according to the procedure described in the Environment and Climate Change Canada publication entitled "Biological Test Method: Test of Reproduction and Survival Using the Cladoceran *Ceriodaphnia dubia* ", as amended from time to time.

3. On one day in each Semi-annual Period, on a day on which samples are picked up at the plant under Condition 18(1), the Discharger shall collect and immediately pick up a grab sample from each Process Effluent Sampling Point at the Discharger's plant, and shall perform a seven-day fathead minnow growth inhibition test and a seven-day *Ceriodaphnia dubia* reproduction inhibition and survivability test on each sample.

4. There shall be an interval of at least ninety (90) days between successive Pick-Up

days at the plant under subsection (3) of this condition.

5. All samples picked up under subsection (3) of this condition in a Semi-annual Period shall be picked up on the same day in the Semi-annual Period.

6. The Discharger need not collect a sample from a sampling point in accordance with subsection (3) of the condition until twelve (12) consecutive monthly rainbow trout acute lethality tests and twelve (12) consecutive monthly *Daphnia magna* acute lethality tests performed on samples collected at the sampling point at the Discharger's plant result in mortality for no more than fifty (50) per cent of the test organisms in hundred (100) per cent effluent.

24. MONITORING – COOLING WATER EFFLUENT – WEEKLY ASSESSMENT

1. The Discharger shall, on one day in each week, pick up a set of samples collected at each Cooling Water Effluent Sampling Point at the Discharger's plant and shall analyze each set of samples for each Assessment Parameter in **Schedule H** in this Approval.

2. There shall be an interval of at least four (4) days between successive Pick-Up days at the plant under subsection (1) of this condition.

3. All samples picked up under subsection (1) of this condition in a week shall be picked up on the same day in the week.

25. MONITORING – OVERFLOW EFFLUENT – ASSESSMENT

1. The Discharger shall, during each Eight (8)-hour period in which Overflow Effluent is discharged from the plant, collect a grab sample at each Overflow Effluent Sampling Point at the Discharger's plant and shall analyze each sample for each Assessment Parameter in **Schedule I** in this Approval.

2. Each grab sample collected under subsection (1) of this condition shall be picked up within four (4) hours of when it was collected.

26. EFFLUENT FLOW MEASUREMENT

1. Subject to subsection (7) of this condition, for the purposes of this condition, a volume of effluent for a stream for a day 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.

2. The Discharger shall determine in cubic metres a daily volume of effluent for each process effluent stream at the Discharger's plant for each day on which a sample is collected under this Approval from the stream.

3. The Discharger shall use flow measurement methods that allow the daily volumes for process effluent streams to be determined to an accuracy of within plus or minus fifteen (15) per cent.

4. The Discharger shall determine in cubic metres a daily volume of effluent for each cooling water effluent stream at the Discharger's plant for each day on which a sample is collected under this Approval from the stream.

5. The Discharger shall use flow measurement methods that allow the daily volumes for cooling water effluent streams to be determined to an accuracy of within plus or minus twenty (20) per cent.

6. The Discharger shall determine in cubic metres a volume of effluent for each Overflow Effluent Monitoring Stream at the Discharger's plant for each Eight (8)-hour period for which a sample is collected under this Approval from the stream.

7. For the purposes of subsection (6) of this condition, a volume of effluent for an Overflow Effluent Monitoring Stream is the volume that flowed past the Overflow Effluent Sampling Point on the stream during the Eight (8)-hour period.

8. The Discharger shall use flow measurement methods that allow the volumes for overflow effluent streams to be determined to an accuracy of within plus or minus twenty (20) per cent.

9. The Discharger shall determine by calibration or confirm by means of a certified report of a registered professional engineer of the Province of Ontario that each flow measurement method used under subsection (2) of this condition meets the accuracy requirements of subsection (3) of this condition, that each flow measurement method used under subsection (4) of this condition meets the accuracy requirements of subsection (5) of this condition, and that each flow measurement method used under subsection (6) of this condition meets the accuracy requirements of subsection (8) of this condition.

10. Where the Discharger uses a new flow measurement method or alters an existing flow measurement method, the Discharger shall determine by calibration or confirm by means of a certified report of a registered professional engineer of the Province of Ontario that each new or altered flow measurement method meets the accuracy requirements of subsection (3), (5) or (8) of this condition, as the case may be, within two weeks after the day on which the new or altered method or system is used.

11. The Discharger shall develop and implement a maintenance schedule and a calibration schedule for each flow measurement system installed at the Discharger's plant and shall maintain each flow measurement system according to good operating practices.

12. The Discharger shall use reasonable efforts to set up each flow measurement system

used for the purposes of this section in a way that permits inspection by a provincial officer.

27. CALCULATION OF PLANT VOLUMES

1. The Discharger shall calculate, in cubic metres, a daily process effluent plant volume for each day.

2. For the purposes of subsection (1) of this condition, a process effluent plant volume for a day is the sum of the daily process effluent volumes determined under Condition 26 for the day.

3. The Discharger shall calculate, in cubic metres, a monthly average process effluent plant volume for each month, by taking the arithmetic mean of the daily process effluent plant volumes calculated under subsection (1) of this condition for the month.

4. The Discharger shall calculate, in cubic metres, a daily cooling water effluent plant volume for each day.

5. For the purposes of subsection (4) of this condition, a cooling water effluent plant volume for a day is the sum of the daily cooling water volumes determined under Condition 26 for the day.

6. The Discharger shall calculate, in cubic metres, a monthly average cooling water effluent plant volume for each month, by taking the arithmetic mean of the daily cooling water effluent plant volumes calculated under subsection (4) of this condition for the month.

28. STORM WATER CONTROL STUDY

1. The Discharger shall complete a storm water control study in respect of the Discharger’s plant, in accordance with the requirements of the Ministry publication entitled "Protocol for Conducting a Storm Water Control Study", dated August, 1994 as amended from time to time.

2. The Discharger need not comply with subsection (1) of this condition in respect of the Discharger’s plant if,

    a. the plant meets the exemption criteria set out in the Ministry publication entitled "Protocol for Conducting a Storm Water Control Study", dated August, 1994 as amended from time to time; and

    b. the Discharger had notified the Director in writing, before 1997, that the plant meets the exemption criteria referred to in paragraph (a).

3. The Discharger shall ensure that a copy of each study completed under this condition

is available to Ministry staff at the Discharger's plant, on request, during the plant's normal office hours.

29. RECORD KEEPING

1. The Discharger shall keep records of all analytical results obtained under sections Conditions 17, 18, 20, 24 and 25, all calculations performed under Conditions 7, 8, 9, 10, 11 and 12 and all determinations and calculations made or performed under Conditions 26 and 27.

2. The Discharger shall keep records of all sampling and analytical procedures used in meeting the requirements of Condition 2, including, for each sample, the date, the time of Pick-Up, the sampling procedures used, and any incidents likely to affect the analytical results.

3. The Discharger shall keep records of all retention times calculated under Condition 16.

4. The Discharger shall keep records of the results of all monitoring performed under Conditions 19 and 21 to 25.

5. The Discharger shall keep records of all maintenance and calibration procedures performed under Condition 26.

6. The Discharger shall keep records of all problems or malfunctions, including those related to sampling, analysis, acute lethality testing, chronic toxicity testing or flow measurement, that result or are likely to result in a failure to comply with a requirement of this Approval, stating the date, duration and cause of each malfunction, and including a description of any remedial action taken.

7. The Discharger shall keep records of any incident in which Process Effluent is discharged from the Discharger's plant without flowing past a sampling point maintained on a process effluent stream in accordance with this Approval before being discharged, stating the date, duration, cause and nature of each incident.

8. The Discharger shall keep records of any incident in which Overflow Effluent is discharged from the Discharger's plant stating the date, duration, cause and nature of each incident.

9. Discharger shall keep records of all Process Changes and redirections of or changes in the character of effluent streams that affect the quality of effluent at any sampling point maintained under this Approval at the Discharger's plant.

10. The Discharger shall keep records of the location of each sampling point maintained at the Discharger's plant under this Approval.

11. The Discharger shall make each record required by this condition as soon as

reasonably possible and shall keep each such record for a period of three (3) years.

12. The Discharger shall ensure that all records kept under this condition are available to Ministry staff at the Discharger's plant, on request, during the plant's normal office hours.

30. REPORTS AVAILABLE TO THE PUBLIC

1. On or before June 1 in each year, the Discharger shall prepare a report relating to the previous calendar year and including,

    a. a summary of plant loadings calculated under Conditions 7, 8 and 9;

    b. a summary of concentrations determined under Conditions 10, 11 and 12;

    c. a summary of retention times calculated under Condition 16;

    d. a summary of the results of monitoring performed under Conditions 17, 18 and 20 to 25;

    e. a summary of calculations performed under Conditions 26(6), 27(1) and 27(4);

    f. a summary of the concentrations or other results that exceeded a limit prescribed by Condition 13 or 14;

    g. a summary of the incidents in which Process Effluent was discharged from the Discharger's plant without flowing past a sampling point maintained on a process effluent stream in accordance with this Approval before being discharged; and

    h. a summary of the incidents in which Overflow Effluent was discharged from the Discharger's plant.

2. The Discharger shall ensure that each report prepared under subsection (1) of this condition is available to any person at the Discharger's plant, on request during the plant's normal office hours.

3. The Discharger shall provide the Director, upon request, with a copy of any report that the Discharger has prepared under subsection (1) of this condition.

31. REPORTS TO THE DISTRICT MANAGER – GENERAL

1. The Discharger shall notify the District Manager and the Director in writing of any change of name or ownership of the Discharger's plant, within thirty (30) days after the

end of the month in which the change occurs.

2. The Discharger 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 at the Discharger's plant, within thirty (30) days of the change or redirection.

3. The Discharger need not comply with subsection (2) of this condition where the effect of the change or redirection on effluent quality is of less than one week's duration.

32. REPORTS TO THE DISTRICT MANAGER

1. The Discharger shall report any incident in which Process Effluent is discharged from the Discharger's plant without flowing past a sampling point maintained on a process effluent stream in accordance with this Approval before being discharged.

2. The Discharger shall report any incident in which Overflow Effluent is discharged from the Discharger's plant.

3. The Discharger shall report any concentration or other result that exceeds a limit prescribed by Condition 13 or 14.

4. A report required under subsection (1), (2) or (3) of this condition shall be given orally, as soon as reasonably possible, and in writing, as soon as reasonably possible.

33. QUARTERLY REPORTS TO THE DISTRICT MANAGER

1. No later than forty five (45) days after the end of each Quarter, the Discharger shall submit a report to the District Manager containing information relating to the Discharger's plant throughout the Quarter as required by subsections (3) to (13) of this condition.

2. A report under this condition shall be submitted to the District Manager in the manner and form the District Manager specifies from time to time.

3. A report under this condition shall include all information included in a report given under Condition 32 during the Quarter.

4. The Discharger shall report, for each month in the Quarter, the monthly average plant loadings and the highest and lowest daily plant loadings calculated under Conditions 7 and 8 for each Limited Parameter and each Assessment Parameter in **Schedule H** in this Approval.

5. The Discharger shall report, for each day in the Quarter, each daily overflow effluent stream loading calculated under Condition 9 for each Assessment Parameter in

Schedule I in this Approval.

6. The Discharger shall report, for each month in the Quarter, the monthly average concentrations calculated under Condition 10 and the highest and lowest analytical results obtained under Conditions 17 and 18 for each Limited Parameter in each Process Effluent Monitoring Stream at the Discharger's plant.

7. The Discharger shall report, for each month in the Quarter, the monthly average concentrations calculated under Condition 11 and the highest and lowest analytical results obtained under Condition 24 for each Assessment Parameter in **Schedule H** in this Approval in each Cooling Water Effluent Monitoring Stream at the Discharger's plant.

8. The Discharger shall report, for each day in the Quarter, the daily concentrations calculated under Condition 12 and the highest and lowest analytical results obtained under Condition 25 for each Assessment Parameter in **Schedule I** in this Approval in each Overflow Effluent Monitoring Stream at the Discharger's plant.

9. The Discharger shall report, for each month in the Quarter, the monthly average process effluent plant volume and the highest and lowest daily process effluent plant volumes calculated under Condition 27.

10. The Discharger shall report, for each month in the Quarter, the monthly average cooling water effluent plant volume and the highest and lowest daily cooling water effluent plant volumes calculated under Condition 27.

11. The Discharger shall report, for each day in the Quarter, the daily overflow effluent stream volumes calculated under Condition 26.

12. The Discharger shall report the number of days in each month in the Quarter on which Process Effluent or Overflow Effluent was discharged from the Discharger's plant.

13. The Discharger shall report, for each month in the Quarter, the highest and lowest pH results obtained under Condition 20 for each Process Effluent Monitoring Stream at the Discharger's plant.

34. REPORTS TO THE DISTRICT MANAGER – CHRONIC TOXICITY TESTING

1. A report under this condition shall be submitted to the District Manager in the manner and form the District Manager specifies from time to time.

2. A report under subsection (1) of this condition shall include a plot of percentage reduction in growth or reproduction against the logarithm of test concentration and shall include a calculation of the concentration at which a twenty (25) per cent reduction in growth or reproduction would occur.

35. CONFLICT BETWEEN APPROVALS

1. Where there is a conflict between a limit in this amendment notice and a limit in the ECA for this Plant for a given parameter, the most stringent of the two limits shall apply.

The reasons for this amendment to the Approval are as follows:

1. Conditions 1 to 34 are imposed to provide for substantially equivalent requirements as is currently provided in Ontario Regulation 560/94 (*Effluent Monitoring and Effluent Limits – Metal Mining Sector*) such that there is a continued protection of the environment in the event that Ontario Regulation 560/94 is revoked:

    a. Effluent limits are imposed to ensure that the effluent discharged from the Discharger's Plant to the receiver meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.

    b. Monitoring and recording requirements are included to require the Discharger to demonstrate on a continual basis that the quality and quantity of the effluent from the Discharger's Plant is consistent with the effluent limits specified in this Approval and that the effluent does not cause any impairment to the receiving watercourse.

    c. Reporting requirements are included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Discharger in resolving the problems in a timely manner.

2. Condition 35 is included to emphasize the precedence of the most stringent limit, if there are conflicting limits between this amendment notice and the ECA for the Plant.

Schedule G

PROCESS EFFLUENT LIMITS AND MONITORING FREQUENCY

TABLE:

Item	Column 0.1 Analytical test group	Column 1 Parameter	Column 2 Monitoring frequency	Column 3 Daily concentration limit (mg/L)	Column 4 Monthly average concentration limit
1.	2	Total Cyanide	Thrice weekly	2	1
2.	8	Total Suspended Solids (TSS)	Thrice weekly	30	15
3.	9	Copper	Weekly	0.6	0.3
4.	9	Lead	Weekly	0.4	0.2
5.	9	Nickel	Weekly	1	0.5
6.	9	Zinc	Weekly	1	0.5
7.	10	Arsenic	Weekly	1	0.5

Schedule H

COOLING WATER ASSESSMENT MONITORING

TABLE:

Item	Column 0.1 Analytical test group	Column 1 Parameter	Column 2 Monitoring frequency
1.	8	Total Suspended Solids (TSS)	Weekly

Schedule I

OVERFLOW EFFLUENT ASSESSMENT MONITORING

TABLE:

Item	Column 0.1 Analytical test group	Column 1 Parameter	Column 2 Monitoring frequency
1.	2	Total Cyanide	Every Eight (8)-hour Period
2.	8	Total Suspended Solids (TSS)	Every Eight (8)-hour Period
3.	9	Copper	Every Eight (8)-hour Period
4.	9	Lead	Every Eight (8)-hour Period
5.	9	Nickel	Every Eight (8)-hour Period
6.	9	Zinc	Every Eight (8)-hour Period
7.	10.	Arsenic	Every Eight (8)-hour Period

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8479-B3QHJZ issued on September 20, 2018.

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**

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 15th day of May, 2025

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

AA/
c: Area Manager, MECP Sault Ste. Marie Area Office
c: District Manager, MECP Sudbury District Office
Jonathan Chester, Silver Lake Ontario Inc.