

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 6724-BTYNWG
Issue Date: December 8, 2020

Pure Gold Mining Inc.
1055 West Hastings Street, No. 1900
Vancouver, British Columbia
V6E 2E9

Site Location: Red Lake Mine
2 Mine Road, Madsen
Municipality of Red Lake, District of Kenora

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 **Phase 1 and Phase 2** operations of the Red Lake Mine for the collection, transmission, treatment and disposal of effluent from the tailings basin receiving underground mine dewatering, tailings from an annual average production rate of 800 tonnes per day gold ore milling operation, process water, domestic sewage, precipitation, groundwater and stormwater runoff from a catchment area of 165 hectares for all storm events up to and including the 200-year storm event, discharging to Coin Creek, consisting of the following:

- H2Flow Treatment System receiving domestic sewage from the Madsen community (Red Lake Municipality) including the Pure Gold Red Lake Mine site, designed for a maximum treatment flow rate of 9.4 cubic metres per hour, consisting of a HILT flow equalization tank, a TILT Moving Bed Biofilm Reactor, a containerized DAF System and a UV Disinfection system, discharging to the Tailings Management Facility;
- Cyanide Destruction Unit at the mill for the treatment of tailings utilizing the SO_2 /Air process at a tailings feed rate of 58 cubic metres per hour, consisting of two (2) agitated tanks in parallel, with associated pump and piping system discharging to the Tailings Management Facility;
- Modifications to the existing Tailings Management Facility (TMF) consisting of the creation of four (4) cells (Cells A, B, C and PP) for the deposition of tailings into Cell C and Cell A during Phase 1 and Phase 2 operations, including reinforcing and raising the wall of existing tailings pond, upgrades to PP Dam 1 and 2 and PP dam walls, upgrading existing or new pipelines and pump systems for tailings deposition, mine dewatering and water recirculation from the TMF back to the mill, and a new seepage collection system including ditches and sumps at PP Dams 1 and 2 for pump back into the TMF, discharging to the Water

Treatment Plant identified below prior to release to Coin Creek or recirculation of treated water back to the mill for reuse or recirculation back to Cell PP;

- Water Treatment Plant (WTP) for the treatment of effluent from the tailings basin and all other sources of process water and contact water prior to release to Coin Creek, consisting of a two stage system, Stage 1 for the removal of ammonia via a Moving Bed Biofilm Reactor System consisting of cyanide removal, nitrification, de-nitrification and re-oxygenation, and Stage 2 for the treatment of heavy metals via metal precipitation, clarifier, polishing and pH adjustment. The system has a maximum treatment capacity of 230 cubic metres per hour during permitted discharge periods and a minimum treatment capacity of 20 cubic metres per hour. During no discharge periods (November 30 to March 15 or when flow rate and ratio criteria are not met), only Stage 1 ammonia removal will be in operation and effluent is to be recirculated back into the TMF with no discharge to Coin Creek. Discharge to Coin Creek during permitted conditions will be via a 1,120 metre long, 200 millimetre diameter outlet pipeline to armoured discharge point S4 on Coin Creek;
- Mine water polishing pond and associated reclaim water pumping system and piping for process water reuse and makeup water in the Mill;
- Foundation drainage systems, collection ditches, perimeter berms, lined collection ponds and associated pumps and piping systems to direct contact stormwater and underground mine dewatering into the TMF or back into production for reuse;

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

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

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

1. "Approval" means this entire document and any schedules attached to it, and the application;
2. "Daily Maximum Concentration" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;
3. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;
4. "District Manager" means the District Manager of the appropriate local District Office of the Ministry, where the Works are geographically located;
5. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended;
6. "Mill Production" means any operation of the mill and production of tailings for the purpose of winning gold;

7. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;
8. "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;
9. "Owner" means Pure Gold Mining Inc., and includes its successors and assignees;
10. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
11. "Works" means the sewage Works described in the Owner's application, and this Approval.

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

TERMS AND CONDITIONS

1. GENERAL CONDITIONS

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 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 approvals from the Ministry of Natural Resources and Forestry and the Ministry of Energy,

- Northern Development and Mines necessary to construct or operate the sewage Works; or
- b. limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

2. 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.

3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - a. change of Owner;
 - b. change of address of the Owner;
 - c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act*, R.S.O. 1990, c.B17 shall be included in the notification to the District Manager; or
 - d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act*, R.S.O. 1990, c. C39 shall be included in the notification to the District Manager.
2. In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager and the Director.
3. The Owner shall ensure that all communications made pursuant to this condition refer to the number at the top of this Approval.

4. CHANGES IN PROCESS OR 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.

5. OPERATION AND MAINTENANCE

1. The Owner shall make all necessary investigations, take all necessary steps and obtain all necessary approvals so as to ensure that the physical structure, siting and operations of the Works do not constitute a safety or health hazard to the general public.
2. The Owner shall undertake an inspection of the condition of the conveyance ditches, collection sumps and ponds, at least once a week, and undertake any necessary cleaning and maintenance to ensure that sediment, debris and excessive decaying vegetation are removed from the above noted Works to prevent the excessive build-up of sediment, oil/grit, debris and/or decaying vegetation, to avoid reduction of the capacity and/or permeability of the Works, as applicable. The Owner shall also regularly inspect and clean out the inlets to and outlets from the Works to ensure that these are not obstructed.
3. The Owner shall ensure the immediate clean-out of the Works after a fuel or oil spill capture.
4. The Owner shall ensure that equipment and material for the containment, clean-up and disposal of fuel and oil and materials contaminated with such, is on hand and in good repair for immediate use in the event of:
 - a. loss of fuel or oil to the Works; or
 - b. a spill within the meaning of Part X of the EPA.
5. The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the Owner's administrative office for inspection by the Ministry. The logbook shall include the following:
 - a. the name of the Works;
 - b. the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed and method of clean-out of the Works; and
 - c. the date of each spill within the catchment area, including follow-up actions and remedial measures undertaken.
6. The Owner shall prepare an operations manual before January 31, 2021, that includes, but is not necessarily limited to, the following information:
 - a. operating and maintenance procedures for routine operation of the Works including the Maximum Operating Pond Elevation as defined by the Engineer of Record for Cell PP of the TMF;
 - 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 spills and any other abnormal situations and for notifying the District Manager; and
 - e. procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
7. The Owner shall maintain the operations manual current and retain a copy at the Owner's administrative office for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.

6. SPECIAL OPERATING CONDITIONS

1. This Approval is issued and approved for Phase 1 and Phase 2 operations only, as outlined in the document "Appendix A Supplement Pure Gold Red Lake Mine - Tailings Deposition Plan for Year 1" prepared by Knight Piésold Consulting dated September 17, 2020, and "Appendix A: Detailed Design Mine Waste and Water Management Strategy and TMF Water Balance Report Rev 0" prepared by Knight Piésold Consulting dated August 13, 2020. The Owner shall submit an amendment application to re-assess the site at least twelve (12) months prior to the commencement of Phase 3 operations and/or the closure and re-direction of surface water runoff from Cell A and B of the TMF to the Derlak Lake diversion channel.
2. The Owner shall ensure that all site contact surface water runoff or seepage is not discharged to the environment and is directed to the Water Treatment Plant (WTP) for further treatment.
3. The Owner shall ensure that no tailings are directed to or discharged directly to Cell PP of the TMF during Phase 1 operations and that every reasonable effort is made to maintain the existing wastewater storage capacity of Cell PP.
4. The Owner shall maintain the water level elevation in Cell PP of the TMF to below the Maximum Operating Pond Elevation as defined by the Engineer of Record and stated in the operation manual required under Condition 5.6 as may be updated from time to time. If the Maximum Operating Pond Elevation is exceeded, the Owner shall:
 - a. notify the District Manager forthwith and in writing within seven (7) days; and
 - b. cease Mill Production and limit all inflow to Cell PP to the extent practical (i.e. limit inflow from underground dewatering) until such time as Cell PP is brought to a level below the Maximum Operating Pond Elevation.

5. The Owner shall not discharge to the receiver (Coin Creek) during November 30 to March 15 each year, or when the minimum flow rate in Coin Creek at Station S4 is less than 42 litres per second.
6. The Owner shall, at all times, control the final effluent discharge rate from the Water Treatment Plant such that the ratio of the flow rate of the receiving surface water (Coin Creek) to the flow rate of effluent is less than or equal to 1.2:1.
7. The Owner shall use Cell A of the TMF for contingency storage of contact water in the event that Cell PP is at capacity and treated water cannot be released.
8. Within six (6) months of the date of issuance of this Approval, the Owner shall submit a long-term Wastewater Treatment Plant sludge management plan to the District Manager.
9. The Owner shall develop and complete a Derlak Lake Remediation Plan to address ongoing discharge of contaminants of concern from Derlak Lake as follows:
 - a. Within six (6) months of the date of the issuance of this Approval, the Owner shall submit a Terms of Reference (TOR) to the District Manager for approval. The TOR shall focus on necessary studies including, but not limited to, an assessment of fish, benthic invertebrates, sediment and water, and outline a workplan and associated timelines for developing a Derlak Lake Remediation Plan.
 - b. Within three (3) years of the date of the issuance of this Approval, the Owner shall submit the Derlak Lake Remediation Plan to the District Manager for Approval.
 - c. Within five (5) years of the date of the issuance of this Approval, the Owner shall implement and complete the approved Derlak Lake Remediation Plan.
10. The Owner shall ensure substantial completion of all components of the process wastewater treatment Works prior to the commencement of Mill Production.
 - a. The Owner shall provide written certification from a qualified person that the process wastewater treatment Works are substantially mechanically complete to the District Manager and receive written confirmation prior to Mill Production.
 - b. Within three (3) months of the date of the issuance of this Approval, the Owner shall ensure that the process wastewater treatment Works are fully commissioned such that the site is operational and capable of discharging wastewater from the site in accordance with this Approval by Spring 2021.

7. EFFLUENT OBJECTIVES AND SURFACE WATER BENCHMARKS

1. The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named as effluent parameters in the effluent parameters in the effluent objectives table in **Schedule B Table 1** and surface water benchmarks in **Schedule C Table 1** are not exceeded at the locations specified.
 - a. Within sixty (60) days of the commencement of discharge at the final effluent discharge point, the Owner shall submit to the District Manager, the final selected location of S10 surface water benchmark sampling location referenced in **Schedule C Table 2** location 4.
2. The Owner shall develop parameter-specific management plans for each parameter in the effluent objectives table in **Schedule B Table 1** by March 31, 2022. The plan shall include at a minimum, but not limited, to the following:
 - a. establishment of criteria that will trigger additional study;
 - b. additional monitoring and/or studies to resolve the origin of objective exceedances;
 - c. evaluation of the potential risk to aquatic resources and human health;
 - d. identification of the corrective actions that could be implemented, if warranted.
3. In the event of an exceedance of effluent objectives as described in **Schedule B Table 1** for two (2) consecutive monthly average concentration results, the Owner shall notify the District Manager in writing within seven (7) days, and submit to the District Manager, within thirty (30) days, an action plan to assess the cause of the exceedance, define contingency measures and recommend actions to address potential impacts.
4. In the event of an exceedance of surface water benchmarks as described in **Schedule C Table 1** for two (2) consecutive monthly average concentration results, the Owner shall notify the District Manager in writing within seven (7) days, and submit to the District Manager, within thirty (30) days, an action plan to assess the cause of the exceedance, define contingency measures and recommend actions to address potential impacts.
5. The Owner shall include in all reports submitted in accordance with Condition 11 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 Table 2** are not exceeded in the effluent at the specified locations.
2. For the purposes of determining compliance with and enforcing subsection (3):
 - a. non-compliance with respect to a 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 Table 2** is greater than the corresponding maximum concentration set out in Column 2 of each Effluent Limits Table listed in **Schedule B Table 2**;
 - 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 month analyzed for a parameter named in Column 1 of the Effluent Limits Table listed in **Schedule B Table 2** is greater than the corresponding average concentration set out in Column 3 of each Effluent Limits Table listed in **Schedule B Table 2**;
 - 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 Water Treatment Plant is non-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 of no more than 50% of the test organism in 100% effluent.

9. EFFLUENT AND RECEIVING WATERS MONITORING AND RECORDING

1. The Owner shall, upon commencement of operation of the sewage works, carry out a monitoring program and all samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
2. Samples shall be collected and analyzed from the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed in the monitoring tables included in **Schedule B Table 3** and **Schedule C Table 2**.
3. The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
 - a. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater 2.0" (January 2016), PIBS 2724e02, as amended from time to time by more recently published editions;

- b. the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions;
 - c. the Environment Canada publications "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" (EPS 1/RM/13 Second Edition - December 2000) and "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to *Daphnia magna* " (EPS 1/RM/14 Second Edition - December 2000), as amended from time to time by more recently published editions; and
 - 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.
4. 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).
 5. Within thirty (30) days of the issuance of this Approval, the Owner shall develop and submit a real time plume delineation validation procedure, to the District Manager for approval, which includes a proposal for real time plume delineation under varying conditions, including, to the extent practical, the minimum flow threshold and discharge ratio outlined under Condition 6.5 and 6.6, utilizing appropriate tracer methods. Within the first seasonal discharge period (March 15 to November 30) of the commencement of discharge from the Tailings Management Facility, the Owner shall conduct the real time plume delineation study in accordance with the procedure.
 6. The Owner shall collect in situ field measurements at discrete depths throughout the water column (i.e., vertical profiling) in Cell PP of the Tailings Management Facility and Snib Lake at a frequency of three times per year during the ice free periods (late spring, summer and fall) to characterize the variability in the water column, targeting the deepest part of each waterbody according to bathymetric data. Field measurements for the vertical profiles will include pH, conductivity, temperature and dissolved oxygen (DO) to monitor for potential stratification.
 7. The Owner shall implement the hydrometric monitoring program as outlined in the document titled "Water Level Measurement and Flow Monitoring Procedures for the Pure Gold Red Lake Mine" prepared by Lorax Environmental Services Ltd. dated May 8, 2020. The flow data shall be used to confirm minimum effluent dilution ratios, and to provide reference data, with an accuracy acceptable to the District Manager. The Owner shall implement monitoring program at the monitoring stations listed in **Schedule C Table 3**.
 8. The Owner shall continuously validate the Tailings Management Facility water balance model based on the collection of on-site data and receiver monitoring data.
 9. The Owner shall undertake a long-term study to evaluate the potential effects of effluent discharges on Coin Creek. The study shall include but not be limited to an assessment of fish, benthic invertebrates, sediment and water. The study can be harmonized with, but is not limited

to, requirements of the federal Environmental Effects Monitoring program. The long-term study shall include an assessment of fish tissue metal body burdens. The Owner shall prepare and submit to the District Manager for concurrence a Terms of Reference for the study sixty (60) days following the recommencement of Mill Production.

10. GROUNDWATER MONITORING AND RECORDING

1. The Owner shall, upon commencement of operation of the sewage works, carry out a monitoring program and all samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
2. Samples shall be collected and analyzed at the sampling point(s), at the sampling frequencies and using the sample type specified for each parameter (i.e. field parameters, groundwater water level and flow measurements, and laboratory analytical parameters) listed in Section 3.2 and 3.3 and Groundwater Monitoring Tables 3-4 and 3-5 in the document "Operational Water Quality Monitoring Plan for the Pure Gold Red Lake Mine", prepared by Lorax Environmental Services Ltd., dated November 13, 2020, as may be updated from time to time in writing by the District Manager. One additional monitoring well cluster (tailings, and sub-wash close to bedrock surface) shall be installed down-gradient of MW18-10A/B and up-gradient of Derlak Lake in 2021.
3. The Owner shall review the locations of the monitoring wells, sampling frequencies and parameters on an annual basis and include any proposed modification to the groundwater monitoring plan in the Groundwater Monitoring Report required by Condition 11.9.
4. The protocols for groundwater sampling shall conform to Section 5.2 and 7 of the Ministry's publication "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario" (December 1996), ISBN-0-7778-4056-1, Version 1.1.
5. The methods and protocols for low-flow groundwater sampling shall conform to the U.S. Environmental Protection Agency Region I publication "Low Stress (low flow) Purging and Sampling Procedure for the Collection of Ground Water Samples From Monitoring Wells (Revision 2)" dated July 30, 1996.
6. The Owner shall prepare and submit a detailed Recommissioning and Operations Phase Waste Rock Management Plan to the District Manager for review before January 31, 2021. The Recommissioning and Operations Phase Waste Rock Management Plan shall include but not be limited to, the waste rock management procedures outlined in the document "Madsen Gold Mine - Recommendations for the Use of Mine Rock as Construction Material", dated August 23, 2019 prepared by Lorax Environmental, in "Pure Gold Red Lake Mine, Closure Plan Amendment 3" dated November 17, 2020, "Appendix B: Surface and Ground Water and MLARD", dated June 16, 2020 (A-2, p.1512-1513 of pdf), procedures for classification and rock segregation and a confirmatory sampling and reporting program.
7. The Owner shall prepare and submit a Field Cell Kinetic Testing Program to the District

Manager for review before January 31, 2021, to assess trends in acid rock drainage and metal leaching (ARD/ML) from site materials. The Field Cell Kinetic Testing Program shall include: a description of the current and planned field cells, rock types and source locations, material types (e.g. blasted, crushed), particle size distribution analysis for each field cell, leachate monitoring frequency and parameters, sampling protocols and quality assurance and quality control (QA/QC) measures. Field cell kinetic procedures should follow those referenced in the Section 19.3 Field Test Cells, Chapter 19.0 Kinetic Tests That Measure Primary Mineral Weathering and Secondary Mineral Precipitation and Dissolution, in the document "Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials" MEND Report 1.20.1, prepared by William A. Price (CANMET - Mining and Mineral Sciences Laboratories), December 2009.

8. The Owner shall prepare and submit a summary of the seepage contingency and mitigation measures to the District Manager before January 31, 2021, for the following areas: Cell PP Dam 1 and 2 seepage pump-back systems, Mine Rock Management Facility, Plant Site Area, and Madsen Portal Area.

11. REPORTING

1. One (1) week prior to the start-up of the operation of the process wastewater treatment Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.
2. The Owner shall, upon request, make all reports, manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
3. The Owner shall report to the District Manager any exceedance of any parameter specified in Condition 8, verbally as soon as reasonably possible, and in writing within seven (7) days of the exceedance.
4. The Owner shall report to the District Manager any acute toxicity test failures verbally as soon as possible and in writing within seven (7) days of the knowledge of such toxicity test failure. Within (15) days of the toxicity test failure, the Owner shall submit a written report to the District Manager outlining the cause(s) of toxicity and proposed or implemented remedial measures to control toxicity.
5. In addition to the obligations under Part X of the EPA, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
6. The Owner shall prepare and submit a monitoring and compliance report to the District Manager on a monthly basis, within forty (40) days following the period being reported upon. The report shall contain at a minimum the following information, which may be amended from time to time by the District Manager:

- a. a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 8, and effluent objectives and surface water benchmarks as set out in Condition 7, including an overview of the success and adequacy of the sewage Works;
 - b. a summary of effluent volumes discharged daily for the given monthly reporting period;
 - c. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage Works;
 - d. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
 - e. a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
 - f. a description of any operating problems encountered and corrective actions taken.
7. The Owner shall prepare an annual performance report following the end of each calendar year, and submit the report to the District Manager by March 31 of each year. The report shall contain, but shall not be limited to, the following information:
- a. a summary and interpretation of all effluent monitoring data and a comparison to the effluent limits outlined in Condition 8, including an overview of the success and adequacy of the sewage Works;
 - b. a description of any operating problems encountered and corrective actions taken;
 - c. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage Works;
 - d. a summary of any effluent quality assurance or control measures undertaken in the reporting period;
 - e. a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
 - f. a description of efforts made and results achieved in meeting the effluent objectives and surface water benchmarks in Condition 7;

- g. a summary of any complaints received during the reporting period and any steps taken to address the complaints;
 - h. any other information the District Manager requires from time to time.
8. The Owner shall prepare an annual Surface Water Monitoring Report following the end of each calendar year, and submit the report to the District Manager by March 31 of each year. The report shall contain, but shall not be limited to, the following information:
- a. a description and evaluation of any and all aquatic effects associated with the mining operations;
 - b. a summary and interpretation of current and historical receiver surface water monitoring data and a comparison to surface water benchmarks and the Ontario Provincial Water Quality Objectives;
 - c. graphs illustrating current and historical temporal trends of key water quality parameters;
 - d. a summary and interpretation of all hydrometric data including:
 - i. hydrographs and updated water balance for the site;
 - ii. monitoring data tables in usable format such as Microsoft Excel of all current and historic data, updates to rating curves including manual measurements displayed on up to date curves, updates to the hydrometric monitoring plan, calibration and verification of the flow measurement devices and explanation of the establishment, calibration, and ongoing maintenance of the hydrometric stations, description of site visits conducted within the year, all updates to the site wide water balance, and hydrographs from all stations to visualize flow;
 - iii. a summary of the developed rating curves for each of the stations, the daily average discharge hydrographs established using these rating curves for the entire period of record and any shifts applied based on manually collected data;
 - iv. a summary of the manual discharge measurements within daily hydrographs; and
 - v. any other information the District Manager requires from time to time.
 - e. tabulation of flow and concentration data used to determine compliance and minimum dilution ratios, with comparison of calculated and measured final mixed concentrations in the receiver;
 - f. a summary of all incidence of non-compliance, exceedances of effluent objectives and exceedances of surface water benchmarks over the reporting period;

- g. a description of work undertaken to update acid mine drainage predictions;
 - h. site plan(s) of the entire site illustrating significant water features such as lakes, streams, ponds, seeps, ditches, collection and treatment facilities, as well as sampling locations with UTM coordinates;
 - i. after the Owner has submitted a minimum of three (3) annual Surface Water Monitoring Reports, the frequency of report submission may be changed to such frequency as the District Manager may specify in writing from time to time; and
 - j. any other information the District Manager requires from time to time.
9. The Owner shall prepare an annual Groundwater Monitoring Report, prepared by a licensed Professional Geoscientist or Professional Engineer qualified in the field of hydrogeology, following the end of each calendar year, and submit the report to the District Manager by March 31 of each year, with the first report submitted by March 31, 2022. The reports shall contain, but shall not be limited to, the following:
- a. a section of text explaining the background of the facility, including location, size, operating history, elevation, flows and any other details which may be critical to assessment and understanding of the facility's operation;
 - b. a scale site plan or plans of the entire site illustrating significant site features such as mine facilities, rivers, seeps, ponds, ditches, collection and treatment facilities, and roadways, as well as all sampling locations;
 - c. a scale location map illustrating the site relative to nearby potentially sensitive groundwater/surface water features (wells, lakes, streams, etc.);
 - d. seasonal maps showing measured groundwater elevations, interpreted flow directions, and any groundwater divides;
 - e. stratigraphic cross-sections that clearly illustrate the subsurface distribution of geological overburden and bedrock materials;
 - f. borehole logs including well completion details for all groundwater monitoring wells in the monitoring program;
 - g. tables illustrating historical groundwater chemistry and elevation data;
 - h. updated time series graphs showing concentration trends for key analytical parameters in groundwater monitoring wells, with reference to applicable water quality standards. The time series graphs must contain all groundwater data from the beginning of monitoring to present;

- i. an assessment of the groundwater monitoring data to evaluate the impact on down-gradient groundwater and receiving surface waters, including proposed groundwater trigger criteria and contingency and mitigation measures;
- j. an assessment of the effectiveness of the seepage pump-back system for Cell PP Dam 1 and 2, including but not limited to: groundwater drawdown within the various aquifer units and radius of influence, any groundwater flow bypasses around the pumping system, and seasonal variations in the required pumping volumes;
- k. a discussion of waste rock management procedures completed as per the Recommissioning and Operations Phase Waste Rock Management Plan, including an assessment of the results of the metal leaching and acid rock drainage (ML/ARD) monitoring program. A copy of the Waste Rock Management Plan should be appended;
- l. a discussion of the results of the Field Cell ARD/ML Kinetic Testing Program, as per the Recommissioning and Operations Phase Waste Rock Management Plan: including data tables and updated time series graphs showing concentration trends for key analytical parameters with reference to applicable water quality standards. The time series graphs must contain all data from the beginning of monitoring to present;
- m. laboratory Certificates of Analysis for groundwater, ML/ARD and field cell testing results provided electronically upon request;
- n. a summary of monitoring well condition and any need for repairs;
- o. recommendations for future monitoring and/or remedial actions;
- p. amendments to the groundwater monitoring and reporting program can be made upon receipt of written request from the proponent, or in response to recommendations from Northern Region Technical Support Section with the approval of the District Manager. and
- q. any other information the District Manager requires from time to time.

12. RECORD KEEPING

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

Schedule A

1. Application for Environmental Compliance Approval submitted by Pure Gold Mining Inc. dated June 18, 2020 and received on June 19, 2020, including design reports, final plans, specifications and all supporting documentation.

Schedule B

Table 1. Effluent Objectives for the final effluent discharge from the Water Treatment Plant to Coin Creek

Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)
Nitrite-Nitrogen (NO ₂ -N)	0.44
Sulphate (SO ₄)	1,716
Total Cobalt	0.22
Total Antimony	0.44
Total Mercury	0.00005

Table 2. Effluent Limits for the final effluent discharge from the Water Treatment Plant (WTP) to Coin Creek

Effluent Parameter	Daily Maximum Concentration Limit (milligrams per litre unless otherwise indicated)	Monthly Average Concentration Limit (milligrams per litre unless otherwise indicated)
Column 1	Column 2	Column 3
Total Suspended Solids	30	15
Cyanide (total)	2.0	1.0
Cyanide (free)	0.02	0.01
Total Arsenic	0.1	0.04
Total Copper	0.017	0.0083
Total Nickel	0.1	0.052
Total Lead	0.004	0.002
Total Zinc	0.024	0.020
Total Cadmium	0.00038	0.00019
Total Iron	0.5	-
Dissolved Aluminum	0.08	-
Total Phosphorus	0.05	-
Un-ionized Ammonia	0.088	0.044
Acute Toxicity (Rainbow Trout and Daphnia Magna)	Non-acutely lethal (not greater than 50% mortality in undiluted effluent)	-
Oil & Grease*	30	15
pH of the effluent maintained between 6.0 - 9.5 inclusive, at all times		

Notes:

* Oil or petrochemicals should not be present in concentrations that can be detected as a visible film, sheen, or discoloration on the surface, be detected by odour, cause tainting of edible aquatic organisms, or form deposits on shorelines and bottom sediments that are detectable by sight or odour or are deleterious to resident organisms.

Table 3. Effluent Monitoring for the Water Treatment Plant (WTP) Intake (Influent) and Effluent

Effluent Parameter	Influent Monitoring	Effluent Monitoring
Total Suspended Solids (TSS)	-	3 times per week
Temperature	3 times per week	3 times per week
pH	3 times per week	3 times per week
Arsenic (As)	3 times per week	3 times per week
Total Ammonia Nitrogen	3 times per week	3 times per week
Total Hardness (as CaCO ₃)	-	Weekly
Conductivity	-	Weekly
Total Alkalinity (as CaCO ₃)	-	Weekly
ICP-MS Total Metal Scan	-	Weekly
Sulphate	-	Monthly
Nitrite Nitrogen		Monthly
Nitrate Nitrogen	--	Monthly
Cyanide - Total	-	3 times per week
Cyanide - Weak Acid Dissociable	-	Monthly
Thiocyanate	-	Monthly
Dissolved Organic Carbon	Monthly	Monthly
Phosphorus	Monthly	Monthly
LC50 - Rainbow Trout	-	Monthly
LC50 - Daphnia Magna	-	Monthly

Notes:

- (a) ICP metal scan shall include: aluminum, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, lithium, magnesium, manganese, mercury, molybdenum, nickel, phosphorus, potassium, selenium, silver, sodium, strontium, tellurium, thallium, tin, tungsten, uranium, vanadium and zinc.

Schedule C

Table 1: Surface Water Benchmarks required to be met at Mixing Zone Boundary

Parameters	Surface Water Benchmarks (milligrams per litre unless otherwise indicated)
Free Cyanide	0.005
Total Arsenic	0.04
Total Copper	0.005
Total Nickel	0.025
Total Lead	0.001
Total Zinc	0.0075
Total Iron	0.5
Total Cadmium	0.00009
Dissolved Aluminum	0.08
Unionized Ammonia	0.02
Total Phosphorus	0.03

Table 2. Monitoring at Receiving Surface Waters

Locations	<ol style="list-style-type: none"> 1. S5 Culvert - Upstream Coin Creek, at the culvert below Highway 618 2. Crescent Lake - Shore of lake, upstream of Coin Creek and Highway 618 3. S4 Coin DS - Coin Creek downstream of discharge from WTP 4. S10 Mixing Zone Boundary Coin Creek - Approximately 100 metres downstream from effluent discharge (downstream of the mixing zone) - location to be agreed upon under Condition 7.1.a above 5. Outflow Coin Creek - Outflow of Coin Creek to Snib Lake 6. S2 PP Dam 1 Seep - PP Dam 1 seepage, at v-notch weir downstream of dam 7. S6 PP Dam 2 Seep - PP Dam 2 seepage, pooled water downstream of dam 8. S3 Derlak - Outflow from Derlak Lake, on downstream side of bridge 9. Snib Lake - Deepest point (water column profiling, surface and depth sampling) 10. S8 Snib Lake - Outflow from Snib Lake 11. S9 Coin - Outflow from Coin Lake 12. F2 Culvert - Flat Lake culvert, downstream side of Road
Frequency	Monthly, except where prevented by unsafe ice conditions
Sample Type	Grab
Parameters	<p><u>Physical Tests</u> Conductivity; Hardness (as CaCO₃); pH; Total Suspended Solids; Total Dissolved Solids; Turbidity</p> <p><u>Metals (Total/Dissolved)</u> Aluminum; Antimony; Arsenic; Barium; Beryllium; Bismuth; Boron; Cadmium; Calcium; Cesium; Chromium; Cobalt; Copper; Iron; Lead; Lithium; Magnesium; Manganese; Molybdenum; Nickel; Phosphorus; Potassium; Rubidium; Selenium; Silicon; Silver; Sodium; Strontium; Sulfur; Tellurium; Thallium; Thorium; Tin; Titanium; Tungsten; Uranium; Vanadium; Zinc; Zirconium</p> <p><u>Anions and Nutrients</u> Alkalinity, Total (as CaCO₃); Ammonia, Total (as CaCO₃); Ammonia, un-ionized (as N); Bicarbonate (as CaCO₃); Carbonate (as CaCO₃); Chloride; Fluoride; Hydroxide (as CaCO₃); Nitrate and Nitrite (as N); Nitrate (as N); Nitrite (as N); Phosphorus (P), Dissolved; Phosphorus (P), Total; Sulfate</p> <p><u>Organic Carbon</u> Dissolved Organic Carbon</p> <p><u>Cyanides</u> Cyanide, Free; Cyanide, Total; Cyanide, Weak Acid Dissociable</p>

Notes:

1. Field parameters including pH, conductivity and temperature will be measured and recorded in conjunction with each

sampling event.

2. ICP metal scan shall include: aluminum, antimony, arsenic, barium, beryllium, bismuth, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, lithium, magnesium, manganese, mercury, molybdenum, nickel, phosphorus, potassium, selenium, silver, sodium, strontium, tellurium, thallium, tin, tungsten, uranium, vanadium and zinc.

Table 3: Proposed Hydrometric Stations

Station ID	Station Description	Coordinates		Measurement Parameters	Frequency of Monitoring
		Easting	Northing		
S5	Upstream Coin Creek, at the culvert below HWY 618	438763	5647923	Water Level, water temperature, air pressure, in-situ flow measurement	Monthly Manual Water Level supplemented with 15-minute data logger and monthly manual flow
S4	Coin Creek downstream of discharge from WTP	437529	5648443	Water Level, water temperature, air pressure, in-situ flow measurement	Monthly Manual Water Level supplemented with 15-minute data logger and monthly manual flow
S8	Outflow from Snib Lake	439852	5650585	Water Level, water temperature, air pressure, in-situ flow measurement	Monthly Manual Water Level supplemented with 15-minute data logger and monthly manual flow
WTP Effluent	WTP Effluent (final point of discharge)	TBD	TBD	Water flow measurement device	Continuous flow measurement, to be completed in tandem with monthly manual flow measurement

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

1. Condition 1 is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted. This condition is also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. Condition 1.6 is included to emphasize that the issuance of this Approval does not diminish any other statutory and regulatory obligations to which the Owner is subject in the construction, maintenance and operation of the Works. The Condition specifically highlights the need to obtain any necessary conservation authority approvals. The Condition also emphasizes the fact that this Approval doesn't limit the authority of the Ministry to require further information.
2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the Ministry records are kept accurate and current with respect to the approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
4. Condition 4 is included to ensure that the Works are 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 as regular inspection and necessary removal of sediment and excessive decaying vegetation from the Works are required to mitigate the impact of sediment, debris and/or decaying vegetation on the treatment capacity of the Works. Condition 5 and 6 is included to ensure that adequate storage is maintained in the Works at all times as required by the design. Furthermore, these Conditions are included to ensure that the Works are operated and maintained to function as designed.
6. Condition 7 and 8 are imposed to ensure that the effluent discharged from the Works to the receiving waters meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
7. Condition 9 and 10 are included to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works is consistent with the (design objectives and) effluent limits specified in the Approval and that the approved works does not cause any impairment to the receiving watercourse.
8. Condition 11 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in

resolving any problems in a timely manner.

9. Condition 12 is included to require that all records are retained for a sufficient time period to adequately evaluate the long-term operation and maintenance of the Works.

**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s).
0047-7V9PW9 issued on August 16, 2010**

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the 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 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 required 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:

The Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

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

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

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

DATED AT TORONTO this 8th day of December, 2020



Fariha Pannu, P.Eng.

Director

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

JY/

c: Area Manager, MECP Kenora

c: District Manager, MECP Thunder Bay - District
Alan Martin, Lorax Environmental Services Ltd.