

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR

Department of Environment and Climate Change

CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002 c E-14.2 Section 83

Issue Date: *April 13, 2023*

Approval No. AA23-045695

Expiration: April 13, 2028

File No. 734.070

Proponent:

Rambler Metals and Mining Canada Limited

Route #418, Ming's Bight Road

PO Box 610

Baie Verte, Newfoundland

A0K 1B0

Attention:

Gus Simbanegavi, Vice President and General Manager

Re:

Rambler Metals and Mining Canada Limited - Nugget Pond

Milling Facility "Mill Site", Ming Copper-Gold Mine "Mine Site"

and Goodyear's Cove Port "Port Site"

Approval is hereby given for the operation of an ore processing facility, tailings management area, and other associated works at the Mill Site; the operation of an underground mine, wastewater treatment plant, and other associated works for the Mine Site; and the operation of a concentrate handling, storage and loading facility at the Port Site.

This Certificate of Approval does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Nothing in this Certificate of Approval negates any regulatory requirement placed on the proponent. Where there is a conflict between conditions in this Certificate of Approval and a regulation, the requirement in the regulation shall take precedence. Approval from the Department of Environment and Climate Change shall be obtained prior to any significant change in the design, construction, installation, or operation of the Project, including any future expansion of the Project. This Certificate of Approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

This Certificate of Approval is subject to the terms and conditions as contained therein, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this Certificate of Approval null and void, may require the proponent to cease all activities associated with this Certificate of Approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, delete or modify conditions to correct errors in the Certificate of Approval or to address significant environmental or health concerns.

FOC MINISTER

TERMS AND CONDITIONS FOR APPROVAL No. AA23-045695

April 13, 2023

General

- 1. This Certificate of Approval is for the operation of an ore processing facility, tailings management area, and other associated works at the Mill Site located near the community of Snook's Arm on the Baie Verte Peninsula, NL; the operation of an underground mine, wastewater treatment plant, and other associated works for the Mine Site located near Ming's Bight on the Baie Verte Peninsula, NL; and the operation of a concentrate loading and storage site at the Port Site located near the community of South Brook, NL. Extensive future expansion or alteration of activities will require a separate Certificate of Approval.
- 2. Any inquiries concerning this Approval shall be directed to the Western Regional Office of the Pollution Prevention Division (telephone: (709) 643-6114; or facsimile: (709) 643-8654).
- 3. In this Certificate of Approval:
 - **accredited** means the formal recognition of the competence of a laboratory to carry out specific functions;
 - **acutely lethal**, in respect of an effluent, means that the effluent at 100 per cent concentration kills more than 50 per cent of the
 - rainbow trout subjected to it for a period of 96 hours, when tested in accordance with Reference Method EPS 1/RM/13; or
 - Daphnia magna subjected to it for a period of 48 hours, when tested in accordance with Reference Method EPS 1/RM/14;
 - ALT (acute lethality test) means a test conducted to determine whether an effluent is acutely lethal;
 - **associated product** means petroleum or a derivative of it, except gasoline, which is in a liquid state at ambient temperature and pressure;
 - **composite sample** means a quantity of undiluted effluent collected continually at an equal rate or at a rate proportionate to flow over a designated sampling period;
 - **Department** means the Department of Environment and Climate Change and its successors;
 - **DGSNL** means Digital Government and Service NL and its successors;
 - EDMS means Environmental Data Management System;
 - **effluent discharge criteria** (EDC) means the maximum allowable levels for the parameters listed in Table 3;
 - **grab sample** means a quantity of undiluted sample collected at any given time. In this Approval it refers to used oil and effluent;

- hazardous waste means a product, substance or organism that is intended for disposal or recycling, including storage prior to disposal or recycling, and that:
 - (a) is listed in Schedule III of the Export and Import of Hazardous Waste Regulations under the Canadian Environmental Protection Act, 1999;
 - (b) is included in any of Classes 2 to 6, and 8 and 9 of the *Transportation of Dangerous Goods Regulations* under the *Transportation of Dangerous Goods Act*, 1992; or
 - (c) exhibits a hazard classification of a gas, a flammable liquid, an oxidizer, or a substance that is dangerously reactive, toxic, infectious, corrosive or environmentally hazardous;
- **licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;
- **liquid waste** is defined by the *Slump Test* (Canadian Standards Association test method A23.2-5C). The liquid waste slump test involves placing the waste in a 30 cm open inverted cone. The cone is removed and the immediate decrease (slump) in height of the waste material is measured. If the material slumps such that the original height is reduced by 15 cm or more, the waste is considered liquid;
- malfunction means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, wastewater treatment equipment, process equipment, or a process to operate in a normal or usual manner. Failures, caused in part by poor maintenance or careless operation, are not malfunctions;
- **MDMER** means the federal Metal and Diamond Mining Effluent Regulations;
- **Minister** means the Minister of the Department;
- **proficiency testing** means the use of inter-laboratory comparisons to determine the performance of individual laboratories for specific tests or measurements;
- **Province** means Province of Newfoundland and Labrador;
- QA/QC means Quality Assurance/Quality Control;
- **register(ed)** in the context of:
 - storage tanks, means that information regarding the storage tank system has been submitted to a DGSNL office and a registration number has been assigned to the storage tank system; and
 - environmental site assessment and impacted site management work, means approved by the Department in accordance with departmental policy and guidelines;
- **regulated substance** means a substance subject to discharge limit(s) under the *Environmental Control Water and Sewage Regulations, 2003*;
- **RMMCL** means Rambler Metals and Mining Canada Limited;

- **Site Professional** means an individual who is registered with the Department to oversee environmental site assessment, remediation and contaminated site management work in Newfoundland and Labrador;
- **storage tank system** means a tank and all vent, fill and withdrawal piping associated with it installed in a fixed location and includes a temporary arrangement;
- **TDS** means total dissolved solids;
- **toxic pass** means a mortality rate of no more than 50 per cent during the ALT;
- TPH means total petroleum hydrocarbons, as measured by the Atlantic PIRI method;
- TSS means total suspended solids;
- **used glycol** means glycol that, through use, storage or handling, can no longer be used for its original purpose; and
- **used oil** means oil that, through use, storage or handling, can no longer be used for its original purpose.
- 4. All necessary measures shall be taken to ensure compliance with all applicable acts, regulations, policies, guidance documents and guidelines, including the following, or their successors:
 - Environmental Protection Act;
 - Water Resources Act;
 - Air Pollution Control Regulations, 2022;
 - Environmental Control Water and Sewage Regulations, 2003;
 - *Halocarbon Regulations;*
 - Storage and Handling of Gasoline and Associated Products Regulations, 2003:
 - *Used Oil and Used Glycol Control Regulations*;
 - Heating Oil Storage Tank System Regulations, 2003;
 - Sampling of Water and Wastewater Industrial Effluent Applications Guidance Document;
 - Accredited Laboratory Policy;
 - Effluent Schedule Determination Policy for Industries; and
 - Guidance Document for the Management of Impacted Sites.

This Approval provides terms and conditions to satisfy various requirements of the above listed acts, regulations, policies, guidance documents and guidelines. If it appears that any of the pertinent requirements of these acts, regulations, policies and guidelines are not being met, then a further review of the works shall be conducted, and suitable pollution control measures may be required by the Minister.

- 5. All reasonable efforts shall be taken to minimize the impact of the operation on the environment. Such efforts include:
 - minimizing the area disturbed by the operation,
 - minimizing air, water or soil pollution,

- finding alternative uses, acceptable to the Department, for waste or rejected materials.
- removing equipment or structures when they no longer have further use, and
- considering the requirement for the eventual rehabilitation of disturbed areas when planning the development of any area on the facility property.
- 6. **RMMCL** shall provide to the Department, within a reasonable time, any information, records, reports or access to data requested or specified by the Department.
- 7. **RMMCL** shall keep all records or other documents required by this Approval at the Mine Site/Mill Site location for a period of not less than three years, beginning the day they were made. These records shall be made available for review by officials of the Department or DGSNL when requested.
- 8. Should **RMMCL** wish to deviate in any way from the terms and conditions of this Certificate of Approval, a written request detailing the proposed deviation shall be made to the Department. **RMMCL** shall comply with the most current terms and conditions until the Department has authorized otherwise. In the case of meeting a deadline requirement, the request shall be made at least 60 days ahead of the applicable date as specified in this Approval or elsewhere by the Department.

Activities Affecting Bodies of Water

- 9. Any work that must be performed in a body of water below the high water mark shall be carried out during a period of low water levels, unless otherwise permitted in writing by the Department.
- 10. All construction operations shall be carried out in a manner that minimizes damage to land, vegetation, and watercourses, and which prevents the discharge of substances, to bodies of water, in excess of applicable regulatory limits.
- 11. The use of heavy equipment shall be confined to dry stable areas and shall not be carried out in streams or bodies of water, unless otherwise permitted in writing by the Department.
- 12. All vehicles and equipment shall be in good repair, and shall be free of leaks of oil or other harmful substances that could impair water quality.
- During the construction of concrete components, formwork shall be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
- 14. Waste hardened concrete shall not be disposed as unsuitable material at the project site. Waste hardened concrete shall be put to beneficial use on site as fill material, or it shall be sent to an approved waste disposal site.
- 15. All areas affected by this project shall be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if necessary in the opinion of this Department.

16. Prior written permission is required from the Department for all work that takes place within 15 metres of a body of water, including but not limited to bridges, culverts, fording, stream modifications, infilling and dredging.

Custom Milling

17. Prior to commencing custom milling at the Mill Site, **RMMCL** shall submit details of any planned custom milling to the Department for approval. At minimum, details shall include the source and quantity of ore to be processed and a characterization as to the acid generating potential of the ore and tailings.

Environmental Protection Plan

18. **RMMCL** shall implement the most recent version of the *Environmental Protection Plan* (*October 2018*). This Plan shall be reviewed annually and revised as necessary, accounting for expansion or alteration of activities. All proposed revisions shall be submitted to the Department for review.

Waste Management

- 19. The management of waste generated at the facility is subject to compliance with the *Environmental Protection Act*. All non-industrial waste shall be stored in a manner acceptable to the Department and, on at least a weekly basis, be disposed of:
 - at an authorized waste disposal site, with the permission of the owner/operator of the site; or
 - by some other means acceptable to the Department.

If required, industrial waste shall be disposed of by a licensed operator.

- 20. **RMMCL** shall ensure that all volatile chemical and solvent wastes, if they cannot be reused, are placed in suitable covered containers for disposal in a manner acceptable to the Department. Disposal of liquid wastes at waste disposal sites in the Province is not permitted.
- Disposal of hazardous waste in a municipal or regional waste disposal site in this Province is prohibited. Transporters of hazardous waste shall have an Approval issued by the Minister. Those generating hazardous waste shall have a waste generator's number issued by the Department and shall also complete the required information outlined in the Waste Manifest Form.

Waste Management Plan

22. **RMMCL** shall continue to implement the Waste Management Plan (*October 2018*) for the Project, including all revisions. Every year the Plan shall be reviewed and revised as necessary, accounting for expansion or alteration of activities. All proposed revisions shall be submitted to the Department for review.

Acid Generating Waste Rock

Only non-acid generating waste rock shall be reused on the surface. If waste rock is identified as potentially acid generating or metal leaching, an appropriate waste rock management program shall be developed to handle, store, and appropriately dispose of the material.

Burning Prohibition

Materials listed in Table 1 shall not be burned in a fire, unless the burning of the material is recommended, in writing, by the Office of the Fire Commissioner or the burning occurs in combustion process equipment that has been approved, in writing, by the Department for that purpose.

Table 1 - Materials Prohibited from Burning in a Fire			
(a) tires	(k) manure		
(b) plastics	(l) rubber		
(c) treated lumber	(m) tar paper		
(d) asphalt and asphalt products	(n) railway ties		
(e) drywall	(o) paint and paint products		
(f) demolition waste	(p) fuel and lubricant containers		
(g) hazardous waste	(q) used oil		
(h) biomedical waste	(r) animal cadavers		
(i) domestic waste	(s) hazardous substances		
(j) trash, garbage, or other waste from commercial, industrial or municipal operations	(t) materials disposed of as part of the removal or decontamination of equipment, buildings or other structures		

25. The Department shall be notified prior to the burning of any materials not listed in Table 1.

Noise

26. Efforts shall be made to minimize and control noise resulting from **RMMCL's** operations and maintenance activities. All vehicles operating within the facility shall have exhaust and muffling devices in good working order.

Dust Suppression

27. **RMMCL** shall control dusting resulting from construction and operational activities at the sites. Use of dust suppressants other than water or calcium chloride shall require approval of the Department. **RMMCL** are encouraged to use best management practices when applying calcium chloride or any other approved dust suppressant.

Chemical Operations

- 28. Empty chemical drums, totes or packaging shall be either sent:
 - back to the original equipment manufacturer for re-use;
 - to a recognized disposal company, or;
 - to a recognized re-cycling facility.

When deemed necessary, waste material from drums, totes or packaging will be retained on-site for collection and disposal by a recognized waste treatment company according to provincial and federal regulations.

Spill and Leak Prevention and Containment

- 29. Areas in which chemicals are used or stored shall have spill and leak containment systems constructed with impermeable floors, walls, dykes or curbs as applicable and be configured, maintained, inspected and repaired as follows:
 - they shall not discharge to the environment;
 - they shall have an effective secondary containment capacity of at least 110 per cent of the chemical storage tank capacity, in the case of a single storage container;
 - if there is more than one storage container, they shall have an effective secondary containment capacity of at least 110 per cent of the capacity of the largest container, or 100 per cent of the capacity of the largest container plus 10 per cent of the aggregate capacity of all additional containers, whichever is greater;
 - they shall be kept clear of material that may compromise the containment capacity;
 - they may include a floor drain system provided that the floor drains, and the place or device to which they drain, are configured in such a manner that the required effective secondary containment capacity is maintained;
 - every year they shall be visually inspected for their liquid containing integrity, and repairs shall be made when required; and
 - once every 10 years, spill and leak containment systems shall be inspected, by a means other than visual inspection, for their liquid containing integrity, and repairs shall be made when required.
- 30. All on site storage of petroleum shall comply with the *Storage and Handling of Gasoline and Associated Products Regulations*, 2003, or its successor. Storage tank systems shall be registered with DGSNL.
- 31. Where applicable, all tanks and fuel delivery systems shall be inspected to appropriate American Petroleum Institute or Underwriters' Laboratories of Canada standards, or any other standards acceptable to this Department. The required frequency of inspections may be changed at the discretion of the Department.
- 32. **RMMCL** shall maintain an inventory of all petroleum and chemical storage tanks. This inventory shall include the following:
 - site plan showing tank location,
 - registration number (where applicable),
 - identification number,

- material stored,
- capacity,
- annual throughput,
- tank material,
- tank type,
- tank diameter,
- tank height,
- tank colour,
- roof type,
- year of manufacture,
- date of installation,
- date of last inspection,
- failure history,
- maintenance history,
- effective secondary containment capacity, and
- date of next planned inspection.

An update of the complete storage tank inventory including any changes to it shall be submitted to the Department within three months of the change having occurred.

Used Oil and Used Glycol

- 33. Used oil and used glycol shall not be mixed and shall be stored in separate:
 - closed containers;
 - registered tanks; or
 - tanks that have an active approval from DGSNL.
- Where greater than 205 litres of used oil or used glycol is stored in one or more containers, the storage shall require approval from the Department or DGSNL.
- 35. Used oil and used glycol shall be disposed of by a company licensed for the handling and disposal of such products.
- 36. Information on used oil and used glycol that is generated at the facility each year shall be submitted to the Department by *January 31* of the following year for review. This shall include a description of the:
 - type(s) of oil and/or glycol used;
 - approximate total volume of used oil and/or used glycol generated during the vear; and
 - method of disposal for the used oil and/or used glycol.
- 37. The use or operation of an oil separator requires registration under the *Used Oil and Used Glycol Control Regulations*. Applications for registration shall be submitted to, and registration numbers are assigned by, DGSNL.

Environmental Contingency Plan

38. **RMMCL** shall continue to implement the *Environmental Contingency Plan* (*October 2018*) for the Project, including all revisions. This Plan describes the actions to be taken in the event of a spill or leak of a toxic or hazardous material. Copies of the Plan shall be placed in convenient areas throughout the facility so that

employees can easily refer to it when needed. **RMMCL** shall ensure that all employees are aware of the Plan and understand the procedures and the reporting protocol to be followed in the event of an emergency. An annual response exercise is recommended for response personnel. Every year, as a minimum, the Plan shall be reviewed and revised as necessary. Any proposed significant revisions shall be submitted to the Department for review. Changes which are not considered significant include minor variations in equipment or personnel characteristics which do not affect the implementation of the Plan.

- 39. Every time **RMMCL** implements the Contingency Plan, information shall be recorded for future reference. This will assist in reviewing and updating the Plan. The record is to consist of all incidents with environmental implications, and include such details as:
 - date:
 - time of day;
 - type of incident (i.e. liquid leak/spill, gas leak, granular chemical leak/spill, equipment malfunction, etc.);
 - actions taken;
 - problems encountered; and
 - other relevant information that would aid in later review of the Plan performance.

Each incident report shall be submitted to the Department as per the *Reporting* section.

Rehabilitation and Closure

- 40. A Rehabilitation and Closure Plan detailing the actions to be taken to restore areas disturbed by the operation has been submitted to the Department (*January 2018*). The Plan shall be implemented progressively as required and completed upon site closure.
- 41. As part of the site decommissioning and restoration process, **RMMCL** shall employ a registered Site Professional to complete a site-wide environmental site assessment, as defined in the *Guidance Document for the Management of Impacted Sites*. Should impacts be identified, **RMMCL** shall proceed through the process outlined in the Guidance Document to achieve regulatory site closure.

Ore and Concentrate Storage, Handling and Transport

- 42. Mined ore will be hauled to surface and stored at the temporary transfer ore stockpile location at the Mine Site. Ore will be loaded from the ore stockpile directly to haul trucks and transported to the Mill Site for processing.
- 43. Ore shall be stored at designated stockpile locations at the Mill Site and at the ore landing area. Should acid generation become a concern with ore storage, **RMMCL** will be required to develop an action plan that addresses drainage from stockpiles (i.e. pad permeability, leachate collection/treatment system). The action plan shall be submitted to the Department.

- 44. Concentrate transport trucks shall be fully enclosed to prevent release of this material into the environment during transport from the Mill Site to the Port Site. In the event of a vehicle accident, resulting in a concentrate spill, concentrate will be considered to be a hazardous material and appropriate *Environmental Contingency Plan* measures implemented as required.
- 45. The portable conveyor and ship loading systems at the Port Site shall be enclosed to reduce the potential for fugitive concentrate dust emissions.

Effluent Management - Mine Site

- 46. Mine dewatering effluent, storm water, and runoff from surface infrastructure areas at the Mine Site will be directed to the Ming West holding sump and then to the wastewater treatment plant for treatment prior to discharge. Treated effluent shall be discharged from the treated wastewater tank into South Brook via the designated discharge line.
- Wastewater treatment plant sludge shall be disposed of in the Ming West Mine underground workings. Alternate sludge disposal options shall require prior review and authorization by the Department. **RMMCL** shall, on a quarterly basis and not less than 30 days apart, have the wastewater treatment plant sludge tested (metals scan as per parameter listing in Table 4). All results shall be submitted as per the **Reporting** section utilizing EDMS Reference Code 00395.

Tailings and Effluent Management – Mill Site

- 48. **RMMCL** shall discharge mill effluent and tailings to the Tailings Pond(s). All piping transporting effluent and tailings shall be maintained so that there is no leakage, spillage or other release, except at the point where effluent or tailings are normally discharged. Placement of tailings shall be such to maintain adequate water cover at all times.
- 49. Effluent from the tailings pond(s) shall only be released, discharged, or overflowed to the Polishing Pond. Effluent from the Polishing Pond shall be discharged via the designated spillway.
- RMMCL shall continue to implement the procedures outlined in the *Operation, Maintenance and Surveillance (OMS) Manual (October 2018*) developed for the Tailings Management Facility. This manual describes the actions (recording of water levels, surveys, visual inspections, detailed inspections, and dam safety reviews, etc.) that will be performed to ensure that the physical integrity of the dams and ancillary structures are maintained. RMMCL shall perform an annual review of the *OMS Manual* and revise the document as deemed necessary. All proposed revisions shall be submitted to the Department for review.

Effluent Monitoring and Discharge

51. **RMMCL** shall perform an Effluent Monitoring Program as per Table 2. Analytical results shall be submitted as per the *Reporting* section.

Table 2 - Effluent Monitoring Program					
Ref.	Location	EDMS Location Code	Parameters	Frequency	
	Wastewater Treatment	00381	EDC (except ALT)	Weekly (at least 24 hours apart)	
	Plant Discharge		ALT and TPH	Monthly (at least 15 days apart)	
			Flow Rate	Continuous/Estimate during Sample Collection	
	Polishing Pond	00382	EDC (except ALT)	Weekly (at least 24 hours apart)	
	Discharge		ALT and TPH	Monthly (at least 15 days apart)	
			Flow Rate	Continuous/Estimate during Sample Collection	

52. Refer to Table 3 for the Effluent Discharge Criteria (EDC).

Table 3 – Effluent Discharge Criteria (EDC)				
Parameter	Maximum Authorized Monthly Mean Concentration	Maximum Authorized Concentration in a Composite Sample	Maximum Authorized Concentration in a Grab Sample	
Arsenic	0.30 mg/L	0.45 mg/L	0.60 mg/L	
Copper	0.30 mg/L	0.45 mg/L	0.60 mg/L	
Cyanide	0.50 mg/L	0.75 mg/L	1.00 mg/L	
Lead	0.10 mg/L	0.15 mg/L	0.20 mg/L	
Nickel	0.50 mg/L	0.75 mg/L	1.00 mg/L	
Zinc	0.50 mg/L	0.75 mg/L	1.00 mg/L	
Total Suspended Solids	15.00 mg/L	22.50 mg/L	30.00 mg/L	
Radium 226	0.37 Bq/L	0.74 Bq/L	1.11 Bq/L	
Un-ionized Ammonia	0.50 mg/L expressed as nitrogen (N)	Not applicable	1.00 mg/L expressed as nitrogen (N)	
Acute Lethality	Toxic Pass			
рН	5.5 to 9 pH units			

RMMCL may reduce the frequency of testing for a parameter that is set out in the EDC with the exception of pH, TSS, ALT and Radium 226 to not less than once in each calendar quarter, at least 30 days apart, if that parameter's monthly mean concentration in the effluent is less than 10 percent of the maximum authorized monthly mean concentration for the 12 months immediately preceding the most recent test. RMMCL shall notify the Department in writing, at least 30 days in advance of a reduction in the frequency of testing.

- RMMCL may reduce the frequency of testing for Radium 226 to not less than once in each calendar quarter, at least 30 days apart, if that substance's concentration in the effluent is less than 0.037Bq/L in 10 consecutive tests. RMMCL shall notify the Department in writing, at least 30 days in advance of a reduction in the frequency of testing.
- 55. **RMMCL** shall increase the frequency of testing to the originally prescribed frequency for a parameter that is set out in the EDC with the exception of pH, TSS and ALT, if the parameter's monthly mean concentration is equal to or greater than 10 percent of the maximum authorized monthly mean concentration.
- RMMCL may reduce the frequency of conducting ALTs to once in each calendar quarter, at least 30 days apart, if the effluent is determined not to be acutely lethal over a period of 12 consecutive months. RMMCL shall notify the Department in writing, at least 30 days in advance of a reduction in the frequency of testing.
- 57. If a sample is determined to be acutely lethal, an aliquot of the failing sample shall be analyzed for the parameters outlined in Table 4 without delay.
- 58. If a sample is determined to be acutely lethal, **RMMCL** shall collect from the final discharge point of the failing site a grab sample twice per month and conduct an ALT in accordance with Section 6 of the Reference Method. Samples shall be collected twice per month, not less than seven days apart, and an ALT shall be conducted on each sample, until it is determined that the effluent is not acutely lethal for three consecutive tests. Following the third consecutive non-acutely lethal test, **RMMCL** shall conduct ALTs as per the original prescribed frequency outlined in Table 2.
- 59. If effluent is determined to be acutely lethal for three consecutive ALTs, **RMMCL** shall implement a Toxicity Identification Evaluation (TIE) to identify the toxin, and from this develop measures to prevent or reduce the toxin. The report, written as a result of these identification activities, shall be submitted to the Department for review, *within 60 days* of the third consecutive failed ALT result. After review of the report, the Department may place additional requirements upon the proponent for treatment of effluent prior to discharge.
- Reports submitted under the section 31 of MDMER as a result of a deposit out of the normal course of events shall be provided to the Department.

Water Chemistry Analysis

61. Four times per calendar year and not less than 30 days apart, **RMMCL** shall perform Water Quality Analysis as per Table 4. Analytical results shall be submitted as per the *Reporting* section.

Table 4 - Water Chemistry Analysis Program				
Name	EDMS Location Code	Parameters		
Treated Mine Effuent	00381	General Parameters:		
No.2 Polishing Pond (Polishing Pond Discharge)	00382	temperature, dissolved oxygen (DO), nitrate + nitrite, nitrate, nitrite, pH, TSS, colour, sodium, potassium,		
Mine Influent	00383	calcium, sulphide, magnesium, ammonia, alkalinity, sulphate, chloride, turbidity, reactive silica,		
South Brook	00384	orthophosphate, phosphorous, DOC, conductance, TDS		
Scrape Pond	00385	(calculated), phenolics, carbonate (CaCO ₃), hardness		
Scote Pond	00386	(CaCO ₃), bicarbonate (CaCO ₃)		
No.1 Tailings Pond Outflow	00387	Metals Scan:		
No.7 Mid-Horseshoe Pond	00388	aluminum, antimony, arsenic, barium, beryllium,		
No.13 Tailings Pond	00390	bismuth, boron, cadmium, chromium, cobalt, copper,		
Monitoring Well #3	00391	iron, lead, manganese, molybdenum, mercury, nickel,		
Monitoring Well #4	00392	selenium, silver, strontium, thallium, tin, titanium,		
Monitoring Well #5	00393	uranium, vanadium, zinc		
Monitoring Well #6	00394			
Camp Pond	00686			
The Steady	00687			

62. **RMMCL** may discontinue testing for mercury if the mercury concentration in the effluent is less than 0.10 ug/L in 12 consecutive quarterly samples. **RMMCL** shall notify the Department in writing, at least 30 days in advance of a reduction in the frequency of testing.

Environmental Effects Monitoring

63. MDMER requires that **RMMCL** conduct Environmental Effects Monitoring (EEM) as part of the mine's authority to deposit effluent under the Fisheries Act. Copies of all EEM study designs and reports shall be submitted to the Department.

Analysis and QA/QC

64. Unless otherwise stated herein, all solids and liquids analysis performed pursuant to this Approval shall be done by either a contracted commercial laboratory or an inhouse laboratory. Contracted commercial laboratories shall have a recognized form of accreditation. In-house laboratories have the option of either obtaining accreditation or submitting to an annual inspection by a representative of the Department, for which RMMCL shall be billed for each laboratory inspection in accordance with Schedule 1 of the *Accredited Laboratory Policy (PD:PP2001-01.2)*. Recommendations of the Department stemming from an annual inspection shall be addressed within six months, otherwise further analytical results shall not be accepted by the Department.

- 65. If **RMMCL** wishes to perform in-house laboratory testing and submit to an annual inspection by the Department then a recognized form of proficiency testing recognition shall be obtained for compliance parameters for which this recognition exists. The compliance parameters are listed in the *Effluent and Monitoring* section. If using a commercial laboratory, **RMMCL** shall contact that commercial laboratory to determine and to implement the sampling and transportation QA/QC requirements for those activities.
- 66. **RMMCL** shall bear all expenses incurred in carrying out the environmental monitoring and analysis required under conditions of this Approval.

Monitoring Alteration

- 67. The Department has the authority to alter monitoring programs or require additional testing at any time when:
 - pollutants might be released to the surrounding environment without being detected:
 - an adverse environmental effect may occur; or
 - it is no longer necessary to maintain the current frequency of sampling and/or the monitoring of parameters.
- 68. **RMMCL** may, at any time, request that monitoring programs or requirements of this Approval be altered by:
 - requesting the change in writing to the Department; and
 - providing sufficient justification, as determined by the Department.

The requirements of this Approval shall remain in effect until altered, in writing, by the Department.

Reporting

- Monthly reports containing the environmental compliance monitoring and sampling information required in this Approval shall be received by the Department in digital format within 30 calendar days of the reporting month. All related laboratory reports shall be submitted with the monthly report in Extensible Markup Language (XML) format and Adobe Portable Document Format (PDF). Digital report submissions shall be uploaded through the EDMS web portal.
- 70. Each monthly report shall include a summary of all environmental monitoring components and shall include an explanation for the omission of any requisite data. The monthly summary reports shall be in Microsoft Word or Adobe PDF and shall be uploaded through the EDMS web portal with the data submissions.

71. All incidents of:

- Environmental Contingency Plan implementation; or
- non-conformance of any condition within this Approval; or
- a spill or leak of any amount of a regulated substance; or
- effluent discharge criteria being, or suspected of being, exceeded; or
- verbal or written complaints of an environmental nature received from the public by **RMMCL** and related to the Project, including complaints submitted anonymously;

shall be immediately reported, within one working day, to the Department.

A written comprehensive incident report, including a detailed description of the incident, a summary of contributing factors, and an Action Plan to prevent future incidents of a similar nature, shall be prepared. The report shall include a description of actions already taken and future actions to be implemented, and shall be submitted to the Department within 30 days of the date of the initial incident.

72. Any:

- spill of gasoline or associated product in excess of 70 litres from a storage tank system, pipeline, or vehicle, or
- leak of gasoline or associated product in any amount from a storage tank system, pipeline, tank car or tank vehicle, or
- spill of used oil or used glycol in excess of 70 litres from a storage tank system, or
- leak of used oil or used glycol in any amount from a storage tank system;

shall be reported immediately through the Environmental Emergencies 24-hour report line at 1-800-563-9089.

Expiration

- 73. This Certificate of Approval expires *April 13*, 2028.
- 74. Should **RMMCL** wish to continue to operate beyond this expiry date, a written request shall be submitted to the Department for the renewal of this Approval. Such request shall be made prior to *October 13, 2027*.

cc: Ms. Julie Robbins
Environment and Climate Change Canada
4 Herald Ave., 5th Floor, Suite 503
Corner Brook, NL
A2H 4B4

Mr. Chris Parsons - Manager of Operations and Environmental Protection Digital Government and Service NL 149 Smallwood Drive Mount Pearl, NL A1B 4J6

Mr. Keith Bradbury – Director Mineral Development Division Department of Natural Resources P.O. Box 8700 St. John's, NL A1B 4J6

Town of Baie Verte P.O. Box 218 Baie Verte, NL A0K 1B0

Town of La Scie P.O. Box 130 La Scie, NL A0K 3M0

Town of Ming's Bight P.O. Box 68, Site 1 Ming's Bight A0K 3S0