

Licence No.: 2239

Licence Issued: April 10, 1997

THIS LICENCE IS ISSUED PURSUANT TO SECTION 11(1) OF THE ENVIRONMENT ACT TO:

CANMINE RESOURCES CORPORATION; "the Licencee"

for the construction and operation of the Development, being a 100 tonne per day milling facility called the "Maskwa Mill" located at the former Maskwa-Dumbarton mine site in Nopiming Provincial Park, to process a limited quantity of 20,000 tonnes of cobalt-copper ore and 3,000 tonnes of old tailings from the Werner Lake Cobalt Project in Ontario, in accordance with the Proposal filed on September 24, 1996, and the alteration to the Proposal filed on March 27, 1997, subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

"AP" means the maximum acid generation potential, expressed as tonnes of CaCO₃ per 1000 tonnes of a material tested, determined in accordance with a static Acid-Base Accounting method satisfactory to the Director;

"approved" means approved by the Director in writing;

"CAEAL" means Canadian Association for Environmental Analytical Laboratories;

"contaminated soil" means soil which contains contaminant concentrations in excess of the applicable remediation criteria cited in the CCME's "Interim Canadian Environmental Quality Criteria for Contaminated Sites" report CCME EPC-CS34 September 1991 or any future amendment thereof;

"Director" means an employee of the department appointed as such by the minister;

"effluent" means minewater released from the Development into the environment;

"grab sample" means a quantity of undiluted effluent collected at any given time;

"mg/L" means milligrams per litre;

"mine" includes the existing open pit, mill, offices, mechanics shop, dry facilities, ore stockpile, waste rock stockpile, and all other ancillary buildings and facilities associated with the Development;

"mine site" means the whole operational, disturbed or impacted surface area of land and water located within the boundaries of the surface rights acquired by the Licencee for the construction and operation of the Development;

"minewater" means water pumped or flowing from the underground workings/tailings disposal facility, or polluted liquids discharged from a mill or any other building or facility associated with the Development, or polluted surface runoff, or any combination thereof, excluding sewage;

"mothballed" means placed into a state of non use, or temporarily closed, while at the same time maintained in a state of readiness for potential re-use or re-opening;

"NP" means the maximum neutralization potential, expressed as tonnes of CaCO₃ per 1000 tonnes of a material tested, determined in accordance with a static Acid-Base Accounting method satisfactory to the Director;

"NPR" means neutralization potential ratio as determined from the ratio of NP/AP;

"potentially acid-generating" means having the potential or uncertain ability to generate acid as indicated by a NPR

of 4 or less, until or unless an appropriate alternate NPR cut-off value is determined, to the satisfaction of the Director, through detailed characterizations, evaluations and interpretations, or through kinetic testing, carried out on representative test material by qualified individuals;

"process wastewater" means wastewater released from the milling facility of the Development, excluding sewage;

"septage" means the sludge produced in individual on-site sewage disposal systems such as septic tanks or holding tanks;

"sewage" means all domestic and sanitary wastewaters generated at this Development;

"solid waste" means solid waste as defined in Manitoba Regulation 150/91, or any future amendment thereto, respecting waste disposal grounds, excluding waste rock;

"tailings" means those granular solids which are discarded as waste material in the process of concentrating commercial minerals present in milled ore;

"undiluted" means free of extraneous sources of water which could feasibly be prevented from mixing with effluent streams prior to their discharge into the environment, and/or not having water added for the purposes of meeting the limits of this Licence; and

"waste rock" means rock containing insufficient commercial mineral value to the Development, excepting such rock which is inadvertently present in mined ore.

GENERAL TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

1. Notwithstanding any of the following limits, terms and conditions specified in this Licence, the Licencee shall, upon the request of the Director:
 - a. sample, monitor, analyze and/or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such pollutants or ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, for such duration and at such frequencies as may be specified;
 - b. determine the environmental impact associated with the release of any pollutants from the said Development; or
 - c. provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, bioassay data, flow rate measurements and such other information as may from time to time be requested.
2. The Licencee shall, unless otherwise specified in this Licence:
 - a. carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the most current edition of "Standard Methods for the Examination of Water and Wastewater" published jointly by the American Public Health Association, the American Waterworks Association and the Water Pollution Control Federation, or in accordance with an equivalent analytical methodology approved by the Director; and
 - b. ensure that all analytical determinations are undertaken by a laboratory accredited by CAEAL or an equivalent accrediting agency.
3. The Licencee shall report all the information requested through the provisions of this Licence in a manner and form acceptable to the Director.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Respecting Surface Activities

4. The Licencee shall restrict construction and operational activities to land to which the Licencee possesses the surface rights or land title, or to land which the Licencee has leased from another owner, wherein the leasing agreement clearly identifies the party which accepts full responsibility for any environmental liabilities incurred by the activities of the Licencee.
5. The Licencee shall ensure that all activities related to the Development are carried out in accordance with any applicable work permits and timber cutting permits as may be required by the Department of Natural Resources.
6. The Licencee shall, before the commencement of activities on the Development and as necessary throughout the operation of the Development, consult with the regional staff of the Department of Natural Resources on ways and means of minimizing potential conflicts with other park users due to Development traffic and ore hauling.

Respecting Contingency Plans and Emergency Response Plans

7. The Licencee shall, within two months of the date of issuance of this Licence, submit to the Director contingency plans, satisfactory to the Director, for addressing:
 - a. potential spills from a ruptured process wastewater discharge line or from a ruptured process water return line; and
 - b. an unexpected breakdown or power failure affecting the pump at the mill site surface run-off sump/pond under circumstances of imminent overflow.
8. The Licencee shall:
 - a. within three months of the issuance of this Licence, submit to the Director, for approval, a proposed Emergency Response Plan, consistent with the CAN/CSA standard Z731.95 - Emergency Planning for Industry, for responding to and cleaning up spills involving dangerous goods (hazardous chemicals, gasoline, etc.) in the event such incidents occur at the mine site; and
 - b. continually maintain the approved Emergency Response Plan in a current status for the duration of the Development.

Respecting Groundwater

9. The Licencee shall, before commencing the partial dewatering of the underground workings of the Dumbarton Mine:
 - a. install the proposed seven monitoring wells around the mined out "A" and "B" zone stopes; and
 - b. submit to the Director a report, satisfactory to the Director, which outlines:
 - i. the geotechnical and hydrological rationale supporting the locations and depths selected for the proposed seven groundwater monitoring wells;
 - ii. the elevation of the initial piezometric surface in each of the groundwater monitoring wells;
 - iii. the initial water quality of the groundwater in each of the groundwater monitoring wells for those parameters identified in Schedule 'A' attached to this Licence;
 - iv. the determined or estimated hydraulic conductivity; and
 - v. a conceptual model of the local groundwater flow pattern showing the horizontal and vertical flow gradients, and direction of the groundwater flow, in the vicinity of the "A" and "B" zone stopes.

Respecting Liquid Wastes

10. The Licencee shall, prior to the diversion of any process wastewater and tailings into the existing underground workings:
 - a. withdraw up to 40,000 cubic metres of minewater from the underground workings at a rate not exceeding 0.016 cubic metres per second (1,400 cubic metres per day); and
 - b. pass the minewater withdrawn from the underground workings through a 2-cell surface treatment pond, lined to the satisfaction of the Director, for appropriate treatment prior to the release of the effluent to the

Bird River, as depicted in Appendix 'B' attached to this Licence.

11. The Licencee shall not release any effluent from the surface treatment pond if:
 - a. the total nickel content of the effluent exceeds 0.5 mg/L; or
 - b. the pH of the effluent exceeds 10.0 pH units.
12. The Licencee shall, following the partial dewatering of the underground workings/tailings disposal facility, and throughout the operational period of the Development:
 - a. direct all process wastewater and minewater from the Development only into the underground workings/tailings disposal facility; and
 - b. prevent the release of any minewater from the underground workings/tailings disposal facility into the environment;

unless otherwise approved by the Director.

13. The Licencee shall obtain all process water requirements for the Development only from the underground workings/tailings disposal facility.
14. The Licencee shall take such corrective action and within such a time frame, as is satisfactory to the Director, to terminate or mitigate any losses or releases of minewater from the underground workings/tailings disposal facility, where such losses or releases are considered by the Director to potentially impart an adverse impact on the environment.
15. The Licencee shall:
 - a. comply with Manitoba Regulation 95/88R, or any future amendment thereto, in regards to any sewage generated at the Development; and
 - b. ensure that any septage removed from the mine site is disposed of only into a facility which has a Licence or Permit authorizing the acceptance of septage.

Respecting Solid Wastes

16. The Licencee shall direct all the tailings solids from the mill only into the underground workings/tailings disposal facility.
17. The Licencee shall not transport any potentially acid-generating waste rock from the Werner Lake operation in Ontario for disposal or use within Manitoba.
18. The Licencee shall:
 - a. not use, nor release to any person, any contaminated soil, or potentially acid-generating rock, tailings or soil, as a construction material; and
 - b. undertake such remedial work as may be specified by the Director should any of the construction materials used, or released to any person, by the Licencee in the course of this Development, be determined as being, or having been, contaminated soil, or potentially acid-generating rock, tailings or soil.
19. The Licencee shall ensure that all non-recyclable solid waste resulting from the Development is removed from the mine site as soon as practical and disposed of into a waste disposal ground operating under the authority of a Permit issued pursuant to Manitoba Regulation 150/91, or any future amendment thereof, where the operator of that facility has agreed to accept the solid waste from the Development.

Respecting Recyclable Wastes

20. The Licencee shall not deposit bulky metallic wastes, used tires, used oil or other fluid lubricants, hydraulic fluids, or any other class of recyclable waste substances as may be specified by the Director, into the environment except to:
 - a. a facility or infrastructure which accepts such materials for recycling, or

- b. a waste disposal ground operating under the authority of an operating permit issued pursuant to Manitoba Regulation 150/91 or any future amendment thereof, where these recyclable substances are kept distinctly segregated from each other and are not buried (unless otherwise specified by the Director) so as to readily facilitate their future recycling.
21. The Licencee shall ensure that any used oil or hydraulic fluids removed from on-site machinery are collected, transported and stored in secure, properly labeled, non-leaking containers until recycled, and that the storage area consists of a base and dikes lined in a fashion satisfactory to the Director so as to prevent the loss of any spilled oil or hydraulic fluids to the subsoil at that storage area.

Respecting Dangerous Goods or Hazardous Wastes

22. The Licencee shall comply with all the applicable requirements of:
 - a. Manitoba Regulation 97/88R, or any future amendment thereof, respecting the storage and handling of gasoline and associated products; and
 - b. the Manitoba Dangerous Goods Handling and Transportation Act, and regulations issued thereunder, respecting the handling, transport, storage and disposal of any dangerous goods brought onto or generated at the Development.
23. The Licencee shall ensure that all petroleum storage tanks are set back at least 100 metres from any waterway or water body.
24. The Licencee shall ensure that no dangerous goods or hazardous wastes are released into, or could drain into, the on-site sewage collection system.

Respecting Monitoring, Record Keeping and Reporting

25. The Licencee shall:
 - a. prior to the start-up of the mill, submit to the Director a list of all of the chemical reagents, and their chemical make-up, which will be used in the milling process; and
 - b. maintain this information in a current status by submitting any changes to the Director.
26. The Licencee shall, once every second day for the first week and bi-weekly thereafter until the partial dewatering of the underground workings is completed:
 - a. collect representative grab samples of the effluent being released from the surface treatment pond;
 - b. analyze the undiluted samples for those parameters identified in Schedule 'A' attached to this Licence; and
 - c. report the analytical results to the Director as soon as they are made available by the laboratory.
27. The Licencee shall:
 - a. weekly, measure and record the total volume, expressed in cubic metres, of the minewater withdrawn from the underground workings; and
 - b. once every month upon the start-up of the mill, determine and record:
 - i. the elevation of the minewater level in the underground workings/tailings disposal facility relative to pre-dewatering level of the minewater in the underground workings; and
 - ii. the remaining holding capacity, expressed in cubic metres, of the underground workings/tailings disposal facility relative to the holding capacity created by the dewatering of the underground workings;

as determined in a manner satisfactory to the Director.

28. The Licencee shall, at least once every month, collect representative grab samples of minewater being returned from the underground workings/tailings disposal facility as process water, and analyze the undiluted samples for those parameters identified in Schedule 'A' attached to this Licence, until or unless otherwise indicated by the Director in writing.

29. The Licencee shall monitor and record the elevation of the piezometric surface in each of the groundwater monitoring wells established around "A" and "B" zone stopes of the underground workings, once per week during the partial dewatering phase, once every two weeks throughout the milling phase of the Development, and once every three months for one year following the cessation of operations at the Development.
30. The Licencee shall sample each of the groundwater monitoring wells established around "A" and "B" zone stopes of the underground workings once every three months throughout the milling phase of the Development and until one year following the cessation of operations at the Development, and analyze the undiluted samples for those parameters identified in Schedule 'A' attached to this Licence, unless otherwise indicated by the Director in writing.
31. The Licencee shall submit to the Director the analytical data, flow rate data, and other required information as determined in accordance with Clauses 27, 28, 29 and 30 of this Licence, no later than 30 days following the end of the month in which the samples were taken.

Respecting Decommissioning

32. The Licencee shall:
 - a. provide the Director with:
 - i. written notice three months in advance of any imminent permanent closure of the Development, or
 - ii. an immediate notice of any sudden decision to temporarily close the Development, whereby the Development would be placed in a mothballed state for re-opening in the foreseeable future;

and shall, within one month of the date of such a notice, arrange to have a qualified consultant undertake a site audit of the affected operational areas, and submit to the Director the findings of the site audit as well as a detailed Closure Plan for the Development, developed in consultation with regional staff of the Department of Natural Resources and the Department of Environment, with respect to the decommissioning and rehabilitation of the affected operational area, the short and long-term management of identified pollutants at the mine site, monitoring programs respecting pollutant releases and their impacts on the receiving environment, the decommissioning of access roads, and any safety concerns as may be associated with the abandonment of the Development, for the consideration, possible amendment and approval of the Director; and

- b. upon the permanent or temporary closure of the Development, and before the site of the Development is abandoned, take all necessary steps to carry out the approved Closure Plan within the time interval specified or accepted by the Director.

REVIEW OR REVOCATION

- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If the Licencee has not commenced construction of the Development within three years of the date of this Licence, the Licence is revoked.
- C. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new proposal pursuant to Section 11 of The Environment Act.

"original signed by"

Larry Strachan, P. Eng.
Director
Environment Act

Client File No.: 4207.00**SCHEDULE 'A'**

SAMPLING PROGRAM

Analytical Parameters	Units	Initial Drawdown Water	Return Process Minewater	Groundwater Monitoring Wells
field pH	pH units	x	x	x
calcium	mg/L	x	x	x
magnesium	mg/L	x	x	x
hardness	mg/L	x	x	x
alkalinity (HCO ₃)	mg/L			x
alkalinity (CO ₃)	mg/L			x
alkalinity (OH)	mg/L			x
conductivity	microS/cm		x	x
dissolved solids	mg/L		x	
total suspended solids	mg/L	x		
total phosphorous	mg/L		x	
total nitrogen	mg/L		x	
nitrates+nitrites as N	mg/L		x	x
sodium	mg/L		x	x
chlorides	mg/L			x
potassium	mg/L			x
sulphates	mg/L		x	x
total arsenic	mg/L	x	x	x
total chromium	mg/L	x	x	x
total copper	mg/L	x	x	x
total iron	mg/L	x	x	x
total lead	mg/L	x	x	x
total manganese	mg/L	x	x	x
total nickel	mg/L	x	x	x
total zinc	mg/L	x	x	x