

Environment Act Licence

Loi sur l'environnement Licence

Manitoba
Conservation
Conservation
Manitoba



Licence No./Licence n° 2628 R

Issue Date/Date de délivrance November 6, 2003

Revised: July 14, 2004

IN ACCORDANCE WITH THE MANITOBA ENVIRONMENT ACT (C.C.S.M. c. E125)
THIS LICENCE IS ISSUED PURSUANT TO SECTIONS 11(1) AND 14(2) TO:

RICE LAKE GOLD CORPORATION; "the Licencee"

for the operation of the Development being a gold and silver mining, milling and refining operation, known as the "Bissett Gold Mine", and including the tailings disposal facility with release of treated effluent towards the Wanipigow River via No-Name Creek, located in Township 24, Range 13 EPM, at the Town of Bissett, as outlined in the Proposal dated June 20, 1995, the Project Description Addendum dated November 3, 1995, the alteration requests dated October 2, 1996, and August 19, 1998, and the Proposal dated October 3, 2001 supported by the Project Description and Environmental Assessment Report dated August 23, 2001, subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

"accredited laboratory" means an analytical facility accredited by the Standard Council of Canada (SCC), or accredited by another accrediting agency recognized by Manitoba Conservation to be equivalent to the SCC, or able to demonstrate, upon request, that it has the quality assurance/quality control (QA/QC) procedures in place equivalent to accreditation based on the international standard ISO/IEC 17025, or otherwise approved by the Director;

"affected area" means a geographical area excluding the property of the Development;

"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;

"CCME" means Canadian Council of Ministers of the Environment;

****A COPY OF THIS LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES****

"composite sample" means as defined in the federal *Metal Mining Effluent Regulations*;

"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 so designated pursuant to *The Environment Act*;

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

"fugitive emissions" means particulate matter escaping from unconfined or non-ducted sources into the atmosphere;

"grab sample" means as defined in the federal *Metal Mining Effluent Regulations*;

"Metal Mining Effluent Regulations" means the *Metal Mining Effluent Regulations* (SOR/2002-222), or any future amendment thereto, promulgated under the federal *Fisheries Act*;

"mine" includes the shaft and underground workings, mill, offices, mechanics shop, hoist room, dry facilities, ore stockpile, tailings disposal facility 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 to the surface from underground mine workings, or polluted liquids discharged from a mill or any other building or facility associated with the mine, or polluted surface runoff, or any combination thereof, but 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;

"noise nuisance" means a continuous or repeated unwanted sound, in an affected area, which is troublesome, annoying or disagreeable to a person:

- (a) residing in the affected area;
- (b) working in the affected area; or
- (c) present at a location in the affected area which is normally open to the members of the public;

if the unwanted sound

- (d) is the subject of at least 5 written complaints, received by the Director within a 90-day period and in a form satisfactory to the Director, from 5 different persons falling within clauses (a), (b) or (c), who do not live in the same household; or
- (e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses (a), (b) or (c), and the Director is of the opinion that if the unwanted sound had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90-day period from 5 different persons who do not live in the same household;

"non acid-generating" means having a NPR greater than 4, 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;

"NP" means the maximum neutralization potential, expressed as tonnes of CaCO_3 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;

"ore" means mineralized rock containing sufficient mineral value to, and for the purposes of, the Development;

"particulate matter" means any finely divided liquid or solid matter other than water droplets;

"primary tailings pond" means the first in a series of ponds of the tailings management facility and which is the pond that receives the tailings from the mill;

"polishing pond" means a pond of the tailings management facility which receives the partially treated tailings from the primary tailings pond;

"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;

"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;

"Standard Methods for the Examination of Water and Wastewater" means the most recent 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 Environment Federation;

"surface sample" means a grab sample of minewater from within one metre of the surface;

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

"tailings disposal facility" means the tailings and minewater management area, including the areas designated as Main Pond, Current Polishing Pond and Future Polishing Pond as shown in Appendix 'A' attached to this Licence;

"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;

"waste disposal ground" means an area of land designated by a person, municipality, provincial government agency, or crown corporation for the disposal of waste and approved for use in accordance with *Manitoba Regulation 150/91*, or subsequent revision thereof, or a Licence issued pursuant to *The Environment Act*; and

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

GENERAL TERMS AND CONDITIONS

Note: Notwithstanding this Environment Act Licence, this Development is also subject to the federal *Metal Mining Effluent Regulations*. If any specification, limit, term or condition laid out in this Licence, or in any subsequent revision thereto, results in a contradiction of

one or more requirements as laid out in, or through, the federal *Metal Mining Effluent Regulations*, then the most stringent limit, term or condition shall apply.

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. In addition to any of the following specifications, limits, terms and conditions specified in this Licence, the Licencee shall, upon the request of the Director:
 - (a) sample, monitor, analyze or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, handling, treatment and disposal systems, for such pollutants, ambient quality, aquatic toxicity, seepage characteristics and discharge rates and for such duration and frequencies as may be specified;
 - (b) determine the environmental impact associated with the release of any pollutant from the Development; or
 - (c) provide the Director within such time as may be specified, with such reports, drawings, specifications, analytical data, 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 of liquid samples in accordance with the methods prescribed in the Standard Methods for the Examination of Water and Wastewater or in accordance with equivalent preservation and analytical methodologies approved by the Director, unless otherwise regulated by the federal *Metal Mining Effluent Regulations*; and
 - (b) have all analytical determinations undertaken by an accredited laboratory.
3. The Licencee shall report all information requested through the provisions of this Licence in a manner and form acceptable to the Director.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Respecting Surface Construction Activities

4. The Licencee shall restrict construction and operational activities to only such lands to which the Licencee possesses the mineral rights, surface rights or complete ownership,

or 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 carry out all activities related to this Development in accordance with any applicable work permits and timber cutting permits as may be required by Manitoba Conservation.
6. The Licencee shall, prior to construction or alteration of the tailings disposal facility, provide to Fisheries and Oceans Canada, for their review and approval, detailed information with respect to the following:
 - (a) construction details for the polishing pond, the dyke, and the diversion ditch including design plans, dyke plans showing method of discharge, and site specific plans, photographs, maps and detailed drawings of the area to be impacted;
 - (b) a fish habitat assessment of the polishing pond area and No Name Creek;
 - (c) the proposed start and completion dates of in-water construction; and
 - (d) proposed mitigative measures to prevent erosion and to prevent sediment from entering the watercourse during discharge of effluent.
7. The Licencee shall, with respect to the tailings disposal facility:
 - (a) not commence any expansion of the facility involving new or raised impoundment dykes until:
 - (i) the construction drawings for the impoundment dykes have been approved for structural stability by the Manitoba Mines Inspection Branch; and
 - (ii) the Director has received a set of the construction drawings for the new impoundment dykes, together with the engineering rationale for the proposed crest elevations and proposed future maximum crest elevations; and
 - (b) construct the existing and any new or raised impoundment dykes with a minimum one metre wide vertical clay core keyed into underlying impervious soils or bedrock, with the constructed clay core, the natural vertical impoundment features and the base of the tailings disposal facility having a hydraulic conductivity of at least 1×10^{-7} centimetres per second or less.

Respecting Liquid Discharges

8. The Licencee shall direct all minewater and tailings generated by the Development into the on-site tailings disposal facility.

9. The Licencee shall reclaim as much clarified water from the tailings disposal facility as possible to supply the process water demands of the mill.
10. The Licencee shall only release effluent from the tailings disposal facility by means of annual drawdown campaigns in the fall of each year, unless otherwise approved by the Director.
11. The Licencee shall not release of any effluent from the tailings disposal facility into the environment:
 - (a) other than through the final discharge point of the tailings disposal facility, as identified through the provisions of the federal *Metal Mining Effluent Regulations*;
 - (b) at a rate in excess of 0.18 cubic metres per second, or at a rate in excess of 0.20 cubic metres per second provided that the existing culvert under the Vanson Road is upgraded to accommodate the greater capacity;
 - (c) if the quality and toxicity of the effluent is in non-compliance with the federal *Metal Mining Effluent Regulations*; or
 - (d) if the quality of the effluent exceeds any of the drinking water health related water quality parameters as laid out in the "Final Draft - Manitoba Water Quality Standards, Objectives, and Guidelines" dated November 22, 2002, or any future amendment thereto, unless otherwise approved by the Director.
12. The Licencee shall take such corrective action, and within such a time frame as is satisfactory to the Director, to mitigate any seepage losses from the tailings disposal facility, where such seepage losses and their quality are determined by the Director to be unacceptable.
13. The Licencee shall:
 - (a) collect and direct all sewage generated at the Development through the existing sewage collection system, septic tanks and septic field, unless:
 - (i) the Director has determined that the existing septic tank and/or field is inadequate relative to the amount of sewage generated;
 - (ii) the Director has determined that seepage flows from the existing septic field are adversely impacting, or may adversely impact, the near shore waters of Rice Lake; or
 - (iii) an approved alteration to the existing sewage disposal system is implemented;
 - (b) comply with *Manitoba Regulation 83/2003*, or any future amendment thereto, in regards to any sewage generated at this Development which is not directed into the existing sewage collection and disposal system; and

- (c) dispose of any sewage and septage, transported or otherwise directed off the mine site, only into a facility which has a Licence or Permit authorizing the acceptance of sewage and septage.

Respecting Air Emissions

14. The Licencee shall limit fugitive emissions from any source within the mine site such that:

- (a) distinct plume forming fugitive emissions do not exceed an opacity of 5%; and
- (b) non plume forming fugitive emissions are not visible at any time;

when measured or viewed in the atmosphere at any point beyond the mine site in an area zoned commercial or residential.

15. The Licencee shall ensure that at any downwind point of impingement of air emissions off the property of the Development, ground level concentrations of suspended particulate matter (SPM) are not in excess of the corresponding limits for any of the listed measurement criteria:

<u>Air Pollutant</u>	<u>Measurement Criteria</u>	<u>Limits</u>
SPM	24-hour average	120 micrograms per cubic metre
SPM	annual geometric mean	70 micrograms per cubic metre

as determined from any ambient air sample or samples collected and analyzed in accordance with procedures and methods satisfactory to the Director, and corrected to a reference temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals (760 millimetres of mercury).

16. The Licencee shall not cause or permit a noise nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or to mitigate a noise nuisance.

Respecting Waste Rock, Ore and Solids Wastes

17. The Licencee shall, unless otherwise specified by the Director, dispose of all waste rock hoisted to surface at this Development by:

- (a) using, or releasing for use, non acid-generating waste rock as a construction material; or
- (b) stockpiling new waste rock in the area designated as "Future Waste Rock Stockpile Area", as shown in Appendix 'B' attached to this Licence, provided that the Licencee:

- (i) places the new waste rock onto an impervious liner constructed of a material, and in a manner, that is satisfactory to the Director;
 - (ii) constructs a lined down-gradient runoff collection ditch at the "Future Waste Rock Stockpile Area" to collect all of the surface runoff from the active portion of the "Future Waste Rock Stockpile Area";
 - (iii) routes all the stockpile runoff in the runoff collection ditch to a collection sump;
 - (iv) pumps all the fluids in the collection sump, as necessary, to the mill for transfer to the tailings area; and
 - (v) limits the height of any the waste rock stockpile within the "Future Waste Rock Stockpile Area" to no higher than the local geodetic elevation of 265 metres above sea level.
18. The Licencee shall:
- (a) not use, nor release to any person, any contaminated soil, or potentially acid-generating rock/materials, as a construction material;
 - (b) undertake such remedial work as may be specified by the Director should any of the construction materials used by the Licencee in the course of constructing or altering this Development be determined to be contaminated soil or acid generating rock/material; and
 - (c) deplete and decommission the existing waste rock stockpile at the "Current Waste Rock/Ore Stockpile Area", as shown in Appendix 'B' attached to this Licence, in a manner satisfactory to the Director, by utilizing that waste rock on a priority basis.
19. The Licencee shall restrict the surface stockpiling of ore to:
- (a) the surface of the pad at the area designated as "Current Waste Rock/Ore Stockpile Area", as shown in Appendix 'B' attached to this Licence;
 - (b) a maximum stockpile of no more than 9,072 tonnes (10,000 tons) at any time, unless otherwise specified in writing by the Director; and
 - (c) non acid-generating ore.
20. The Licencee shall remove all non-recyclable solid waste resulting from demolition, upgrading and general operational activities at the mine site from the mine site as soon as practical, and deposit such solid waste into a waste disposal ground operating under the authority of:
- (a) a permit issued pursuant to *Manitoba Regulation 150/91*, or any future amendment thereto; or

- (b) a Licence issued pursuant to *The Environment Act*.

Respecting Dangerous Goods or Hazardous Wastes

21. The Licencee shall comply with all the applicable requirements of:
- (a) *Manitoba Regulation 188/2001*, or any future amendment thereof, respecting the storage and handling of petroleum products and allied 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.
22. The Licencee shall not locate any petroleum storage tank within 100 metres of the shoreline of any waterway or water body.
23. The Licencee shall not release dangerous goods or hazardous wastes into the sewage collection system.

Respecting Recyclable Wastes

24. The Licencee shall not deposit bulky metallic wastes, used tires, used oil or other fluid lubricants, hydraulic fluids, and 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 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 recycling.
25. The Licencee shall ensure 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 for the fluids consists of a base and dikes lined in a fashion satisfactory to the Director to prevent the loss of any spilled oil or hydraulic fluids to the subsoil at that storage area.
26. The Licencee shall make an effort to initiate and maintain a recycling program for those substances identified in, or through the provisions of, Clause 24 of this Licence.

Respecting Contingency Planning and Emergency Response Plans

27. The Licencee shall:
- (a) continually maintain in a current status:
 - (i) contingency plans for dealing with matters such as spills from a ruptured tailings line and unexpected seepage losses from the tailings disposal facility; and

- (ii) details on the locations and containment provisions for existing and proposed chemical and fuel storage areas, and on how and where to the tailings line would be drained under pipeline freezing, pipeline rupture or pump shutdown events; and
- (b) continually maintain the Emergency Response Plan, approved by the Director on October 9, 1996, in a current status, and consistent with the "Industrial Emergency Response Planning Guide (MIAC, September, 1996)" and the requirements of the federal *Metal Mining Effluent Regulations*, to the degree that is satisfactory to the Director.

Respecting Monitoring, Record keeping and Reporting

28. The Licencee shall, until the existing waste rock stockpile at the "Current Waste Rock/Ore Stockpile Area" (shown in Appendix 'B' attached to this Licence) has been depleted and decommissioned, once a month under open water conditions and following a precipitation event:
- (a) collect a representative grab sample of run-off water from the down-gradient perimeter ditch of the existing waste rock stockpile; and
 - (b) analyze the samples for those parameters listed in Appendix 'C' attached to this Licence.
29. The Licence shall in each year during which new waste rock or new ore is being deposited onto the respective surface waste rock stockpile area or ore stockpile area:
- (a) collect a representative bulked sample of each of the new waste rock and the new ore once every 3 months;
 - (b) annually have each bulked sample (collected over the preceding 12 months) subjected to acid-base accounting tests, carried out by qualified individuals, for the determination of the neutralization potential, acid generation potential, neutralization potential ratio, and percent sulphur content of each bulked sample; and
 - (c) report the data determined pursuant to Sub-clause 29(b) of this Licence to the Director, in writing and in an electronic format acceptable to the Director, as soon as the analytical data becomes available.
30. The Licencee shall, once every month-end during each operating year, record the elevation of the minewater level in the main pond of the tailings disposal facility relative to the lowest crest elevation of the perimeter dyke system.

31. The Licencee shall during each month of each operating year determine by measurement, or by a method of estimation satisfactory to the Director, the quantity of water being reclaimed from the tailings disposal facility for the mill, and the percentage value of this quantity relative to the mill's process water requirements for that month's production rate.
32. The Licencee shall, once every three months during each operating year, collect a surface sample of minewater from the main tailings pond and analyze the sample for those parameters listed in Appendix 'D' attached to this Licence.
33. The Licencee shall, once every two months in each operating year, and between the time that the polishing pond has been filled with minewater from the main pond and the time that effluent release from the polishing pond is commenced, collect a surface sample of minewater from the polishing pond and analyze the sample for those parameters listed in Appendix 'D' attached to this Licence.
34. The Licencee shall, unless otherwise specified by the Director:
 - (a) annually monitor each accessible groundwater monitoring well of those existing monitoring wells designated as 96-01, 96-02, 96-03, 96-05 and 96-06, and shown in Appendix 'A' attached to this Licence, for potentiometric elevation, field pH, conductivity and temperature;
 - (b) annually collect a groundwater sample from each of the accessible groundwater monitoring well, and analyze the samples for those parameters listed in Appendix 'D' attached to this Licence; and
 - (b) establish and monitor as per Sub-clauses 34(a) and 34(b) of this Licence, any additional new groundwater monitoring wells at such locations as may be requested by the Director;
35. The Licencee shall submit to the Director, in writing and in an electronic format acceptable to the Director, the analytical data and information determined in accordance with Clauses 28, 30, 31, 32, 33 and 34 of this Licence, no later than 30 days following the end of the month in which the samples were taken.
36. The Licencee shall, prior to the initiation of any effluent discharge, collect at least three samples, one each from the surface, middle and bottom of the water column at the deepest location in the polishing pond, analyze each sample for those parameters listed in Appendix 'D' attached to this Licence, and test each sample for acute lethality to rainbow trout and *Daphnia magna* by means of tests carried out in a manner consistent with the procedures identified in the federal *Metal Mining Effluent Regulations*.

37. The Licencee shall monitor the effluent quality and measure the rate of discharge at the final discharge point of the tailings disposal facility over the course of each annual discharge campaign such that:
- (a) within 24 hours of the commencement of discharge, the first grab or composite effluent sample is collected;
 - (b) an additional grab or composite effluent sample is collected at the final discharge every seven days for the duration of the discharge;
 - (c) each collected effluent sample is analyzed for those parameters listed in Appendix 'D' attached to this Licence and tested for acute lethality to rainbow trout and to *Daphnia magna* by means of tests carried out in accordance with requirements of the federal *Metal Mining Effluent Regulations*; and
 - (d) the maximum rate of effluent discharge (cubic metres per second), the daily volume of effluent discharged on each day on which an effluent sample was collected, and the total volume of effluent discharged over the duration of the discharge campaign, are measured and recorded.
38. The Licencee shall collect a sample of stream water at each of the receiving water monitoring stations designated as NNC-VR, NNC-GR, WR-US and WR-DS, as shown in Appendix 'E' attached to this Licence, and have each sample analyzed for those parameters listed in Appendix 'D' attached to this Licence:
- (a) prior to but within seven days of the initiation of any polishing pond discharge;
 - (b) at weekly intervals for the duration of the discharge;
 - (c) approximately one week following the termination of the discharge; and
 - (d) at weekly intervals until the pre-discharge baseline condition is re-established to the satisfaction of the Director.
39. The Licencee shall, within 30 days of the completion of each discharge campaign, collect sediment samples from the receiving stream at the stations designated as NNC-DP, NNC-VR and NNC-GR as shown in Appendix 'E' attached to this Licence and have the samples analyzed for the following parameters:
- (a) total metals;
 - (b) total organic carbon;
 - (c) moisture content; and

- (d) pH.
40. The Licencee shall, once every three years, collect sediment samples from the receiving stream at the stations designated as WR-US and WR-DS as shown in Appendix 'E' attached to this Licence and have the samples analyzed for the following parameters:
- (a) total metals;
 - (b) total organic carbon;
 - (c) moisture content; and
 - (d) pH.
41. The Licencee shall obtain the samples required to be collected in Clauses 39 and 40 of this Licence such that:
- (a) the samples are taken by coring;
 - (b) the top 5 centimetres of each core are submitted for analysis; and
 - (c) a minimum of 5 individual core samples are taken at each location on each sampling event.
42. The Licencee shall:
- (a) during each discharge campaign, submit to the Director, in writing and in an electronic format satisfactory to the Director, the analytical data and information determined in accordance with Clauses 36, 37, and 38 of this Licence once every two weeks as the data becomes available;
 - (b) within two months of the termination of each annual effluent discharge campaign, submit to the Director and the Hollow Water First Nation an environmental monitoring report which summarizes the monitoring data collected during the discharge campaign in accordance with Clauses 37, 38, 39, and 40 of this Licence and describes the environmental impact of the effluent on the receiving waterways relative to non-impacted or pre-impacted baseline data respecting the receiving water and sediment, as well as relative to the "Final Draft - Manitoba Water Quality Standards, Objectives and Guidelines" dated November 22, 2002, or any future amendment thereto, respecting the receiving water; and
 - (c) submit to the Director a copy of each quarterly and annual effluent monitoring report, submitted by the Licencee to Environment Canada in accordance with the federal *Metal Mining Effluent Regulations*, at the same time as each such report is submitted to the federal authorization officer.

43. The Licencee shall:
- (a) carry out the environmental effects monitoring program, as required by the federal *Metal Mining Effluent Regulations*, in consultation with the Water Quality Management Section of the Water Branch of Manitoba Conservation, and incorporate such additional monitoring requirements as may be requested in writing by the Director; and
 - (b) submit to the Director a copy of each environmental effects monitoring report, submitted by the Licencee to Environment Canada in accordance with the federal *Metal Mining Effluent Regulations*, at the same time as each such report is submitted to the federal authorization officer.
44. The Licencee shall by January 31st of each operating year, submit a report to the Director on the achievements made over the preceding calendar year regarding the recycling program initiated pursuant to Clause 26 of this Licence.


Respecting Mine Closure, Decommissioning and Rehabilitation/Restoration

45. The Licencee shall:
- (a) provide the Director with:
 - (i) written notice three months in advance of any imminent permanent closure of this Development; or
 - (ii) provide the Director with an immediate notice of any sudden decision to temporarily close this Development whereby the Development would be placed in a mothballed state for re-opening in the foreseeable future;
 - (b) comply with *Manitoba Regulation 67/99*, or any future amendment thereto, issued under *The Mines and Minerals Act*, respecting closure plans for mining developments, particularly in regards to addressing environmental issues including, but not necessarily limited to:
 - (i) the decommissioning of the underground workings and surface infrastructure associated with the Development;
 - (ii) the decommissioning of access roads and stream crossings used to access the mine site;
 - (iii) the containment, control or treatment of pollutants originating from the mine site of the Development;
 - (iv) the rehabilitation of the mine site area disturbed by the Development;
 - (v) the restoration or replacement of fish habitats disturbed, adversely affected or lost as a result of the Development; and
 - (vi) the strategy, scope, frequency and duration of post-closure environmental monitoring activities at the mine site;where applicable; and

- (c) in the course of progressive rehabilitation, as well as upon the permanent or temporary closure of this Development, implement the environmentally related aspects of the Closure Plan approved pursuant to *Manitoba Regulation 67/99*, or any future amendment thereto, to the satisfaction of the Director.

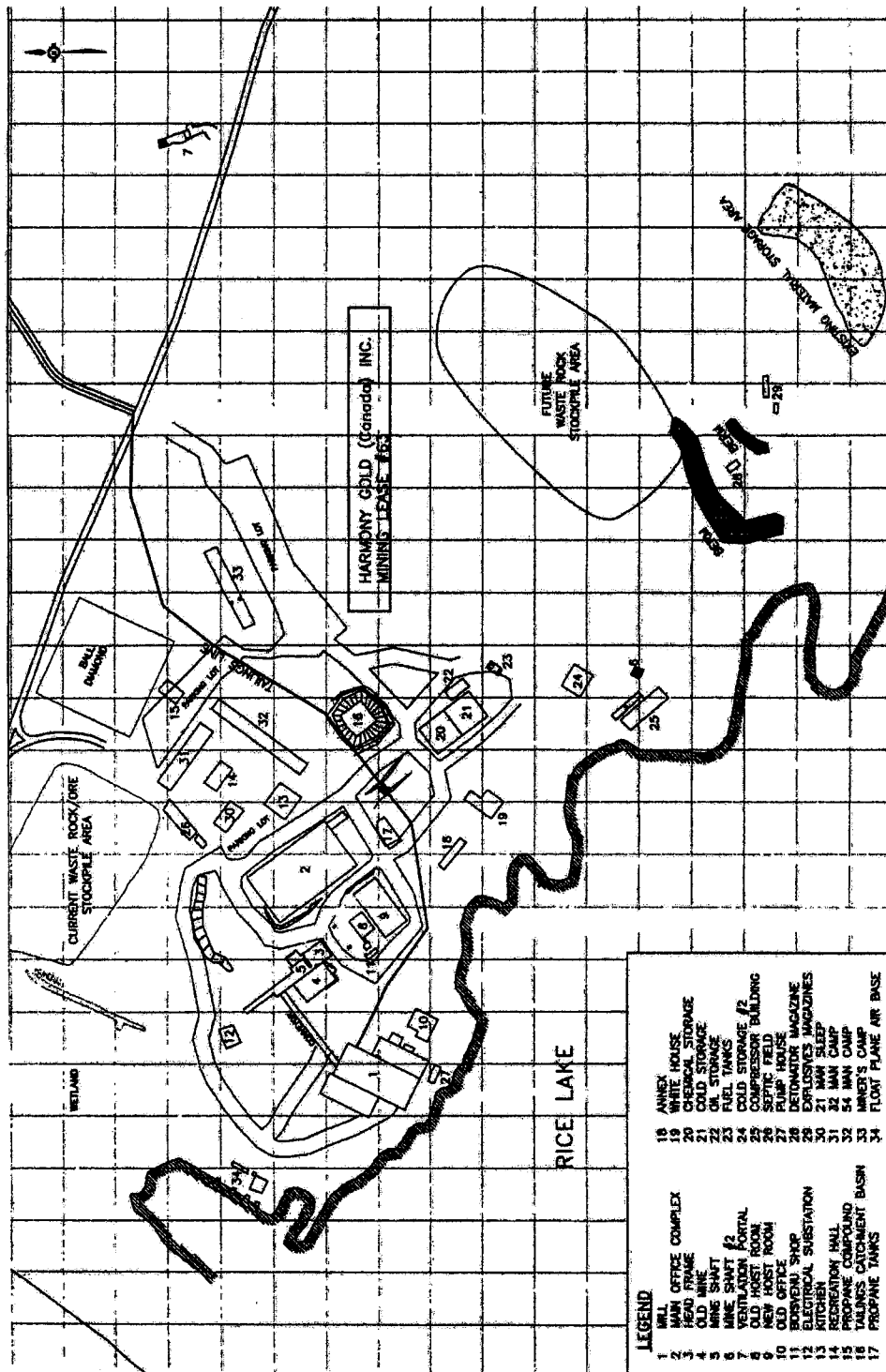
REVIEW AND REVOCATION

- A. This Licence replaces Environment Act Licences No. 2161 S1 RR and No. 2628 which are hereby rescinded.
- B. 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.
- 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*.



Larry Strachan, P. Eng.
Director
Environment Act

APPENDIX 'B'
(Site Layout)



APPENDIX 'C'
(Waste Rock Runoff Analytical Parameters)

Inorganic Parameters	Metals
pH	T. Arsenic
Conductivity	T. Cadmium
T. Dissolved Solids	T. Chromium
Total Suspended Solids	T. Copper
Turbidity	T. Lead
Colour	T. Mercury
Hardness	T. Nickel
Sodium	T. Iron
Diss. Chloride	T. Selenium
Diss. Magnesium	T. Silver
Diss. Calcium	T. Zinc
Diss. Potassium	
Bicarbonate	
Carbonate	
Diss. Sulphate	
Diss. Fluoride	
Nitrate + Nitrite (as N)	
T. Phosphorus (as P)	

Diss. means dissolved
 T. means total

This Appendix is subject to change by the Director from time to time.

APPENDIX 'D'
(Groundwater, Minewater and Effluent Analytical Parameters)

pH
Conductivity
Hardness
Alkalinity
Diss. Calcium
Diss. Magnesium
Sodium
Diss. Potassium
Diss. Sulphate
Diss. Chloride
Bicarbonate
Total Suspended Solids
T. Phosphorus
T. Nitrate Nitrogen
T. Ammonia (as N)
T. and Diss. Metals
Total, Free and Weak Acid Dissociable (WAD) Cyanide

Diss. means dissolved

T. means total

This Appendix is subject to change by the Director from time to time.

APPENDIX 'E'
(Water Sampling Locations)

