

The Mineral Industry Environmental Protection Regulations

Repealed
by Chapter 10.2 Reg 7 (effective March 6, 1996).

Formerly
Chapter E-10.2 Reg 5.

NOTE:

This consolidation is not official. Amendments have been incorporated for convenience of reference and the original statutes and regulations should be consulted for all purposes of interpretation and application of the law. In order to preserve the integrity of the original statutes and regulations, errors that may have appeared are reproduced in this consolidation.

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Appendix

CHAPTER E-10.2 REG 5

The Environmental Management and Protection Act

Title

- 1 These regulations may be cited as *The Mineral Industry Environmental Protection Regulations*.

Interpretation

- 2 In these regulations:

- (a) **“Act”** means *The Environmental Management and Protection Act*;
- (b) **“acutely lethal concentration”** means the concentration of a pollutant in water at which 50% or more of a test species dies during a 96-hour static acute lethality test conducted in accordance with the most recent edition of *Standard Methods For the Examination of Water and Wastewater*, published jointly by the American Public Health Association, the American Water Works Association and the Water Pollution Control Federation;
- (c) **“alter”** means to change a pollutant control facility in a manner that may affect its standard of environmental performance or environmental protection;
- (d) **“decommission”** means to remove permanently from service a pollutant control facility and any area used in connection with the operation of the facility;
- (e) **“deep well injection”** means disposal of liquid wastes into a subsurface geological horizon;
- (f) **“exploration”** means the search by any physical or chemical means for minerals;
- (g) **“metre-per cent”** means the product obtained by multiplying the vertical thickness of a mineralized zone in metres by the average per cent concentration of uranium over the vertical thickness;
- (h) **“mill”** means a facility operated to crush, grind, leach, dissolve, roast, float, sift, shake, wash, aspirate or carry out any other process for the purpose of obtaining or concentrating a mineral and includes a smelter or a refinery;
- (i) **“mine”** includes:
 - (i) an opening or excavation in, or working of, the ground for the purpose of searching for, winning, opening up, proving or storing underground any mineral or mineral-bearing substance;
 - (ii) wells for the purpose of formation testing, mining, waste disposal, deep well injection or dewatering related to the exploration for or the development or removal of a mineral; or

- (iii) all ways, works, engines, machinery, plant, buildings, furnaces, roast yards and premises below or above ground belonging to or used in connection with the operations carried out in or about the operation of mining or in or about a mine;
- (j) **“mineral”** means any non-living substance formed by the processes of nature that occurs on or under the surface of the ground, irrespective of its chemical or physical state, but does not include:
- (i) petroleum;
 - (ii) naturally-occurring surface water;
 - (iii) agricultural soil; or
 - (iv) sand and gravel that belongs to the owner of the surface of the land, other than the Crown, pursuant to *The Sand and Gravel Act*;
- (k) **“mining”** includes:
- (i) a mode or method of working whereby the soil, earth or any mineral may be disturbed, removed, carted, carried, washed, sifted, leached, dissolved, roasted, smelted, refined, crushed, ground or dealt with by another similar process for the purpose of obtaining a mineral whether the mineral was previously disturbed or not;
 - (ii) the boring or drilling for a mineral;
 - (iii) the working of the ground for the purpose of underground storage of a mineral; or
 - (iv) the drilling, installing or operating of wells for the purpose of formation testing, mining, waste disposal, deep well injection or dewatering related to the exploration for or the development or removal of a mineral;
- (l) **“pollutant control facility”** means a facility or area for the treatment, handling or disposal of any pollutant arising from any mining operations or the development of or the exploration for any mineral and includes environmental protection components of:
- (i) a mine or mill;
 - (ii) a tailings management area;
 - (iii) an ore storage facility;
 - (iv) a waste rock disposal area;
 - (v) a mine overburden or spoil disposal area;
 - (vi) a waste treatment plant;
 - (vii) a fuel storage facility;
 - (viii) a chemical storage facility;

- (ix) a waste sump;
- (x) a site drainage control;
- (xi) a groundwater dewatering system;
- (xii) exploration equipment; and
- (xiii) all associated machinery and equipment including pumps, pipes, conveyors, launders and ditches used in connection with facilities or areas mentioned in subclauses (i) to (xii);

(m) **“reclaim”** means to rehabilitate a site and areas affected by mining or exploration activities;

(n) **“stream bed”** means a clearly defined natural open channel that carries running water, either ephemeral or continuous, moving under the influence of gravity to lower levels.

16 Aug 91 cE-10.2 Reg 5 s2.

Application of regulations

3 These regulations do not apply to:

- (a) any oil or gas exploration or production activity regulated pursuant to *The Oil and Gas Conservation Act*; or
- (b) exploration by any means other than drilling, trenching or hydraulic removal of overburden.

16 Aug 91 cE-10.2 Reg 5 s3.

Exemption from section 17 of Act

4(1) Clause 17(a) of the Act does not apply to any discharge, deposit, drainage or release from a pollutant control facility governed by these regulations.

(2) Clause 17(b) of the Act does not apply to any discharge, deposit or release from a pollutant control facility governed by these regulations.

(3) Clause 17(c) of the Act does not apply to the construction, installation, alteration, extension or operation of a pollutant control facility governed by these regulations.

16 Aug 91 cE-10.2 Reg 5 s4.

Construction, etc. of facility

5 Except as permitted by section 14, no person shall cause or permit the construction, alteration or extension of any pollutant control facility unless the person first obtains approval to do so from the minister.

16 Aug 91 cE-10.2 Reg 5 s5.

Application for approval to construct

6(1) A person who desires to construct, alter or extend a pollutant control facility shall apply in writing to the minister for approval to do so.

(2) An application pursuant to subsection (1) is to include the following information and material or, if the information or material has been provided in an earlier submission to the minister, is to make reference to that information or material:

- (a) a statement of the nature of the wildlife, fisheries, air, water resources, soil and hydrogeology for the area of the facility;
- (b) site maps of the area of the facility showing topographical and drainage features of the area during construction, alteration or extension, and as they will be on completion of the work proposed;
- (c) a set of drawings and specifications of the construction, alteration or extension proposed;
- (d) a description of the proposed methods and procedures of the operation of the facility;
- (e) a list of pollutants that may be stored or used in the facility;
- (f) a schedule of the proposed construction, alteration or extension;
- (g) a contingency plan for:
 - (i) preventing; and
 - (ii) cleaning up any;
 spills of pollutants from the facility;
- (h) a description of the proposed:
 - (i) operating schedule; and
 - (ii) methods and procedures for monitoring the operation of the facility to detect pollutants that may be discharged into the environment; and
- (i) a conceptual plan and schedule for decommissioning the facility and reclaiming areas disturbed in the construction or operation of it.

16 Aug 91 cE-10.2 Reg 5 s6.

Operating, etc. of facility

7 Except as permitted by section 14, no person shall operate a pollutant control facility for the purpose of causing or permitting the discharge, drainage, diversion, deep well injection, handling or on-site transportation of any substance that may be a pollutant, including:

- (a) groundwater; and
- (b) any substance that:
 - (i) is dealt with without processing; and
 - (ii) arises from any activity related to the exploration, mining, milling or development of any mineral resource;

unless the person first obtains approval from the minister authorizing the specific activities to be carried out.

16 Aug 91 cE-10.2 Reg 5 s7.

Application for approval to operate

8(1) A person who desires to operate a pollutant control facility mentioned in section 7 shall apply in writing to the minister for approval to do so.

(2) An application pursuant to subsection (1) is to include the following information and material:

- (a) the information and material set out in subsection 6(2), updated to reflect the operational phase of the facility; and
 - (b) a proposed schedule setting out any planned discharge of pollutants to the environment, including the anticipated quantity and quality of those discharges.
- (3) A person who desires to obtain a renewal of an approval to operate a pollutant control facility shall apply in writing to the minister, setting out any proposed changes in the operation or monitoring of the facility.

16 Aug 91 cE-10.2 Reg 5 s8.

Temporary closure of facility

9 Except as permitted by an approval pursuant to section 8, no person who is the owner or operator of a pollutant control facility shall cease to operate all or part of the facility for a period greater than 180 consecutive days without an approval issued pursuant to section 12 unless the person first obtains approval from the minister to do so.

16 Aug 91 cE-10.2 Reg 5 s9.

Application for approval to temporarily close

10(1) A person who desires to temporarily cease operating all or part of a pollutant control facility for a period greater than 180 consecutive days shall apply in writing to the minister for approval to do so.

(2) An application pursuant to subsection (1) is to include the following information and material:

- (a) a statement of the reasons for the proposed closure of the facility;
- (b) a tentative date for the resumption of operations of the facility; and
- (c) a description of the proposed methods and procedures for preventing spills or releases of pollutants from the facility during the period of its closure.

16 Aug 91 cE-10.2 Reg 5 s10.

Permanent closure of facility

11 No person who is the owner or operator of a pollutant control facility shall permanently close all or part of the facility unless the person first obtains approval from the minister to decommission the facility and reclaim areas disturbed by the facility.

16 Aug 91 cE-10.2 Reg 5 s11.

Application for approval to decommission and reclaim

12(1) A person who desires to permanently cease operating all or part of a pollutant control facility shall apply in writing to the minister for approval to do so.

(2) An application pursuant to subsection (1) is to include the following information and material:

- (a) site plans of the facility and of any areas used or disturbed in connection with the construction or operation of the facility;
- (b) a list of all pollutants and the quantities of them in the facility and the areas mentioned in clause (a);
- (c) a detailed proposal for decommissioning and reclaiming the facility and areas mentioned in clause (a) and the time within which it is to be done; and
- (d) a description of the proposed methods, procedures and scheduling for monitoring the facility and areas mentioned in clause (a) for the purpose of detecting spills or releases of pollutants from the facility and areas during and after the decommissioning and reclaiming process.

16 Aug 91 cE-10.2 Reg 5 s12.

Application for release from decommissioning and reclamation approval

13(1) A person who desires to be released from further requirements set out in an approval issued pursuant to section 12 shall apply in writing to the minister for a release.

(2) An application pursuant to subsection (1) is to include the following information and material:

- (a) a detailed analysis and evaluation of monitoring data and observations from the decommissioning and post-decommissioning monitoring program that demonstrates compliance with requirements set out in the approval; and
- (b) a list and assessment of remaining environmental liabilities.

16 Aug 91 cE-10.2 Reg 5 s13.

Conditions for exploration

14(1) No person shall conduct any exploration to which these regulations apply without approvals pursuant to sections 6 and 8 unless that person complies with the terms and conditions set out in subsections (2) to (5).

(2) A person who intends to conduct an exploration program shall:

- (a) advise the minister of that intention prior to commencing exploration;
and
- (b) provide the minister with:
- (i) the inclusive dates during which the program is to be carried out;
 - (ii) the location of the proposed exploration; and
 - (iii) the anticipated scope of the program.
- (3) A person who conducts an exploration program shall ensure that:
- (a) every flowing artesian drill hole is sealed on completion of the hole to prevent discharge to the environment;
 - (b) every occurrence of a flowing artesian drill hole is reported to the minister within 30 days of its discovery, together with a report describing how the hole was sealed;
 - (c) subject to subsection (4), drill mud, return water and cuttings from drilling are disposed of down a drill hole or on land in a manner that will prevent overflow to a stream or lake;
 - (d) drill mud solids or cuttings:
 - (i) with a uranium content greater than 0.05%; and
 - (ii) that are not otherwise retained;are disposed of down a drill hole;
 - (e) the upper 30 metres of bedrock in a hole mentioned in clause (d) or the entire depth of the hole, whichever is less, is grouted;
 - (f) the handling, storage and disposal of all pollutants associated with the exploration is done in a manner that prevents pollution of the environment;
 - (g) on completion of the program, exploration sites are reclaimed so that:
 - (i) drill hole surface casings are removed or cut off at or below the surface of the ground;
 - (ii) all drill holes under lakes, streams or muskeg are sealed by grouting the upper 30 metres of bedrock or the entire depth of the hole, whichever is less;
 - (iii) all drill holes that encounter mineralization with a uranium content greater than 1.0%, over a length greater than one metre and with a metre-per cent concentration greater than 5.0, are sealed by grouting the hole over:
 - (A) the entire length of the mineralized zones; and
 - (B) not less than 10 metres above and below each mineralized zone; and

(iv) materials and equipment associated with the exploration program are removed from the exploration site.

(4) In the case of a drill working on lake ice or stream ice, the person conducting the exploration program may dispose of drill mud, cuttings from drilling and return water at the drill site if:

- (a) drilling additives are not used in concentrations that are acutely lethal concentrations for fish;
- (b) drill cuttings do not have uranium concentrations greater than 0.05%; and
- (c) any:
 - (i) drill mud;
 - (ii) cuttings from drilling; and
 - (iii) return water;

that are not recycled are deposited on the ice surface.

(5) No person who conducts an exploration program shall carry out drilling, trenching, hydraulic stripping of overburden or disposal of waste products from any of those operations on land that is within 30 metres of a lake bed or a stream bed.

16 Aug 91 cE-10.2 Reg 5 s14.

Further information or material

15 Where any information or material submitted with an application for an approval is, in the opinion of the minister:

- (a) insufficient; or
- (b) of such a nature that the minister is not able to evaluate the action or project for which the approval is requested;

the minister may require the applicant to submit further information or material with respect to that previously submitted.

16 Aug 91 cE-10.2 Reg 5 s15.

Minister is to consider application for approval

16 Subject to section 15, where the minister receives an application pursuant to these regulations for an approval, the minister shall, in a timely manner:

- (a) issue the approval applied for;
- (b) issue the approval applied for subject to any terms and conditions pertaining to environmental management and protection that the minister considers appropriate; or
- (c) refuse to issue the approval applied for after giving the applicant:
 - (i) notice of the minister's intention to refuse the approval;
 - (ii) the reasons for the refusal; and
 - (iii) an opportunity to make representations with respect to the matter.

16 Aug 91 cE-10.2 Reg 5 s16.

Limitation respecting certain discharges

17 Where a discharge to the environment of any liquid effluent is permitted by an approval pursuant to section 8, 10 or 12, the person to whom the approval is granted shall ensure that the concentration of any pollutants in the effluent does not exceed:

- (a) the concentrations set out in the Appendix to these regulations;
- (b) more stringent limits than those mentioned in clause (a), specified by the minister pursuant to clause 16(b) in a term or condition imposed on the approval; or
- (c) in the case of a pollutant that is not listed in the Appendix to these regulations, any limits that are specified by the minister.

16 Aug 91 cE-10.2 Reg 5 s17.

Approval not transferable

18 An approval issued by the minister pursuant to these regulations is not transferable to any other person.

16 Aug 91 cE-10.2 Reg 5 s18.

Compliance with approval and terms and conditions

19 The person to whom an approval is issued pursuant to these regulations and:

- (a) any officer, employee or agent of the person; or
- (b) any contractor with whom the person has an agreement, who is engaged in any activity to which the approval or any of its terms and conditions relates;

shall comply with the approval and the terms and conditions of it.

16 Aug 91 cE-10.2 Reg 5 s19.

Expiry of approval

20 An approval issued pursuant to these regulations expires on the day specified in the approval.

16 Aug 91 cE-10.2 Reg 5 s20.

Amendment or cancellation of approval

21 The minister may amend or cancel an approval issued to a person pursuant to these regulations where:

- (a) the person contravenes any term or condition to which the approval is subject;

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- (b) the person submits a written request to amend or cancel the approval; or
- (c) the minister considers it appropriate to do so.

16 Aug 91 cE-10.2 Reg 5 s21.

R.R.S. c.D-14 Reg 2 repealed**22** *The Mineral Industry Pollution Prevention Regulations* are repealed.

16 Aug 91 cE-10.2 Reg 5 s22.

Transition**23** An approval issued pursuant to *The Mineral Industry Pollution Prevention Regulations* that is valid and subsisting on the day before the day on which these regulations come into force:

- (a) continues to be valid and subsisting until the expiry date specified in the approval unless it is sooner amended or cancelled pursuant to these regulations; and
- (b) is deemed to be an approval issued pursuant to these regulations.

16 Aug 91 cE-10.2 Reg 5 s23.

Appendix

[Section 17]

Authorized Concentration of Pollutants in Liquid Effluent

<u>Pollutant</u>	<u>Maximum Monthly Arithmetic Mean Concentration</u>	<u>Maximum Grab Sample Concentration</u>
Total Arsenic	0.5 mg/L	1.0 mg/L
Total Copper	0.3 mg/L	0.6 mg/L
Total Lead	0.2 mg/L	0.4 mg/L
Total Nickel	0.5 mg/L	1.0 mg/L
Total Uranium	2.5 mg/L	5.0 mg/L
Total Zinc	0.5 mg/L	1.0 mg/L
Total Radium-226	0.37 Bq/L	1.11 Bq/L
Total Thorium-230	1.85 Bq/L	3.7 Bq/L
Total Lead-210	0.92 Bq/L	1.84 Bq/L
Total Cyanide	1.0 mg/L	2.0 mg/L
Un-ionized Ammonia*	0.5 mg/L	1.0 mg/L

The pH level of water discharged to the environment shall be between 6.0 and 9.5 in 75% of samples during any month, and the pH level of grab samples shall never be less than 5.0 or greater than 10.0.

* Un-ionized ammonia is the portion of total ammonia nitrogen that is in the form NH_3 .

91 cE-10.2 Reg 5.