The Hazardous Substances and Waste Dangerous Goods Regulations

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<u>Chapter E-10.2 Reg 3</u> (effective April 1, 1989) as amended by Saskatchewan Regulations 25/92, 107/92, 28/94, 3/95 and 63/2000.

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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CHAPTER E-10.2 REG 3

The Environmental Management and Protection Act

Title

1 These regulations may be cited as *The Hazardous Substances and Waste Dangerous Goods Regulations*.

1 May 92 SR 25/92 s3.

INTERPRETATION

Interpretation

2(1) In these regulations:

(a) **"abandoned"** when used in reference to a storage facility, means unused or out-of-service for the purpose of storing a hazardous substance or waste dangerous good for a period of 24 consecutive months or more;

(a.1) **"above-ground storage tank"** means a storage tank of which more than ninety percent of its capacity is above surface grade;

(a.2) "Act" means The Environmental Management and Protection Act;

(b) **"agricultural chemical"** means any substance inteded, sold or represented for use as a fertilizer, pesticide or soil supplement;

(c) "alteration", with respect to a storage facility, means any addition, enlargement or other change or replacement of the storage facility or any change in the configuration of the piping of the storage facility, but does not include:

(i) adjustments, repairs or maintenance made in the course of normal operation of the storage facility;

- (ii) minor improvements to an existing storage facility; or
- (iii) temporary changes made to the storage facility in an emergency;
- (d) "approval" means an approval in writing from the minister;
- (e) "approved" means approved by the minister in writing;
- (f) "ASTM" means the American Society for Testing and Materials;

(f.1) "**certification program**" means a training course that covers the installation, testing or decommissioning of storage tanks for petroleum products that is offered by the department or is an equivalent training course approved by the minister;

(g) **"container"** means a receptacle of 205 litres water capacity or less that is designed to be used to store or contain a hazardous substance, a mixture of hazardous substances, a waste dangerous good, a mixture of waste dangerous goods or a combination of those items;

(h) **"corrosive substance"** means a substance with the characteristics described in clause 4(1)(a);

(i) "decommissioning" means:

(i) the process of removing a storage facility from operation and decontaminating or disposing of it or placing it in a condition of standby with appropriate controls and safeguards acceptable to the minister; or

(ii) decontaminating the area used for the operation of a storage facility;

(j) "director" means the Director of the Commercial Branch, Saskatchewan Environment and Resource Management;

(j.1) **"empty container"** means a container from which:

(i) all hazardous substances or waste dangerous goods have been removed from the container so that the container contains less than 0.1 % of the original amount of hazardous substance or waste dangerous good as residue in the container; and

(ii) where applicable, all flammable vapours have been reduced to less than twenty percent (20%) of the lower explosive limit for the material by purging or by the introduction of an inert material;

(j.2) **"existing"** means a storage facility that was constructed, installed or relocated pior to April 1, 1989, whether it was operational or not;

(k) **"environmental persistent or chronic hazardous substance"** means a substance with the characteristics described in clause 4(1)(b);

(k.1) **"flow-through process tank"** means any storage tank which forms an integral part of a manufacturing, recycling or disposal process and through which there is a steady or uninterrupted flow of any hazardous substances or waste dangerous goods during operation of the process;

(l) "hazardous substance" means a substance designated in section 3;

(m) **"household chemical"** means any substance that has been collected, transported, stored or used in domestic establishments including single and multiple residences, hotels and motels;

(n) **"ignitable substance"** means a substance with the characteristics described in clause 4(1)(c);

(o) " LC_{50} " means LC_{50} as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada);

(p) " LD_{50} " means LD_{50} as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada);

(p.1) **"level 1 leak detection"** means a method of detection that is capable of detecting a leak of 0.38 litres per hour with a probability of detection of 0.95 and a probability of false alarm of 0.05;

(q) **"mixture"** means any combination of two or more substances if the combination is not the result of a chemical reaction;

(r) "NACE" means the National Association of Corrosion Engineers;

(s) **"operator"** means a person who is responsible for the day-to-day maintenance and operation of a storage facility;

(s.1) **"out-of-service"**, when used in reference to a storage facility, means the lack of use, other than for seasonal, standby or surcharge storage, of the facility for a period not exceeding 24 consecutive months;

(s.2) **"overfill protection system"** means a mechanical or electrical device that is installed in or on a storage tank to prevent the storage tank from being overfilled;

(t) **"owner"** means a person who has the possessary right to and care, control or management of and over a storage facilty;

(u) **"oxidizing substance"** means a substance with the characteristics described in clause 4(1)(d);

(v) **"petroleum product"** means a mixture of hydrocarbons, with or without additives, that is used, or is capable of being used, as a combustible fuel and, without limiting the generality of the foregoing, includes gasoline, diesel fuel, aviation fuel, kerosene, naphtha, lubricant, fuel oil, heating oil and engine oil, but does not include propane gas, paint or solvent;

(v.1) **"qualified person"** means a person who has successfully completed a certification program and possesses two years of directly related experience in the installation, testing or decommissioning of underground storage tanks or above-ground storage tanks;

(w) **"reactive substance"** means a substance with the characteristics described in clause 4(1)(e);

(w.1) **"release detection system"** means any device or equipment that is capable of monitoring or determining the presence or evidence of hazardous substances or waste dangerous goods in subsurface soil;

(w.2) **"stockpile"** means bulk storage and handling of hazardous substances or waste dangerous goods stored above surface grade or below surface grade and includes solids, liquids and mixtures of solids and liquids not contained in storage tanks or containers;

(x) "storage facility" means any facility that is used for storing and handling:

- (i) hazardous substances; or
- (ii) waste dangerous goods;

and includes any warehouse, yard, storage tank, container, stockpile, pipe or equipment that is used for those purposes and is wholly contained within the contiguous boundaries of a property; (y) "storage tank means a receptacle of greater than 205 litres water capacity that is used for the storage of a hazardous substance, a mixture of hazardous substances, a waste dangerous good, or a mixture of waste dangerous goods or a mixture of any two or more of them and includes a fixed or moveable receptacle but does not include a receptacle incorporated into moveable vehicle or trailer;

(z) **Repealed.** 1 May 92 SR 25/92 s4.

(aa) **"toxic substance"** means a substance with the characteristics described in clause 4(1)(f);

(bb) **"trade secret"** includes any formula, plan, pattern, process, data, information or compilation of information that is not patented, that is secret or that is known only to the possessor or to a person with whom the possessor has a confidentiality agreement and that gives the possessor a competitive advantage over others who do not possess it, but does not include relevant information required to protect the environment and workers;

(bb.1) **"transfer spill preventer"** means a collection device located on the fill pipe or other filling device of a storage tank that is designed to collect any over-delivery during the delivery of hazardous substances or waste dangerous goods to the storge tank;

(cc) **"underground storage tanks"** means a storage tank that has at least 10% of its volume below the surface of the ground and includes pipes below the surface of the ground that are connected to a storage tank that is not below the surface of the ground;

(dd) **"waste dangerous good"** means a substance with the characteristics described in subsection 4(4).

(2) A reference to an Act of the Parliament of Canada is a reference to that Act as amended from time to time.

25 Nov 88 cE-10.2 Reg 3 s2; 1 May 92 SR 25/92 s4; 27 Jan 95 SR 3/95 s3.

HAZARDOUS SUBSTANCES

Designation of hazardous substances

3 The following substances are designated as hazardous substances:

- (a) industrial hazardous substances listed in Appendix A;
- (b) industrial hazardous substances described in subsection 4(2);
- (c) acute hazardous substances listed in Appendix B;
- (d) acute hazardous substances described in subsection 4(3);

(e) environmental persistent or chronic hazardous substances listed in Appendix C;

(f) environmental persistent or chronic hazardous substances described in clause 4(1)(b).

25 Nov 88 cE-10.2 Reg 3 s3.

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DESIGNATION AS HAZARDOUS WASTES

Designation of waste dangerous goods as hazardous wastes

3.1 Waste dangerous goods are designated as hazardous wastes.

 $1~{\rm May}$ 92 SR 25/92 s5.

CHARACTERIZATION OF SUBSTANCES

Characteristics of certain hazardous substances

4(1) For the purposes of these regulations:

- (a) a corrosive substance is a substance that:
 - (i) has been known to cause visible necrosis of human skin tissue;

(ii) causes visible necrosis of the skin tissue of an albino rabbit at the contact site within a period of four hours or less when administered by continuous contact with the intact bare skin of the rabbit;

(iii) is aqueous and has a pH factor less than or equal to 2.0 or greater than or equal to 12.5 as determined by a pH meter;

(iv) corrodes SAE 1020 steel or 7075-T6 non-clad aluminum surfaces at a rat greater than 6.25 millimetres per year at a test temperature of 55° Celsius using test NACE TM-01-69 (Revised 1976) or an equivalent test approved by the director; or

(v) is a corrosive gas, Class 2, Division 4, as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada);

(b) an environmental persistent or chronic hazardous substance is a substance that:

(i) has been demonstrated to pose a hazard to human health or the environment because of its chronic toxicity, bio-accumulative properties or persistence in the environment;

(ii) has been recognized by the International Agency for Research on Cancer, the National Cancer Institute or the United States Environmental Protection Agency as a human or animal positive or suspected carcinogen;

(iii) is a Miscellaneous Product or Substance, Class 9, Division 1, as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada); or

(iv) is a Miscellaneous Product or Substance, Class 9, Division 2, as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada);

(c) an ignitable substance is a substance that is:

(i) a liquid, other than an aqueous solution, containing less than 24% alcohol by volume and has a flash point less than 61° Celsius, as determined by the Tag Closed Cup Tester (ASTM D-56-82), the Setaflash Closed Cup Tester (ASTM D-3828-81 or ASTM D-3278-82), the Pensky-Martens Closed Cup Tester (ASTM D-93-80), or as determined by an equivalent test method approved by the minister;

(ii) a solid and is capable, under normal conitions of storage temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a danger; or

(iii) an ignitable compressed gas, Class 2, Division 1, as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada);

(d) an oxidizing substance is a substance that:

(i) causes or contributes to the combustion of another material by yielding oxygen or another oxidizing agent whether or not the oxidizing material is itself combustible;

(ii) contains the bivalent oxygen 0-0 structure, being an organic peroxide; or

(iii) is an oxidizing substance, Class 5, Divisions 1 and 2, as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* Canada);

(e) a reactive substance is a substance that:

(i) is normally unstable and readily undergoes violent polymerization, decomposition or condensation;

- (ii) reacts violently with water;
- (iii) forms potentially explosive mixtures with water;

(iv) when mixed with water, generates toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment;

(v) is a cyanide or sulphide bearing substance that when exposed to pH conditions between 2.0 and 12.5, inclusive, is capable of generating toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment;

(vi) is capable of becoming self-reactive under conditions of shock or increase in pressure or temperature;

(vii) is a flammable solid, Class 4, Division 1 as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada);

(viii) is a substances liable to spontaneous combustion, Class 4, Division 2 as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada); or

(ix) is a substance that on contact with water emits flammable gases, Class 4, Division 3 as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada);

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- (f) a toxic substance is a substance that:
 - (i) in low dose has been found to be fatal to humans;

(ii) in the absence of data on human toxicity, has been shown in studies to have:

(A) an LD_{50} for solids with oral toxicity not greater than 200 mg/kg;

(B) an LD_{50} for liquids with oral toxicity not greater than 500 mg/kg;

(C) an LD_{50} for substances with dermal toxicity not greater than 1000 mg/kg;

(D) and LC_{50} for dusts or mists with inhalation toxicity not greater than 10000 mg/m³ at normal atmospheric pressure; or

(E) a saturated vapour concentration greater than 0.2 times the LC_{50} expressed in mL/m³ at normal atmospheric pressure and an inhalation toxicity not greater than 5000 mL/m³ at normal atmospheric pressure;

(iii) for the purposes of subclause (ii), where the LD_{50} value or LC_{50} value of a mixure is unknown, the LD_{50} value or LC_{50} value of a mixture may be determined by the formula prescribed in the *Transportation of Dangerous Goods Act* (Canada); or

(iv) is a poisonous compressed gas, Class 2, Division 3, as defined in the regulations made pursuant to the *Transportation of Dangerous Goods Act* (Canada).

(2) A corrosive substance, an ignitable substance or an oxidizing substance is an industrial hazardous substance.

(3) A reactive substance or a toxic substance is an acute hazardous substance.

(4) A waste dangerous good is any substance that:

- (a) either:
 - (i) is no longer used for its original purpose; or

(ii) is intended for reuse, recovery, recycling, treatment or disposal, including storage prior to reuse, recovery, recycling, treatment or disposal; and

- (b) either is:
 - (i) a substance listed in Appendix D;

(ii) a substance listed in Schedule II, List II, of *The Dangerous Goods Transportation Regulations*; (ii) a substance that meets any of the criteria set out in Part III of *The Dangerous Goods Transportation Regulations*; or

(iv) a substance that:

(A) is included in Division 2 of Class 9 as defined in *The Dangerous Goods Transportation Regulations*;

(B) is in a quantity greater than 0.01% by mass; and

(C) is not regulated by the *Food and Drugs Act* (Canada) or the *Feeds Act* (Canada).

- (5) No person shall:
 - (a) mix or dilute; or
 - (b) allow mixing or dilution;

of a waste dangerous good with water or other liquid or solid, where the mixing or dilution would result in the waste dangerous good being no longer subject to these regulations.

25 Nov 88 cE-10.2 Reg 3 s4; 1 May 92 SR 25/92 s6.

EXEMPTION FROM REQUIREMENTS

General Exemptions

5(1) These regulations do not apply to any substance that is not described in section 3 or 3.1 nor to any of the following:

(a) household and agricultural chemicals stored for consumptive use on the premises of any single residence, multiple residence, hotel or motel;

(b) substances in quantities that are permitted in food or drugs pursuant to the *Food and Drugs Act* (Canada);

(c) radioactive materials regulated pursuant to the *Atomic Energy Control Act* (Canada);

(d) consumer products subject to the *Consumer Chemicals and Containers Regulations* (Canada), SOR/88-556, made pursuant to the *Hazardous Products Act* (Canada);

- (e) tobacco and tobacco products;
- (f) wood and wood products;
- (g) empty containers;
- (h) explosives as defined in the *Explosives Act* (Canada);

(i) hazardous wastes regulated pursuant to *The PCB Waste Storage Regulations*;

(j) substances in sanitary sewage lagoons.

(2) Any construction, installation or operation of, or alteration or extension to any industrial effluent works that is operated primarily for the storage of waste dangerous goods is exempt from clause 17(c) of the Act.

27 Jan 95 SR 3/95 s4.

Underground storage facilities

6 These regulations do not apply to the storage of any hazardous substances or waste dangerous goods in the following types of underground storage facilities:

(a) pipe lines and pipe storage facilities that store or transport crude oil, natural gas or production water and that are subject to *The Pipe Lines Act*;

(b) interprovincial pipe lines that store or transport crude oil, natural gas or production water and that are subject to the *National Energy Board Act* (Canada);

(c) natural gas distribution facilities within urban centres and low pressure rural distribution lines regulated pursuant to *The Power Corporation Act*;

(d) storage facilities that store or transport crude oil, natural gas or production water and that are subject to *The Oil and Gas Conservation Act*;

(e) flow-through process tanks.

27 Jan 95 SR 3/95 s5.

Above-ground storage facilities

7(1) These regulations do not apply to the storage of hazardous substances or waste dangerous goods in the following types of above-ground storage facilities:

(a) **Repealed.** 1 May 92 SR 25/92 s9.

(b) pipe lines and pipe storage facilities that store or transport crude oil, natural gas or production water and that are subject to *The Pipe Lines Act*;

(c) storage facilities that store or transport crude oil, natural gas or production water and that are subject to *The Oil and Gas Conservation Act*;

(d) flow-through process tanks; and

(e) above-ground farm or residential storage tanks which are not used for storage for any commercial purpose;

(f) above-ground storage tanks located within underground mines.

(2) These regulations do not apply to the design and installation of any pressure vessel that is:

- (a) regulated under The Boiler and Pressure Vessel Act; and
- (b) used for the storage of hazardous substances or waste dangerous goods.

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(3) These regulations do not apply to the storage of any industrial hazardous substances within:

(a) above-ground storage tanks that have a nominal capacity of less than 4000 litres; or

(b) storage facilities employing above-ground storage tanks with an aggregate storage capacity of less than 4000 litres.

25 Nov 88 cE-10.2 Reg 3 s7; 1 May 92 SR 25/92 s9; 27 Jan 95 SR 3/95 s6.

Storage in small containers

8(1) Subject to subsection (2), these regulations do not apply to the storage of any hazardous substance or waste dangerous good in drums, bags, other containers or stockpile where the substance:

(a) is stored or used in a research, industrial or experimental laboratory;

(b) is an industrial hazardous substance stored in a storage facility and the weight of the substance combined with the weight of any other industrial hazardous substance stored in the facility does not exceed:

- (i) 1000 kilograms in the case of an indoor facility; or
- (ii) 2000 kilograms in the case of an outdoor facility;

(c) is an acute hazardous substance stored in a storage facility and the weight of the substance combined with the weight of any other hazardous substance stored at the facility does not exceed 100 kilograms at any time;

(d) is an environmental persistent or chronic hazardous substance stored in a storage facility and the weight of the substance combined with the weight of any other hazardous substance stored at the facility does not exceed 100 kilograms at any time; or

(e) is a waste dangerous good stored in a storage facility other than used oil or waste antifreeze solutions and the weight of the waste dangerous good combined with the weight of any other waste dangerous good other than used oil or waste antifreeze solutions does not exceed 100 kilograms at any time.

(2) Where an acute hazardous substance, environmental persistent substance or chronic hazardous substance is also an industrial hazardous substance, the exemption provided by clause (1)(b) does not apply in respect of the storage of the substance.

(3) These regulations do not apply to the storage of new engine oil, lubricants and grease in containers.

(4) These regulations do not apply to the storage of used oil or waste antifreeze solutions in containers at a storage facility where the aggregate storage capacity for all used oil and waste antifreeze solution containers at that storage facility does not exceed 500 kilograms.

25 Nov 88 cE-10.2 Reg 3 s8; 1 May 92 SR 25/92 s10; 27 Jan 95 SR 3/95 s7.

APPROVAL TO STORE

Approval to store

9(1) Subject to subsection (2), no person shall store hazardous substances or waste dangerous goods unless he or she has obtained the prior approval of the minister under this section to do so.

(2) In case of an existing storage facility, the owner of the storage facility:

(a) shall register the storage facility with the director on a form provided by the minister:

(i) in the case of a storage facility owned by a farmer, on or before December 31, 1992;

(ii) in any other case, within six months from the day on which these regulations come into force;

(b) shall, on registration pursuant to clause (a), comply with section 13 with respect to the operation and maintenance of the storage facility;

(c) may continue the operation of the storage facility without the approval of the minister until the sooner of an alteration to the storage facility or:

(i) in the case of an above-ground storage tank for petroleum products, December 31, 1997;

(ii) in the case of an underground storage tank for the storage of hazardous substances:

(A) if determined by the minister to be located in a site of high environmental sensitivity, April 1, 1994;

(B) subject to subsection (9), if determined by the minister to be located in a site of moderate environmental sensitivity, the sooner of:

(I) the detection of a leak in accordance with subsection 13(1.1) or (1.2); or

(II) the later of December 31, 1997 or 17 years from the known date that the underground storage tank was manufactured; or

(C) subject to subsection (10), if determined by the minister to be located in a site of low environmental sensitivity, when leaks are detected in accordance with subsection 13(1.1) or (1.2);

(iii) in the case of any other storage facility for the storage of hazardous substances other than those mentioned in subclauses (i) and (ii), April 1, 1995; or

(iv) in the case of a storage facility used for the storage of waste dangerous goods, April 1, 1995; and

(3) The owner or operator of a proposed storage facility for the storage of hazardous substances or waste dangerous goods shall submit an application, on a form supplied by the minister, to the minister for approval to store the hazardous substances or waste dangerous goods.

(4) A person who has obtained the approval of the minister to store any hazardous substance or waste dangerous good shall post the approval in a conspicuous place in the storage facility where the hazardous substance or waste dangerous good is stored.

(5) No person shall transfer or cause to be transferred any hazardous substance or waste dangerous good to a storage facility unless:

(a) the storage facility has been approved by the minister pursuant to this section; or

(b) where the storage facility has not been approved, the storage facility has been registered with the director pursuant to this section for the storage of that substance and the storage facility is not required to be approved by the minister.

(5.1) In the case of an underground storage tank mentioned in paragraph 9(2)(c)(ii)(C), clause (5)(b) does not apply unless the owner or operator of that underground storage tank is in compliance with subsection 13(1.1) or 13(1.2).

(6) Where the owner or operator of a storage facility mentioned in subsection (2) proposes to make an alteration to the storage facility, he or she shall notify the minister of his or her intention to do so prior to commencing the alteration.

(7) Where there is an alteration of a storage facility mentioned in subsection (2), sections 14, 15 and 16 apply on and from the time of the completion of the alteration of the facility.

(8) Where there is no alteration to a storage facility mentioned in subclause (2)(c)(i) prior to December 31, 1997, section 14 applies on and from December 31, 1997.

(8.1) Where there is no alteration to a storage facility mentioned in paragraph (2)(c)(ii)(A) prior to April 1, 1994, section 15 applies on and from April 1, 1994.

(8.2) Where there is no alteration to a storage facility mentioned in paragraph (2)(c)(ii)(B) prior to the later of December 31, 1997 or 17 years from the known date that the underground storage tank was manufactured and the requirements of subsection (9) have been met, section 15 applies on and from the later of December 31, 1997 or 17 years from the known date that the underground storage tank was manufactured.

(8.3) Where there is no alteration to a storage facility mentioned in paragraph (2)(c)(ii)(C) and the requirements of subsection (10) have been met, section 15 applies on and from the detection of a leak in accordance with subsection 13(1.1) or (1.2).

(8.4) Where there is no alteration to a storage facility mentioned in subclause (2)(c)(iii) or (2)(c)(iv) prior to April 1, 1995, sections 14, 15 and 16 apply on and from April 1, 1995.

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(9) No person shall store a hazardous substance in an underground storage tank at locations determined by the minister to be located in a site of moderate environmental sensitivity:

(a) in the case of an underground storage tank equipped with a metered product dispenser, unless:

(i) the underground storage tank is equipped in conformance with paragraphs 15(1)(b)(v)(C), (D) and either (A) or (B) by no later than December 31, 1997;

(ii) in the case of a steel underground storage tank, the underground storage tank is equipped in conformance with paragraph 15(1)(b)(v)(E) and clause 15(1)(c) by no later than December 31, 1997; and

(iii) the tank bed is equipped with at least one more release detection monitoring well than the number of tanks by the later of December 31, 1997 or 17 years from the known date that the underground storage tank was manufactured; or

(b) in the case of an underground storage tank not equipped with a metered product dispenser or an underground storage tank that is owned by a farmer and used solely for the purposes of storing petroleum products to be used by that farmer for his or her own farming purposes, unless:

(i) in the case of a steel underground storage tank, the underground storage tank is equipped in conformance with paragraph 15(1)(b)(v)(E) and clause 15(1)(c) by the later of December 31, 1997 or 17 years from the known date that the underground storage tank was manufactured; and

(ii) the tank bed is equipped with at least one more release detection monitoring well than the number of tanks by the later of December 31, 1997 or 17 years from the known date that the underground storage tank was manufactured.

(10) No person shall store a hazardous substance in an existing operational underground storage tank at a location determined by the minister to be a site of low environmental sensitivity:

(a) subject to clause (c), in the case of an underground storage tank equipped with a metered product dispenser, unless the owner or operator is conforming with the requirements of subsection 13(1.1) by no later than December 31, 1995;

(b) subject to clause (c), in the case of an underground storage tank not equipped with a metered product dispenser, unless the tank bed is equipped with at least one more release detection monitoring well than the number of tanks by December 31, 1995; or

(c) in the case of an underground storage tank that is owned by a farmer and used solely for the purposes of storing petroleum products to be used by that farmer for his or her own farming purposes, unless the tank bed is equipped with at least one more release detection monitoring well than the number of tanks by December 31, 1997.

(11) Sections 10 and 17 apply to every storage facility, including every storage facility mentioned in subsection (2).

1 May 92 SR 25/92 s11; 23 Oct 92 SR 107/92 s2; 8 Apr 94 SR 28/94 s2; 27 Jan 95 SR 3/95 s8; 11 Aug 2000 SR 63/2000 s2.

APPROVAL TO CONSTRUCT

Approval to construct

10(1) No person shall:

- (a) construct, install, alter or expand; or
- (b) cause the construction, installation, alteration or expansion of;

a storage facility for the storage of hazardous substances or waste dangerous goods without the prior approval of the minister under this section to do so.

(2) The owner or operator of a proposed facility for the storage of hazardous substances or waste dangerous goods shall submit an application to the minister and provide as part of the application:

(a) a general description of the proposed storage facility for each hazardous substance or waste dangerous good to be stored at the storage facility, including its location, site plan, storage system design and operation and maintenance procedures;

(b) a list of each substance and waste dangerous good, and the estimated quantity of each, to be stored at the storage facility;

- (c) a description of:
 - (i) the release detection system; and
 - (ii) the containment system; and

(iii) where applicable, the regular inspection and maintenance procedures for those systems;

(d) a copy of the preliminary facility emergency response contingency plan;

(e) in the case of a storage tank and the associated piping and equipment for the storage of petroleum products, the name of the qualified person performing the construction, installation, alteration or expansion of the storage tank system; and

(f) any other information that the minister may require.

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(3) No person shall construct, install, alter or expand, or cause the construction, installation, alteration or expansion of, an above-ground storage tank for the storage of petroleum products, other than by means of the services of a qualified person or under the supervision of a person designated by the minister unless:

(a) each tank is filled by a direct top-fill using a functional automatic shutoff nozzle; and

(b) petroleum products are delivered from each tank by means of a gravity flow hose.

(4) No person shall construct, install, alter or expand, or cause the construction, installation, alteration or expansion of, an above-ground storage tank for the storage of waste dangerous goods other than under the supervision of a person designated by the minister.

(5) No person shall construct, install, alter or expand, or cause the construction, installation, alteration or expansion of, an underground storage tank for the storage of petroleum products other than by means of the services of a qualified person or under the supervision of a person designated by the minister.

(6) No person shall construct, install, alter or expand, or cause the construction, installation, alteration or expansion of, an underground storage tank for the storage of waste dangerous goods other than under the supervision of a person designated by the minister.

1 May 92 SR 25/92 s11; 27 Jan 95 SR 3/95 s9.

Decision to grant approval

11(1) Where a person makes an application pursuant to sections 9 or 10 or submits a proposal pursuant to section 17 and supplies all of the information required by the minister or by these regulations, the minister shall:

- (a) either:
 - (i) issue the approval; or
 - (ii) refuse to issue the approval; and
- (b) notify the person of the decision.
- (2) The minister may:

(a) impose any terms and conditions on the approval that the minister considers appropriate;

(b) amend, vary, revoke or replace the terms or conditions mentioned in clause (a); and

(c) suspend or cancel an approval.

(3) No person to whom an approval is issued pursuant to these regulations shall fail to comply with any terms and conditions imposed in the approval.

1 May 92 SR 25/92 s11.

Approval not assignable, exception

12(1) Subject to subsection (2), the rights conferred on a person by an approval issued pursuant to Section 11 are not transferable to any other person.

(2) The rights conferred on a person by an approval are transferable to any other person who is assigned or assumes the construction or operation of the storage facility with respect to which the approval was given.

(3) An assignee or person who assumes the construction or operation of a storage facility shall, within 30 days of the assumption of the construction or operation or assignment, notify the director in writing of the assumption or assignment.

25 Nov 88 cE-10.2 Reg 3 s12; 1 May 92 SR 25/92 s12.

Duties of operator, owner

13(1) The operator or owner of a storage facility shall:

(a) maintain all documents, including:

(i) a Material Safety Data Sheet as defined in the regulations made pursuant to the *Hazardous Products Act* (Canada), containing all hazard information concerning all hazardous substances stored at the facility and, subject to trade secret provisions under the *Hazardous Products Act* (Canada) and other applicable legislation, the chemical ingredients of all hazardous substances stored at the facility; and

(ii) records of laboratory analyses or a Material Safety Data Sheet as defined in the regulations made pursuant to the *Hazardous Products Act* (Canada), containing:

(A) all hazard information concerning any component of the waste dangerous goods that indicate the classification of the waste dangerous goods according to the criteria prescribed in Part III or Schedule II List II of *The Dangerous Goods Transportation Regulations*; and

(B) all other information regarding the composition of the waste dangerous goods as required by the minister;

(b) maintain a copy of the list of all hazardous substances and waste dangerous goods stored at the facility and their inventory records;

(c) report any unaccountable discrepancy in inventory or leakage of a hazardous substance or waste dangerous good to the minister in accordance with *The Environmental Spill Control Regulations*, where applicable;

(d) maintain inspection and maintenance records for the leak detection and containment systems at the facility;

(e) maintain a copy of the facility emergency response contingency plans, including proposed actions in response to potential accidents related to the operation of the storage facility;

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(f) retain the records described in clauses (b) and (d) for at least two years from the date of their creation and, on request, make those records available to the minister or any person designated by the minister;

(g) supply at least semi-annually a revised, current copy of:

(i) the list of all hazardous substances and waste dangerous goods stored at the facility; and

(ii) the inventory records of the hazardous substances and waste dangerous goods mentioned in subclause (i);

to the local fire department responsible for the facility; and

- (h) supply:
 - (i) annually; or
 - (ii) whenever the plan is revised;

a copy of the facility emergency response contingency plans, including proposed actions in response to potential accidents related to the operation of the storage facility to the local fire department responsible for the facility and to the local emergency measures organization.

(1.1) The owner or operator of an underground storage tank for hazardous substances equipped with a metered product dispenser that is not in compliance with the requirements of section 15 prior to December 31, 1995, shall, prior to December 31, 1995:

(a) ensure that level 1 leak detection is performed daily and recorded daily on inventory records in conformance with the requirements prescribed by the United States Environmental Protection Agency publication EPA/530/ UST/-90-007, "Standard Test Procedures for Evaluating Leak Detection Methods: Statistical Inventory Reconciliation Methods", and that the results are reported to the director on a monthly basis;

(b) in the event of a leak or suspected leak, report the results in accordance with *The Environmental Spill Control Regulations*;

(c) in the event of an inconclusive result, report the occurrence to the director within 72 hours.

(1.2) The owner or operator of an underground storage tank that is not equipped with a metered product dispenser or an underground storage tank that is used solely for the purposes of storing petroleum products to be used by a farmer for his or her own farming purposes, shall:

(a) ensure that release detection monitoring wells are checked for evidence of a leak by an independent party on an annual basis and that the results are reported to the director; and

(b) in the event of the existence of evidence of a leak or suspected leak, report the results in accordance with *The Environmental Spill Control Regulations*. E-10.2 REG 3

(2) The operator or owner of an underground storage tank that contains petroleum products shall:

(a) conduct product inventory measurements and reconciliation calculations on every underground storage tank on each day the tank is in operation;

(b) measure and record the level of any water at the bottom of every underground storage tank at least weekly;

(c) maintain and retain for examination by the minister on request of the minister inventory and reconciliation records for every underground storage tank showing the daily as well as cumulative product gain or loss for a period of not less than two years from the date of their creation;

(d) perform cathodic protection voltage measurements on every underground storage tank and pipe on a annual basis in conformance with:

(i) the Underwriters Laboratories of Canada Publication CAN4-S603.1-M85 Standard for Galvanic Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids, June 1985, as revised, amended or substituted at the time of coming into force of this subclause; or

(ii) clause 5.5 and Part 6.0 of the Petroleum Association for the Conservation of the Canadian Environment Publication 87-1 Guideline Specification for the Impressed Current Method of Cathodic Protection of Underground Petroleum Storage Tanks; and

(e) retain cathodic protection voltage measurement records for every underground storage tank and pipe until the storage facility is decommissioned and make those records available for examination by the minister on request of the minister.

(3) The operator or owner of an above-ground storage tank that contains petroleum products shall:

(a) conduct product inventory measurements and reconciliation calculations on every above-ground storage tank at least weekly;

(b) measure and record the level of water at the bottom of each above-ground storage tank at least monthly; and

(c) maintain and retain for examination by the minister on request of the minister inventory and reconciliation records for every above-ground storage tank showing the weekly as well as cumulative product gain or loss for a period of not less than two years from the date of their creation.

25 Nov 88 cE-10.2 Reg 3 s13; 1 May 92 SR 25/92 s13; 27 Jan 95 SR 3/95 s10.

Prohibition re storage in above-ground tanks

14 No person shall store a hazardous substance or a waste dangerous good in an above-ground storage tank unless the tank and the associated piping and equipment are:

(a) constructed of a material compatible with the stored hazardous substance or waste dangerous good;

(b) designed, constructed, supported and installed in a manner able to withstand stresses imposed by the stored hazardous substances or waste dangerous goods or, where applicable, in conformity with the following standards:

(i) with respect to shop fabricated steel, above-ground horizontal tanks for flammable and combustible liquids, the standards prescribed by the Underwriters Laboratories of Canada publication CAN4-S601-M84 "Standard for Shop Fabricated Steel Above-ground Horizontal Tanks For Flammable and Combustible Liquids", May, 1984, as revised, amended or substituted;

(ii) with respect to shop fabricated steel, above-ground vertical tanks for flammable and combustible liquids, the standards prescribed by the Underwriters Laboratories of Canada publication CAN4-S630-M84 "Standard for Shop Fabricated Steel Above-ground Vertical Tanks for Flammable and Combustible Liquids", May, 1984, as revised, amended or substituted;

(iii) with respect to steel storage tanks for oil storage, the standards prescribed by the American Petroleum Institute publication API Standard 650 "Welded Steel Tanks For Oil Storage", July, 1973, as revised, amended or substituted;

(iv) with respect to large, welded, low-pressure storage tanks, the standards prescribed by the American Petroleum Institute publication API-Standard-620 "Recommended Rules for Design and Construction of Large, Welded, Low-pressure Storage Tanks", July, 1973, as revised, amended or substituted;

(v) with respect to storage tanks, the standards prescribed by the American Petroleum Institute publications API-STD-12D "Specification for Large Field Welded Production Tanks", August 1, 1957, or API-SPEC-12F "Specification for Shop Welded Tanks for Storage of Production Liquids", January, 1982, as those publications are revised, amended or substituted at the time of the coming into force of this subclause;

(vi) with respect to pipe for pipe lines, the standards prescribed by the American Petroleum Institute, publication API-SPEC-5L "Specification for Line Pipe", March, 1975, the ASTM publication ASTM A 53-86 "Standard Specification for Pipe, Steel, Black and Hot-dipped, Zinc-coated Welded and Seamless" and the Underwriters Laboratories of Canada publication CAN3-Z245.1-M86 "Steel Line Pipe", as those publications are revised, amended or substituted;

(vii) with respect to shop fabricated steel above-ground horizontal utility tanks for flammable and combustible liquids, the standards prescribed by the Underwriters' Laboratories of Canada publication ULC-S643-M1989, "Standard for Shop Fabricated Steel Aboveground Utility Tanks for Flammable and Combustible Liquids," November, 1989, as revised, amended or substituted;

(viii) with respect to contained steel above-ground tanks for flammable liquids, the standards prescribed by the Underwriters' Laboratories of Canada publication ULC/ORD-C142.3-1991, "Contained Steel Above-ground Tank Assemblies for Flammable Liquids," April, 1991, as revised, amended or substituted;

(ix) with respect to contained steel above-ground tanks for used oil, the standards prescribed by the Underwriters' Laboratories of Canada publication ULC/ORD-C142.23-1991, "Aboveground Waste Oil Tanks," January, 1991, as revised, amended or substituted;

(x) with respect to steel above-ground tanks for fuel oil, lubricating oil and used oil, the standards prescribed by the Underwriters' Laboratories of Canada publication CAN/ULC-S602M, "Third Draft, Proposed Third Edition, Standard for Aboveground Steel Tanks for Fuel Oil and Lubricating Oil," August, 1991, as revised, amended or substituted;

(xi) with respect to the storage of hazardous substances or waste dangerous goods, any storage tank approved by the Underwriters' Laboratories of Canada or other nationally recognized standards association where the tanks are used for the purpose for which they were so approved;

(xii) with respect to any tank or pipe line described in subclauses (i) to (ix), the standards mentioned in those subclauses or any nationally recognized standard;

(c) coated with a rust-resistant material where the tank is susceptible to corrosion;

(d) protected from corrosion in conformance with the criteria prescribed by Appendix A of the Underwriters Laboratories of Canada publication CAN4-S6031-M85 "Standard for Galvanic Corrosion Protection Systems for Underground Tanks for Flammable and Combustible Liquids", June, 1985, as revised, amended or substituted where the above-ground storage tank, piping or equipment is in contact with the ground;

(e) equipped with a high level alarm or overfill protection system unless filled by a direct top-fill using a functional automatic shut-off nozzle; (f) where of a nominal capacity of greater than 10,000 litres and susceptible to corrosion, subjected to a thickness test immediately after 20 years from the date of the manufacture of the above-ground storage tank and at 10-year intervals after that, and permanently marked immediately after each test, in a conspicuous place and manner, to indicate the:

- (i) date of the test;
- (ii) remaining life of the above-ground storage tank;

(iii) nominal plate thickness of the above-ground storage tank at the time of the test;

(g) clearly marked to identify the contents;

(h) immediately surrounded by an impermeable system, which is designed, constructed and maintained:

(i) to contain any hazardous substances or waste dangerous goods that are released from the storage tank, piping or equipment; and

(ii) to prevent the spread of the hazardous substances or waste dangerous goods to the surrounding area or into any storm or sanitary sewer system, water supply or water source;

- (i) either:
 - (i) equipped with a transfer spill collector in the off-loading line;

(ii) constructed with the piping so that the invert elevation of the connection point is above the crown elevation of the adjacent laterally running pipe so as to prevent spillage during the transfer of hazardous substances or waste dangerous goods into the above-ground storage tank; or

(iii) equipped or constructed so as to contain spills at the off-loading connection point in a manner acceptable to the minister; and

(j) with respect to:

(i) above-ground storage tanks containing used oil that are emptied using vacuum suction, equipped with suction tubes fitted with leak-tight couplings for connection to the product removal suction hose; and

(ii) above-ground storage tanks containing used oil that are manually filled, equipped with an inlet funnel with a minimum 25-litre capacity, a lockable funnel inlet cover and a mesh-screened funnel opening.

25 Nov 88 cE-10.2 Reg 3 s14; 1 May 92 SR 25/92 s14; 27 Jan 95 SR 3/95 s11.

Prohibition re storage in underground tanks

15(1) No person shall store a hazardous substance or a waste dangerous good in an underground storage tank unless the storage tank and the associated piping and equipment:

(a) are constructed of material compatible with the stored hazardous substance or waste dangerous good;

(b) are designed, constructed, supported and installed in a manner able to withstand stresses imposed by the stored hazardous substances or waste dangerous goods or, where applicable, in conformity with the following standards and requirements:

(i) subject to subclause (ii), with respect to steel underground storage tanks, the specifications prescribed by subsection 4.3.8 of the National Research Council of Canada publication "National Fire Code of Canada, 1990", as revised, amended or substituted at the date of the coming into force of this subclause;

(ii) with respect to steel underground storage tanks, for flammable and combustible liquids, the standards prescribed by the Underwriters Laboratories of Canada publication CAN4-S603-M85 "Standards for Steel Underground Tanks for Flammable and Combustible Liquids", June, 1985, as revised, amended or substituted at the date of the coming into force of this subclause;

(iii) with respect to reinforced plastic underground storage tanks, the standards prescribed by the Underwriters Laboratories of Canada publication CAN4-S615-M83 "Standards for Reinforced Plastic Underground Tanks for Petroleum Products", February, 1983, as revised, amended or substituted at the date of the coming into force of this subclause;

(iv) with respect to underground storage tanks for the storage of petroleum products, the standards and requirements prescribed by the publication of the Canadian Council of Ministers of the Environment "Environmental Code of Practice for Underground Storage Tank Systems Containing Petroleum Products — 1989" as revised, amended or substituted at the date of the coming into force of this subclause;

(v) with respect to underground storage tanks containing petroleum products that:

(A) are filled by means of hoses equipped with tight-fill couplings, either a transfer spill prevention system that meets the standards prescribed by the Underwriters' Laboratories of Canada publication ULC/ORD-C58.19-1992, "Spill Containment Devices for Underground Flammable Liquid Storage Tanks", January, 1992, or an over-fill protection system that meets the standards prescribed by the Underwriters' Laboratories of Canada publication ULC/ORD-C58.15-1992, "Overfill Protection Devices for Flammable Liquid Storage Tanks", January, 1992, as revised, amended or substituted at the coming into force of this paragraph, or a system that, in the opinion of the minister, achieves an equivalent level of performance;

(B) are filled by means of hoses equipped with functional automatic shut-off nozzles, a transfer spill prevention system that meets the standards prescribed by the Underwriters' Laboratories of Canada publication ULC/ORD-C58.19-1992, "Spill Containment Devices for Underground Flammable Liquid Storage Tanks", January, 1992, as revised, amended or substituted at the coming into force of this paragraph, or a system that, in the opinion of the minister, achieves an equivalent level of performance;

(C) are equipped with a product dispenser, a drip collection tray immediately under the dispenser that meets the standards prescribed by the Underwriters' Laboratories of Canada publication ULC/ ORD-C107.21, "Under-Dispenser Sumps", June, 1992, as revised, amended or substituted at the coming into force of this paragraph, or a system that, in the opinion of the minister, achieves an equivalent level of performance;

(D) employ suction pumps, vertical in-line check valves immediately beneath the product dispenser; and

(E) are cathodically protected underground storage tanks, corrosion monitoring terminals in conformity with clauses 4.4.1 and either 4.4.3 or 4.4.4 of the Underwriters' Laboratories of Canada Publication CAN/ULC-S603.1-92, "Standard for Galvanic Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids," September 1992, as revised, amended or substituted at the coming into force of this paragraph;

(vi) with respect to:

(A) underground storage tanks containing used oil that are emptied using vacuum suction, suction tubes fitted with leak-tight couplings for connection to the product removal suction hose; and

(B) underground storage tanks containing used oil that are manually filled, an inlet funnel with a minimum 25-litre capacity, a lockable funnel inlet cover and a mesh-screened funnel opening;

(c) where susceptible to external corrosion, are protected from corrosion in conformity with Appendix A of the Underwriters Laboratories of Canada publication CAN4-S603.1-M85 "Standard for Galvanic Corrosion Protection Systems for Underground Tanks for Flammable and Combustible Liquids", June, 1985, as revised, amended or substituted;

(d) are equipped with release detection, transfer spill prevention and over-fill protection systems;

(e) are less than 25 years of age if constructed of steel and not protected from corrosion;

(f) are tested on installation, repair, service, and immediately prior to commencement of use by a method acceptable to the minister;

(g) if they are underground storage tanks that have been out-of-service for more than one year, have passed a leak test acceptable to the minister before the storage tank and associated piping and equipment is returned to service; and

- (h) are of a known documented age.
- (2) Every person required to conduct a test pursuant to clause (1)(f) or (g) shall:
 - (a) ensure that the test is performed by a qualified person; and

(b) report the results of that test to the director within 30 days of the completion of the test.

1 May 92 SR 25/92 s15; 27 Jan 95 SR 3/95 s12.

Prohibition re storage in certain containers or stockpiles

16(1) No person shall store a hazardous substance or a waste dangerous good in a container or a stockpile unless the container or stockpile is:

(a) situated in an impermeable area which is constructed and maintained in a condition to prevent any release of a hazardous substance or waste dangerous good from:

- (i) entering any storm or sanitary sewage system or water supply; and
- (ii) contaminating any other area;

(b) surrounded by a fence or other enclosure that is posted with at least one sign adequate to give reasonable notice to persons of the storage of a hazardous substance or waste dangerous good inside the fence or enclosure and containing a telephone number to be used in an emergency at the storage facility;

(c) subject to subsection (6), clearly marked or labelled as required by the *Transportation of Dangerous Goods Act* (Canada) or in any other manner that clearly and concisely identifies the contents of the container or stockpile;

(d) kept in segregated storage in accordance with sentences 3.3.6.6(1) and 3.3.6.6(2) of the 1990 National Fire Code of Canada as that code exists at the coming into force of this clause;

(e) subject to subsection (5), stored apart from human food and ingredients or animal feed and ingredients by means of:

(i) a separate warehouse or yard; or

(ii) a physical barrier from floor to ceiling and separate containment system; and

(f) situated apart from a permanent or temporary human residence, or from a building or other facility employed for the rearing or keeping of animals.

(2) Subject to subsection (5), no person shall store more than 2,000 kilograms of hazardous substances, used oil or waste antifreeze solutions or more than 200 kilograms of waste dangerous goods other than used oil or waste antifreeze solutions, in a stockpile or a container within a building or other structure unless the building or structure is:

(a) situated at least 100 metres from a residence or at least 500 metres from a hospital, senior citizen care home, school, day-care centre, prison, group home, special-care home or health care facility, and:

(i) where the building or structure consists of one or two stories, has a structure of non-combustible construction and is equipped with a monitored single-stage fire alarm system installed, tested and maintained in accordance with the National Building Code of Canada (1990), regardless of the occupant load;

(ii) where the building or structure consists of one or two stories, has a structure of combustible construction or combustible and non-combustible construction in combination and:

(A) has floor assemblies that are fire separations and, if constructed of combustible construction, have a fire resistance rating of not less than one hour;

(B) has load-bearing walls, columns and arches that have a fire resistance rating of not less than the rating required for the assemblies they support;

(C) the exterior walls, where constructed of combustible construction, have a fire resistance rating of not less than one hour; and

(D) is equipped with a monitored single-stage fire alarm system installed, tested and maintained in accordance with the National Building Code of Canada (1990), regardless of the occupant load; or

(iii) where the building or structure consists of three or four stories, has a structure of non-combustible construction in accordance with the National Building Code of Canada (1990) and is equipped with a fire suppression system designed, installed, tested and maintained in accordance with the National Fire Code of Canada (1990); or

(b) situated at least 100 metres from a hospital, senior citizen care home, school, day-care centre, prison, group home, special-care home or health care facility and:

(i) subject to subclause (ii), where the building or structure consists of one or two stories, has a structure of non-combustible construction and has floor assemblies, load-bearing walls, columns, arches, exterior walls and roof assembly with a minimum one hour fire resistance rating and is equipped with a monitored single-stage fire alarm system installed, tested and maintained in accordance with the National Building Code of Canada (1990), regardless of the occupant load; (ii) where the building or structure consists of one or two stories with a floor area of less than 100 square metres, has a structure of noncombustible construction and is equipped with a monitored single-stage fire alarm system installed, tested and maintained in accordance with the National Building Code of Canada (1990), regardless of the occupant load;

(iii) where the building or structure consists of one or two stories, has a structure of combustible construction or combustible and non-combustible construction in combination and has floor assemblies, load-bearing walls, columns, arches, exterior walls and roof assembly with a minimum one-hour fire resistance rating and is equipped with a monitored single-stage fire alarm system installed, tested and maintained in accordance with the National Building Code of Canada (1990), regardless of the occupant load; or

(iv) where the building or structure consists of three or four stories, has a structure of non-combustible construction in accordance with the National Building Code of Canada (1990), and is equipped with a fire suppression system designed, installed, tested and maintained in accordance with the National Fire Code of Canada (1990).

(3) Subject to subsection (5), no person shall store more than 2,000 kilograms of hazardous substances, used oil or waste antifreeze solutions or more than 200 kilograms of waste dangerous goods other than used oil or waste antifreeze solutions, in a stockpile or a container outside of a building or other structure unless the hazardous substance or waste dangerous good is situated at least 500 metres from a residence, hospital, senior citizen care home, school, day-care centre, prison, group home, special-care home or health care facility.

(4) Subject to subsection (5), no person shall store a hazardous substance or waste dangerous good in a stockpile or a container unless the stockpile or container is:

(a) situated on land other than land that is subject to flooding on a 1 in 500 year run-off or storm event based on available historical data for natural or engineered watercourses or water bodies; and

(b) situated in a storage facility designed so as not to be subject to flooding in the event of a 0.15 metre rainstorm of one-hour duration.

(5) The requirements of clause (1)(e) and subsection (2) to (4) do not apply if:

(a) the person storing or proposing to store the hazardous substance or waste dangerous good provides the minister with the information the minister may require and the minister, after considering that information, is of the opinion that the storage does not constitute a danger to the public or the environment; or (b) in the case of a storage facility for containers or stockpiles in operation prior to the coming into force of this clause, the person storing or proposing to store hazardous substances or waste dangerous goods obtains:

(i) the consent of the person in charge of any hospital, senior citizen care home, school, day-care centre, prison, group home, special-care home or health care facility within 100 metres of the storage facility and the consent of any person residing within 100 metres of the storage facility;

(ii) the consent of the municipality; and

(iii) in the case of a proposed alteration or expansion to the storage facility, approval to alter or expand the facility pursuant to section 10 and the consents mentioned in subclauses (i) and (ii) and following the alteration or expansion the storage facility provides a level of protection acceptable to the minister.

- (6) Clause (1)(c) does not apply to:
 - (a) portable containers intended for immediate and complete use;
 - (b) pipes, piping systems and valves; or
 - (c) continuous-run or multiple-use containers.

(7) No person shall store a hazardous substance or waste dangerous good in a container that is buried either fully or partially beneath the ground.

1 May 92 SR 25/92 s15; 27 Jan 95 SR 3/95 s13.

Decommissioning

17(1) No person shall remove, abandon, dispose or permanently close all or part of any storage facility without the prior approval of the minister to decommission the storage facility and decontaminate and reclaim or manage and monitor every affected area.

(2) At least 30 days prior to the removal, abandonment, disposal or permanent closure of a storage facility, the owner or operator of the storage facility shall submit a decommissioning application to the minister containing:

(a) a description of how the decommissioning is to take place;

(b) a description of the plans for the disposal of any remaining equipment, hazardous substances, waste dangerous goods or contaminated materials; and

- (c) a detailed proposal:
 - (i) to decontaminate and reclaim the affected area;
 - (ii) to monitor and manage the affected area; or

(ii) that consists of a combination of decontaminating and reclaiming and monitoring and managing pursuant to subclauses (i) and (ii).

(3) Before making a proposal pursuant to subclause (2)(c)(ii), the owner or operator shall carry out a site assessment to determine the degree of contamination, the risks to the environment and the risks to the health and safety of the public.

(4) Within 12 months of the date of approval, an owner or operator of a storage facility, in accordance with the terms of the approval, shall decommission the facility and:

(a) decontaminate and reclaim the affected area; or

(b) initiate monitoring and management of the contamination and associated risks.

(5) Notwithstanding any other provision in these regulations or any term of an approval, no owner or operator of an underground storage tank shall abandon or permanently close the underground storage tank unless the underground storage tank is:

- (a) emptied;
- (b) removed from the ground; and
- (c) rendered unfit for further use for the storage of hazardous substances or waste dangerous goods.

(6) No person to whom an approval is issued pursuant to this section shall fail to comply with the terms of the approval.

(7) No person shall decommission, remove, abandon, dispose or permanently close an underground storage tank used for the storage of petroleum products other than by means of the services of a qualified person or under the supervision a person designated by the minister.

(8) No person shall decommission, remove, abandon, dispose or permanently close an underground storage tank used for the storage of waste dangerous goods other than under the supervision of a person designated by the minister.

27 Jan 95 SR 3/95 s14.

TRANSFERAL OF WASTE DANGEROUS GOODS

Transferal of waste dangerous goods

18(1) In this section:

(a) **"consignee number"** means a valid consignee provincial I.D. number obtained using a form supplied by the minister and used in Part C of the waste manifest described in section 4.15 of the *Transportation of Dangerous Goods Regulations* (Canada), SOR/85-77;

(b) **"consignor number"** means a valid consignor provincial I.D. number obtained using a form supplied by the minister and used in Part A of the waste manifest decribed in section 4.15 of the *Transportation of Dangerous Goods Regulations* (Canada), SOR/85-77.

(2) No owner of waste dangerous goods shall transfer, or allow to be transferred, the waste dangerous goods from a storage facility to a mode of transportation without holding a consignor number.

(3) No owner of waste dangerous goods shall transfer, or allow to be transferred, the waste dangerous goods from a mode of transportation to a storage facility without holding a consignee number.

 $1~{\rm May}~92~{\rm SR}~25/92~{\rm s}15.$

Appendix A

INDUSTRIAL HAZARDOUS SUBSTANCES

Name of Chemical

Acetaldehyde/Ethyl aldehyde/Ethanal Acetaldehyde, trichloro-/Chloral Acetamide, N-9H-flouren-2-yl-/2-Acetylaminoflourence Acetic acid Acetic acid, ethyl ester/Ethyl acetate Acetic acid, lead salt/Lead acetate Acetic anhydried Acetone/2-Propanone Acetonitrile/Methyl cyanide Acetophenone/Ethanone, 1-phenyl-Acetylene Acridine Acrylic acid/2-Propenoic acid Adipic acid Alanine, 3-(p-bis(2-chloroethyl)amino)phenyl-, L-/Melphalan/Sarcolysin Aluminum (powder) Aluminum chloride hvdrate Aluminum nitrate Amitrole/Amino triazole/3-Amino-1,2,4-triazole Ammonia (anhydrous) Ammonium bifluoride Ammonium dichromate Ammonium hydroxide Ammonium molybdate Ammonium nitrate n-Amyl acetate and isomers n-Amylamine and isomers n-Amyl chloride and isomers Amyl trichlorosilane and isomers Antimony compounds Antimony pentachloride Antimony pentaflouride Antimony sulfate Antimony trichloride Antimony trioxide Ashphalt Barium chlorate Barium chloride Barium chromate Barium hydroxide Barium nitrate Barium perchlorate Barium permanganate Barium peroxide Barium stearate

Bentazon/3-(1-Methylethyl)-1H-2,1,3-benzothiadiazin-4H(3H)-one 2,2-dioxide Benzal chloride/Benzylidine chloride/Benzyl dichloride Benzenamine, 2-methyl-5-nitro-/5-Nitro-o-toluidine Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl) -alpha-hydroxy, ethyl ester/Ethyl 4,4'dichlorobenzilate 1,2-Benzenedicarboxylic acid anhydride/Phthalic anhydride 1,2-Benzenedicarboxylic acid, (bis(2-ethylhexyl)) ester/Bis(2-ethylhexyl)phthalate 1,2-Benzenedicarboxylic acid, dibutyl ester/Dibutyl phthalate 1,2-Benzenedicarboxylic acid, diethyl ester/Diethyl phthalate 1,2-Benzenedicarboxylic acid, dimethyl ester/Dimethyl phthalate 1,2-Benzenedicarboxylic acid, di-n-octyl ester/Di-n-octyl phthalate Benzene, 1,2-dichloro-/o-Dichlorobenzene Benzene, 1,3-dichloro-/m-Dichlorobenzene Benzene, 1,4-dichloro-/p-Dichlorobenzene Benzene, 1,3-diisocyanatomethyl-/Toluene diisocyanate Benzene, dimethyl-/Xylene (ortho, meta, para) 1,2-Benzenediol, Pyrocatechol 1.3-Benzenediol/Resorcinol Benzene, hexachloro-/Hexachlorobenzene Benzene, hexahydro-/Cyclohexane Benzene, hydroxy-/Phenol Benzene, methyl-/Toluene Benzene, 1-methyl-2,4-dinitro-/2,4-Dinitrotoluene Benzene, 1-methyl-2.6-dinitro-/2.6-Dinitrotoluene Benzene, 1,2-methylenedioxy-4-propenyl-/Isosafrole Benzene, 1,2-methylenedioxy-4-propyl-/Dihydrosafrole Benzene, (1-methylethyl)-/Isopropylbenzene/Cumene Benzene, nitro-/Nitrobenzene Benzene, 1,2,4,5-tetrachloro-/1,2,4,5-Tetrachlorobenzene Benzotrifluoride Benzyl chloride/(Chloromethyl) benzene $(1,1'-Biphenyl)-4,4'-diamine,\ 3,3'-dimethoxy-/3,3'-Dimethoxybenzidine/Dianisidine$ (1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-/3,3'-Dimethylbenzidine/o-Tolidine Bis(2-chloroethoxy)methane Bis(2-chloroisopropyl) ether/Ether, bis(2-chloro-1-methylethyl) Bismuth (powder) Boron trichloride Boron trifluoride 4-Bromophenyl phenyl ether/Benzene, 1-bromo-4-phenoxy-/4-Bromodiphenylether 1-Butanamine, N-butyl-N-nitroso-/N-Nitrosodi-n-butylamine 1,2,4-Butanetriol trinitrate 1-Butanol/n-Butyl alcohol 2-Butanone/Methyl ethyl ketone 2-Butenal/Crotonaldehyde 2-Butene, 1,4-dichloro-/1,4-Dichloro-2-butene Butylate/S-Ethyl diisobutyl thiocarbamate n-Butyl acetate and isomers n-Butyl amine and isomers n-Butyl butyrate n-Butyl formate and isomers n-Butyl mercaptan and isomers/1-Butanethiol tert-Butyltrichlorosilane para-tert-Butyl toluene Butyraldehyde and isomers Cadmium (powder) Cadmium nitrate Calcium Calcium chlorate Calcium chlorite Calcium hydroxide

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Calcium hypochlorite Calcium nitrate Calcium permanganate Calcium peroxide Calcium resinate Caprylyl peroxide Carbamic acid, ethyl ester/Ethyl carbamate (urethane) Carbamic acid, methylnitroso-, ethyl ester/N-Nitroso-N-methylurethane Carbonochloridic acid, methyl ester/Methyl chloroformate Carbon oxyfluoride/Carbonyl fluoride/Fluorophosgene Carbon tetrachloride/Tetrachloromethane Chlorobenzene/Benzene, chloro-4-Chloro-m-cresol/4-Chloro-3-methylphenol Chloromethyl methyl ether/Methychloromethyl ether o-Chlorophenol/2-Chlorophenol Chlorosulfonic acid Chlorsulfuron/1-(2-Chlorophenylsulphonyl)-3-(4-methoxy-6-methyl-1,3,5-triazin-2-yl)urea Chromic acid Cobalt (powder) Cobaltous nitrate Cobaltous resinate Collodion Copper chlorotetrazole Copper compounds Copper nitrate Copper sulfate Cresols Cresylic acid Cupriethylene diamine Cycloheptane Cyclohexanone Cyclohexanone peroxide Cyclohexenyltrichlorosilane Cyclohexyltrichlorosilane Cyclopentane Cyclopentanol Cyclopentene 2,4-D, salts and esters/2,4-Dichlorophenoxyacetic acid, salts and esters 2,4-DB, salts and esters/Gamma-(2,4-Dichlorophenoxy) butyric acid, salts and esters 2,4-DP, salts/Dichloroprop, salts/2-(2,4-Dichlorophenoxy)propionic acid, salts Decalin/Decahydronapthalene Diallate/S-(2,3-Dichloroallyl)diisopropylthio-carbamate/Avadex 1,2-Dibromo-3-chloropropane/Propane, 1,2-dibromo-3-chloro-Dibutyl ether and isomers 1,1-Dichloroethylene/Ethene, 1,1-dichloro-/Vinylidene chloride 1,2-Dichloroethylene/Ethene, trans-1,2-dichloro-/Acetylene dichloride Dichloroethyl ether/Ether, bis(2-chloroethyl)/Dichloroethyloxide Diclofop-methyl/Diclofop/(RS)-2-[4-(2,4-Dichlorophenoxy)phenoxy]propionic acid Dichloroisocyanuric acid/Dichloro-S-triazine-2,4,6-trione 2,4-Dichlorophenol/Phenol, 2,4-dichloro-2,6-Dichlorophenol/Phenol, 2,6-dichloro-1,2-Dichloropropane/Propylene dichloride Dicumyl peroxide Diesel fuel Diethylamine 1,4-Diethylene dioxide/1,4-Dioxane Diethvlene triamine Diethyl ether/Ethyl ether Difenzoquat/Difenzoquat methyl sulfate/1,2-dimethyl-3,5-diphenyl-1<u>H</u>-pyrazolium methyl sulfate Difluorophosphoric acid

1,2-Dihydro-3,6-pyridazinedione/Maleic hydrazide Diisopropylbenzene hydroperoxide Dimethylamine/Methanamine, N-methyl-Dimethyldichlorosilane 2.5-Dimethylhexane 2,4-Dimethylphenol/Xylenol 2,4-Dinitroaniline Dinocap/2,4-Dinitro-6-octylphenyl crotonate I and 2,6-Dinitro-4-octylphenyl crotonate II Diphenylamine Dipropylamine/1-Propanamine, N-propyl-Dipropyl ether Di-N-propylnitrosamine/N-Nitroso-N-dipropylamine Diuron/3-(3,4-Dichlorophenyl)-1,1-dimethylurea Ethalfluralin/N-Ethyl-N-(2-methylallyl)-2,6-dinitro-4-trifluoromethylaniline Ethane, 1,1-dichloro-/1,1-Dichloroethane/Ethylene dichloride 1,2-Ethanediylbis(carbamodithioic acid)/Ethylenebis-(dithiocarbamic acid) Ethane, pentachloro-/Pentachloroethane Ethane, 1,1,1,2-tetrachloro-/1,1,1,2-Tetrachloroethane/Acetylene Tetrachloride Ethane, 1,1,2,2-tetrachloro-/1,1,2,2-Tetrachloroethane Ethanethioamide/Thioacetamide Ethane, 1,1,1-trichloro-2,2-bis(p-methoxyphenyl-)/Methoxychlor Ethene, 1,1,2,2-tetrachloro-/Tetrachloroethylene or Perchloroethylene Ethyl alcohol Ethvlamine Ethyl acrylate/2-propenoic acid, ethyl ester Ethylbenzene Ethyl butyrate Ethyl chloride Ethyl chloroformate Ethylene cyanohydrin/beta-Hydroxypropionitrile Ethylene diamine Ethyl formate Ethyl methacrylate/Methacrylic acid, ethyl ester Ethyl nitrate Ethyl propionate Fenoxaprop-ethyl/2-[4-(6-Chlorobenzoxazol-2-yloxy)phenoxy]propionic acid Fluazifop/Fluazifop-butyl/(RS)-2[4-(5-Trifluoromethyl-2-pyridyloxy)phenoxy]propionic acid Formaldehyde/Methylene oxide Formic acid/Methanoic acid Furan/Furfuran 2,5-Furandione/Maleic anhydride Furan, tetrahydro-/Tetrahydrofuran Gasoline Glycidylaldehyde/Glycidaldehyde n-Heptane and isomers 1-Heptene and isomers Hexamethylenediamine n-Hexane and isomers 1-Hexene and isomers n-Hexylamine and isomers Hexyltrichlorosilane Hydrazine (hydrate)/Diamide hydrate Hydriodic acid Hydrobromic acid Hydrochloric acid Hydrogen (liquified) Hydrogen peroxide Hydroquinone Hypochlorite compounds Indium

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Invert drilling fluids Isobutyl alcohol/Isobutanol Isooctane Isooctene (mixture of isomers) Isopentane Isoprene Isopropanol Isopropyl acetate Isopropyl acetylene Isopropylamine Isopropyl chloride Isopropyl ether Lithium hypochlorite Lithium peroxide Magnesium Magnesium chlorate Magnesium nitrate Magnesium perchlorate Magnesium peroxide Manganese (powder) Manganese acetate Manganese nitrate MCPA, salts and esters/4-Chloro-2-methylphenoxyacetic acid, salts and esters MCPB, salts/4-(4-Chloro-2-methylphenoxy)butyric acid, salts Mecoprop, salts/(+)Alpha-4-Chloro-2-methylphenoxy)propionic acid, salts Metal hydrides Methacrylonitrile/2-propenenitrile,2-methyl Methane, chloro-/Methyl chloride Methanethiol/Methyl mercaptan Methanol/Methyl alcohol Methyl acetate Methyl acetone (mixture of acetone, methyl acetate and methyl alcohol) Methylamine N-Methylaniline/Toluidine 1-Methylbutadiene/1,3-Pentadiene/Piperylene 2-Methyl-1-butene 3-Methyl-1-butene Methyl butyl ether and isomers Methyl butyrate and isomers Methylcyclohexane Methyldichlorosilane Methyl ethyl ether Methyl formate Methyl isopropenyl ketone Methylmagnesium bromide Methylmagnesium chloride Methylmagnesium iodide Methyl Methacrylate/2-Propenoic acid, 2-methyl-,methyl ester 4-Methyl-2-pentanone/Methyl isobutyl ketone Methyl propionate Methyl valerate and isomers Methyl vinyl ketone Metribuzin/4-Amino-6-(1,1-Dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one Molybdenum (powder) Monofluorophosphoric acid Naphtha (of petroleum or coal tar origin) Naphthalene 1-Naphthylamine/alpha-Naphthylamine Neohexane/2,2-Dimethylbutane

Nickel (powder) Nickel chloride Nickel nitrate Nitric acid Nitrobenzoic acid (meta, para) 4-Nitrobiphenyl Nitrochlorobenzene (ortho, meta, para) Nitrohydrochloric acid/aqua regia 1-Nonene and isomers/Nonylene n-Octane and isomers 1-Octene Oleum/Fuming Sulfuric Acid Oxalic acid Paracetaldehyde n-Pentane and isomers 2-Pentanone and isomers Perchloric acid Perchloryl fluoride Petroleum ether Petroleum products Phenol Phenylphenol Phosphoric acid Phosphorus (amorphous, red) 2-Picoline/2-Methylpyridine Potassium bromate Potassium dichloroisocyanurate/Potassium-dichloro-s-triazinetrione Potassium dichromate Potassium dinitrobenzfuroxan Potassium fluoride Potassium hydroxide Potassium nitrate Potassium nitrite Potassium perchlorate Potassium permanganate Propanil/3,4-Dichloropropionilide 1-Propanamine/n-Propylamine 2-Propanone/Acetone Propionaldehyde Propionic acid Propionic acid, 2-(2,4,5-trichlorophenoxy)-/Silvex n-Propyl acetate n-Propyl alcohol Propylene oxide n-Propyl formate n-Propyl mercaptan/1-Propanethiol Pyridine/Azabenzene Selenious acid/Monohydrated selenium dioxide Sethoxydim/(±)-2-(1-Ethoxyiminobutyl)-5-[2-(ethylthio)propyl]-3-hydroxy cyclohex-2-enone Silicon tetrachloride Silver nitrate Sodium aluminate Sodium azide Sodium bromate Sodium carbonate peroxide Sodium chlorate Sodium chlorite Sodium dichloroisocyanurate/Sodium dichloro-S-triazinetrione Sodium hydrosulfite/Sodium bisulfite

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Sodium hydroxide Sodium hypochlorite Sodium methylate/Sodium methoxide Sodium nitrate Sodium oxide/Sodium monoxide Sodium perchlorate Sodium permanganate Stannic chloride Strontium peroxide Styrene Succinic acid peroxide Sulfur trioxide Sulfuric acid Sulfurous acid TCA/Trichloroacetic acid/Sodium trichloroacetate Tetralin/Tetrazene/1,2,3,4 - Tetrahydronapthalene Thorium (powder) Titanium (powder) Titanium sulfate Titanium tetrachloride Toluidine Triallate/S-2,3,3-Trichloroallyl diisopropylthiocarbamate Trichloroborane Trichloroisocyanuric acid Trimethylamine Turpentine Uracil, 5-(bis(2-chloroethyl)amino)-/Uracil mustard n-Valeraldehyde and isomers/Amyl aldehyde/pentanal Vinvl acetate Vinyl ethyl ether Vinyl isopropyl ether Zinc (powder) Zinc ammonium nitrate Zinc chloride Zinc nitrate Zinc permanganate Zirconium (powder) Zirconium chloride

1 May 92 SR 25/92 s16; 27 Jan 95 SR 3/95 s15.

Appendix B

ACUTE HAZARDOUS SUBSTANCES

Name of Chemical Acetaldehyde, chloro-/Chloroacetaldehyde/2-chloro-l-ethanal Acetamide, N-(aminothioxomethyl)-/1-Acetyl-2-thiourea Acetamide, 2-fluoro-/Fluoroacetamide Acetic acid, fluoro-, sodium salt/Sodium fluoroacetate Acetic acid, thallium (I) salt/Thallium (I) acetate Acetimidic acid, N-((methylcarbamoyl)oxy)thio-, methyl ester/Methomyl Acetone cyanohydrin/2-Methyllactonitrile/2-Hydroxy -2- methylpropane nitrile 3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts/Warfarin Acetyl benzoyl peroxide Acetyl chloride/Acetic chloride/Ethanoylchloride Acetyl peroxide Acetyl peroxide Acrolein/2-Propenal

Acrylamide/Propenamide Acrylonitrile/2-Propenenitrile Adiponitrile Aldicarb/Temik Aldrin Alkyl aluminum chloride Alkyl aluminum compounds Allyl acetate Allyl alcohol/2-Propen-1-ol Allyl bromide/3-Bromopropene Allyl chloride/3-Chloropropene Allyl chlorocarbonate/Allyl chloroformate Allyl cyanide/vinyl acetonitrile/3-Butenenitrile Allyl fluoride/3-Fluoropropene Allytrichlorosilane Aluminum chloride (anhydrous) Aluminum phosphide/Phostoxin Aluminum borohydride Aluminum hvdride 2-Aminopyridine 4-Aminopyridine/p-Aminopyridine Ammonium arsenate Ammonium cyanide Ammonium fluoride Ammonium perchlorate Ammonium permanganate Ammonium picrate/Phenol, 2,4,6-trinitro-, ammonium salt Ammonium sulfide Ammonium vanadate/Ammonium metavanadate Aniline/Phenylamine Anisoyl chloride Antimony Antimony pentasulfide Antimony potassium tartrate Antimony trifluoride Antimony trisulfide Arsenic acid Arsenic halides Arsenic (III) oxide/Arsenic trioxide Arsenic pentaselenide Arsenic pentoxide/Arsenic (V) oxide Arsenic sulfide Arsenious acid and salts Arsine Arsine, diethyl-/Diethylarsine Aziridine/Ethyleneimine Azodrin Barium Barium azide Barium cyanide Barium sulfide Barium oxide Bayluscide Bendiocarb Benzenamine, 4-chloro-/p-Chloroaniline Benzenamine, 4-nitro-/p-Nitroaniline Benzene, (chloromethyl)-/Chlorotoluene Benzenethiol/Phenyl mercaptan Benzene, 1,3,5-trinitro-/1,3,5-Trinitrobenzene

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p-Benzoquinone/Cyclohexadienedione Bidrin Bis (2-chloroisopropyl, ether/Ether, bis (2-chloro-1-methylethyl) Boranes/Boron hydrides Bordeaux arsenites Bromine Bromine cyanide/Cyanogen bromide Bromine pentafluoride Bromine trifluoride Bromoacetone/2-Propanone, 1-bromo-Bromoxynil Brucine/2,3-Dimethoxystrychnidin-10-one 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-/Hexachlorobutadiene 2-Butanone peroxide/Methyl ethyl ketone peroxide tert-Butyl hydroperoxide n-Butyl lithium and isomers tert-Butyl peroxyacetate/tert-Butyl peracetate tert-Butyl peroxybenzoate tert-Butyl peroxypivalate Cadmium chloride Cadmium cyanide Cadmium fluoride Cadmium oxide Cadmium phosphate Cadmium sulfate Cadmium sulfide Calcium arsenate Calcium arsenite Calcium carbide Calcium cyanide Calcium hydride Calcium phosphide Camphene, octachloro-/Toxaphene Carbamide, N-ethyl-N-nitroso-/1-Nitroso-1-ethylurea Carbamide, N-methyl-N-nitroso-/1-Nitroso-1-methylurea Carbamide, thio-/Thiourea/Thiocarbamide Carbon bisulphide/Carbon disulphide Carbonyl chloride/Phosgene Carbophenothion/Phosphorodithioic acid Chlordane Chlorfenvinphos Chlorinated dibenzo dioxins Chlorinated dibenzo-furans/Chlorinated phenylene oxide Chlorine Chlorine cyanide/Cyanogen chloride Chlorine dioxide Chlorine trifluoride alpha-Chloroacetophenone Chloroacetyl chloride Chlorocyanohydrin para-Chlorobenzoyl peroxide 1-Chloro-2,3-epoxypropane/Epichlorhydrin/ECH ortho-Chlorobenzylidene malonitrile 1-(o-Chlorophenyl)thiourea/2-Chlorophenyl thiourea 2-Chloroethyl vinyl ether/Ethane, 2-chloroethoxy-Chloropicrin 3-Chloropropionitrile/3-Chloropropanenitrile Chlorpyrifos Chromyl chloride

Cocculus, Fishberry/Picrotoxin Copper acetoarsenite Copper acetylide Copper arsenate Copper arsenite Copper chloride Copper cyanides Coroxon Coumafuryl Coumaphos Crimidine Cyanides (soluble cyanide salts) not elsewhere specified Cyanogen/Ethanedinitrile Cyanamide Cyanazine Cyanuric triazide Cycloheximide/Actidone DDD/Dichlorodiphenyldichloroethane DDT/Dichlorodiphenvltrichloroethane DDVP/Dimethyldichlorovinyl phosphate/Dichlorovos Decaborane/Decaboron tetradecahydride Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta(c,d)-pentalen-2- one/Kepone or Chlordecone Deltamethrin Demeton/Systox Diazinon Diamine/Hydrazine Diazodinitrophenol Diborane/Boroethane Dichlorophenylarsine/Phenyldichloroarsine 1,3-Dichloropropene/Propene, 1,3-dichloro-Dieldrin Diethylaluminum chloride Diethyl chlorovinyl phosphate Diethyldichlorosilane Diethylene glycol dinitrate N,N-Diethylhydrazine/Hydrazine, 1,2-diethyl-O,O-Diethyl-S-(2-(ethylthio)ethyl) phosphorodithioate/Disulfoton O,O-Diethyl-S-methyl-dithiophosphate/Phosphoro-dithioic acid, O,O-diethyl-, S-methyl ester Diethyl zinc Diethyl-p-nitrophenyl phosphate/Phosphoric acid, diethyl p-nitrophenyl ester/para. Oxon O,O-Diethyl-S-phosphoro-dithiolate O,O-Diethyl O,2-pyrazinyl phosphorothioate/Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester/Zinophos Diisopropyl peroxydicarbonate Diisopropylfluorophosphate/Phosphorofluoridic acid, Diglycidyl ether Dimefox/Bis (dimethylamino) fluorophosphine oxide Dimethoate alpha, alpha-Dimethylbenzylhydroperoxide/Cumene hydroperoxide 1,1-Dimethylhydrazine/Hydrazine, 1,1-dimethyl-1,2-Dimethylhydrazine/Hydrazine, 1,2-dimethyl-O,O-Dimethyl O-(p-nitrophenyl) phosphorothioate/Methyl parathion Dimethylnitrosamine/N-Nitrosodimethylamine Dimethyl sulphate/Sulphuric acid, dimethyl ester Dimethyl sulfide/Methyl sulfide/Methyl thiomethane Dinitrobenzene (ortho, meta, para) Dinitrochlorobenzene 4,6-Dinitro-o-cresol and salts/Phenol, 2,4-dinitro-6-methyl-, and salts 4,6-Dinitro-o-cyclohexylphenol/Phenol, 2-cyclohexyl-4,6-dinitro-

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Dinitrophenol (2,3-, 2,4-,2,6-isomers) 2,4-Dinitrophenylhydrazine Dinoseb Dioxathion Diphenyldichlorosilane Diphenyl disulfide Diphosphoramide, octamethyl-/Octamethylpyro-phosphoramide/Schradan Dipicrylamine/2,4,6,2',4',6' - Hexanitrodiphenylamine Diquat/1,1'-Ethylene-2,2'-bipyridylium ion 2,4-Dithiobiuret/2-Thio-1-(thiocarbomyl) Dithione Dithiopyrophosphoric acid, tetraethyl ester/Tetraethyl dithiopyrophosphate/Bladafume Dodecyltrichlorosilane Dyfonate/Fonofos Endosulfan/5-Norbornene-2,3-dimethanol,1,4,5,6,7,7-hexachloro-, cyclic sulphite Endothal/7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid Endothion Endrin/1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a- octahydro-endo, endo-1,4:5,8- dimethanonaphthalene Epichlorohydrin Epinephrine/Adrenaline EPN/Ethyl - p - nitrophenyl thionobenzene phosphate Ethanamine, 1,1-dimethyl-2-phenyl-/alpha,alpha-Dimethylphenethylamine/ Phenylpropylmethylamine Ethenamine, N-methyl-N-nitroso-/N-Nitrosomethyl-vinylamine Ethion Ethylene oxide/Oxirane/1,2 - Epoxyethane Ethyl cyanide/Propionitrile Ethyl mercaptan/Ethanethiol Ethyl nitrite/Nitrous ether Ethyldichloroarsine Ethyldichlorosilane Ethylphenyldichlorosilane Ethyltrichlorosilane Famphur/Phosphorothioic acid, O,O-dimethyl O-(p-((dimethylamino)sulfonyl)phenyl) ester Fensulfothion/Dasanit Ferric arsenate Ferrous arsenate Fluoboric acid Fluoride salts Fluorine Fluoroacetanilide Fluoroacetic acid, sodium salt/Sodium fluoroacetate Fluorosulfonic acid Fulminic acid, mercury (II) salt/Fulminate of mercury Furadan/Carbofuran 2-Furancarboxaldehyde/Furfural Gamma - B.H.C. Glyucolonitrile/Formaldehyde cyanohydrin Guanidine nitrate Guanidine, N-nitroso-N-methyl-N'-nitro-/N-Methyl-N'-nitro-N- nitrosoguanidine Guanyl nitrosaminoguanylidene hydrazine Guthion Hafnium compound Heptachlor/Isodrin Hexachlorohexahydro-exo, exo-dimethanonaphthalene Hexachlorophene/2,2'-Methylenebis-(3,4,6-trichlorophenol) Hexadecvltrichlorosilane Hexafluorophosphoric acid Hexaethyl tetraphosphate/Tetraphosphoric acid, hexaethyl ester

Hydrazine (anhydrous) Hydrazine azide Hydrazinecarbothioamide/Thiosemicarbazide Hydrazine, methyl-/Methylhydrazine Hydrazoic acid Hydrocyanic acid/Hydrogen cyanide Hydrofluosilicic acid Hydrogen fluoride Hydrogen phosphide/Phosphine Hydrogen selenide Hydrogen sulfide Hydroxylamine/Oxammonium Iodine monochloride Ioxynil Isocyanic acid, methyl ester/Methyl isocyanate Isopropyl mercaptan meta-Isopropylphenyl-N-methylcarbamate Kinoprene Lead arsenate Lead arsenite Lead azide Lead cyanide Lead Styphnate/Lead trinitroresorcinate Lithium Lithium aluminum hydride Lithium ferrosilicon Lithium hydride Lithium silicon Magnesium arsenate Magnesium arsenite Malonitrile/Malonic dinitrile/Cyanoacetonitrile Manganese arsenate Manganese Methylcyclopentadienyl manganese tricarbonyl Mannitol hexanitrate Mercuric acetate Mercuric chloride Mercuric cyanide Mercuric oxycyanide Mercuric thiocyanide Mercurous iodide Mercury, (acetato)phenyl-/Phenylmercuric acetate Methamidophos/O.S-Diethyl phosphoramidothioate Methane, tetranitro-/Tetranitromethane Methanethiol, trichloro-/Trichloromethanethiol Methidathion Methomyl Methoxyethylmercuric chloride Methylaluminum sesquibromide Methylaluminum sesquichloride 2-Methylaziridine/Propyleneimine Methyldichloroarsine 4,4-Methylene bis(2-chloro-aniline) Methyltrichlorosilane Mevinphos Methylisothiocyanate Mocap/0-Ethyl, S,S - dipropylphosphodithioate Monochloroacetic acid Monochloroacetone 1,4-Naphthalenedione/1,4-Naphthoquinone alpha-Naphthylthiourea/Thiourea, 1-naphthalenyl-

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Nickel arsenate Nickel arsenide Nickel carbonyl/Nickel tetracarbonyl Nickel cyanide/Nickel (II) cyanide Nicotine and salts/Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)- and salts Nitric oxide/Nitrogen (II) oxide Nitroaniline (ortho, meta, para) Nitro carbo nitrate Nitrocellulose Nitrogen dioxide/Nitrogen (IV) oxide Nitrogen mustard Nitroglycerin/1,2,3-Propanetriol, trinitrate-Nitrophenol (meta) Nitropropane/Propane, 2-nitro-Nitrosoguanidine Nitrostarch Nonyltrichlorosilane Octachlorocamphene Octadecvltrichlorosilane Octyltrichlorosilane Osmium oxide/Osmium tetroxide Oxydemeton - methyl Oxygen difluoride/Fluorine monoxide Para-oxon/Diethyl - p - nitrophenyl phosphate Paraguat Parathion/Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester Pentaborane Pentachlorophenol/Phenol, pentachloro-Pentaerythrite tetra-nitrate Peracetic acid (40% solution) Perchloromethyl mercaptan/Trichloromethylsulfonyl chloride Phenylenediamine (para) Phenylhydrazine hydrochloride Phenyltrichlorosilane N-Phenylthiourea/Phenylthiocarbamide Phorate/Phosphorothioic acid, O,O-diethyl S-(ethylthio)methyl ester Phosfolan/Cyolane Phosphamidon Phosphoric anhydride Phosphorus (white or yellow) Phosphorus oxybromide Phosphorus oxychloride Phosphorus pentachloride Phosphorus sesquisulfide Phosphorus sulphide/Phosphorus pentasulphide Phosphorus tribromide Phosphorus trichloride Picramide/Trinitroaniline Picric acid Picryl chloride/2-Chloro-1, 3, 5-trinitrobenzene Plumbane, tetraethyl-/tetraethyl lead Potasan Potassium Potassium arsenate Potassium arsenite Potassium bifluoride Potassium cvanide Potassium dicyanoargentate/Potassium silver cyanide Potassium hydride Potassium peroxide

Potassium sulfide Primicarb Propargyl alcohol/2-Propyn-1-01 Propargyl bromide beta-Propiolactone Propoxor Pyrophosphoric acid, tetraethyl ester/Tetraethyl pyrophosphate n-Propyltrichlorosilane Pyrazophos/O.O.Diethyl-O-(5-methyl-6-ethoxycarbonyl-pyrazolo-(1,5-a)- pyrimidin-2-yl)- phosphorothioate Pyrosulfuryl chloride/Disulfonyl chloride Quinone Raney nickel Reserpine/3,4,5-Trimethoxybenzoyl methyl reserpate Rotenone Schradan/Octamethyl pyrophosphoramide Selenium dioxide/Selenium oxide Selenium disulphide/Sulphur selenide Selenium fluoride/Selenium hexafluoride Silver acetylide Silver azide Silver cyanide Sodium Sodium aluminum hydride Sodium amide Sodium arsenate Sodium arsenite Sodium bromate Sodium cacodylate Sodium chromate Sodium cyanide Sodium dichromate Sodium fluoride Sodium hydride Sodium hypochlorite (anhydrous) Sodium nitrite Sodium peroxide Sodium picramate Sodium peroxide Sodium potassium alloy Sodium selenate Sodium sulfide and sodium hydrosulfide Strontium arsenate Strontium nitrate Strontium sulphide Strychnine and salts Sulfide salts (soluble) Sulfur chloride Sulfotepp/Tetraethyldithiopyrophosphate Sulfur pentafluoride Sulfuryl chloride Sulfuryl fluoride Tellurium hexafluoride Telodrin/Isobornyl thiocyanoacetate (82%) Terbufos 2,3,7,8-Tetrachlorodibenzo-para-dioxin (TCDD) Tetramethyl lead Tetramethyl succinonitrile Thallium Thallium compounds

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Thallium (I) nitrate/Thallous nitrate Thallium (III) oxide/Thallic oxide Thallium (I) selenite Thallium (I) sulphate/Sulphuric acid, thallium (I) salt Thiocarbonychloride/perchloromethyl mercaptan/Thiophosgene Thionazin Thionyl chloride/Sulfurous oxychloride Thiophosphoryl chloride/Phosphorous sulfochloride Tin compounds (organic) Trichloronate Trichlorosilane Tris (1-Aziridinyl) phosphine oxide Trinitroanisole/Methyl picrate Trinitrobenzene 2,4,6-Trinitrobenzoic acid Trinitronaphthalene 2,4,6-Trinitroresorcinol/Styphnic acid Trinitrotoluene Uranvl nitrate Urea nitrate Vanadium oxytrichloride Vanadium pentoxide/Vanadium (V) oxide Vanadium tetrachloride Vinvltrichlorosilane Warfarin Zinc arsenate Zinc arsenite Zinc cyanide Zinc peroxide Zinc phosphide, when present at concentrations greater than 10 percent

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Appendix C

ENVIRONMENTAL PERSISTENT OR CHRONIC HAZARDOUS SUBSTANCES

Name of Chemical

Acephate/Orthene/O.S-Dimethyl acetylphosphoroamidothioate Acetamide, N-(4-ethoxyphenyl)-/Phenacetin/Acetophenetidin Aminodiphenyl/p-Xenylamine Ammonium chromate Anthracene Arsenic Asbestos (including chrysotile, omosite, crocidolite, tremolite, anthophyllite, and actinolite) Atrazine/2-Chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine Azathioprine Barium fluoride Barium fluosilicate Benazolin, salts/4-Chloro-2-oxobenzothiazolin-3-ylacetic acid, salts Bensulide/2-Benzenesulphonamidoethyl O,O-di-isopropyl phosphorodithioate Benz(a)anthracene/1,2-Benzanthracene Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-/3-Methylchloanthrene 3,4-Benz(c)acridine/Benz(c)acridine Benzenamine, 4-chlor-2-methyl-/4-chloro-O-toluidine hydrochloride/2-Amino-4-chlorotoluene Benzenamine, N,N'-dimethyl-4-phenylazo-/Dimethylaminoazobenzene

Benzenamine, 4,4'-methylenebis (2-chlor-)/4,4'-Methylenebis (2-chloroaniline) Benzenamine, 2-methyl-, hydrochloride/o-Toluidine hydrochloride Benzene Benzene, 1,2-methylenedioxy-4-ollyl-/Safrole Benzene, pentachloro-/Pentachlorobenzene Benzene, pentachloronitro-/Pentachloronitrobenzene Benzidine/4,4'-Diaminobiphenyl 1,2-Benziothiazolin-3-one, 1,1-dioxide and salts/Saccharine and salts Benzo(j,k)fluorene/Fluoranthene Benzo(a)pyrene/3,4-Benzopyrene 1,2-Benz(a)anthracene, 7,12-dimethyl-/9,10-Dimethyl-benz(a)anthracene Benzotrichloride/Benzene, trichloromethyl-/1,2-Benzphenanthrene/Chrysene Beryllium compounds Beryllium dust/Beryllium, metal powder 2,2'-Bioxirane/d-Threitol,1,2:3,4-dianhydro-(1,1'-biphenhyl) -4,4'-diamine, 3,3'-dichloro-/3,3'- Dichlorobenzidine Bis (chloromethyl) ether/Dichlorodimethyl ether Bis (methylmercuric) sulfate Bromacil/5-Bromo-3-sec-butyl-6-methyluracil Bromoform/Tribromomethane 1,4-Butanediol dimethanesulphonate/Myleran Cadmium compounds Calcium chromate/Chromic acid, calcium salt Calcium fluoride Carbaryl/1-Naphthyl methylcarbamate Chloramben, salts/3-Amino-2,5-dichlorobenzoic acid, salts Chlorambucil Chlornaphazine/2-Napthylamine, N,N'-bis-(2-chloroethyl)-Chloroform/Trichloromethane Chlorpropham/Isopropyl N-(3-chlorophenyl)carbamate beta-Chloronaphthalene/Naphthalene, 2-chloro-Chromium Chromic oxide Creosote Cyclophosphamide/Endoxan Cypermethrin/(±)Alpha-Cyano-3-phenoxybenzyl(±)cis,trans-3-(2,2-dichloro vinyl)-2,2- dimethylcyclopropane carboxylate Dalapon, salts/2,2-Dichloropropionic acid, salts Diaminotoluene/Toluenediamine Dicamba, salts/2-Methoxy-3,6-dichlorobenzoic acid, salts Diethylstilbestrol/4,4'-Stilbenediol, alpha, alpha'-diethyl-Dibenz(a,h)anthracene/1,2,5,6-Dibenzanthracene Dibromomethane/Methylene bromide Dichlorodifluoromethane/Methane, dichlorodifluro-Dichloromethane/Methylene chloride Dicofol/1,1-Bis(p-chorophenyl)-2,2,2-trichloroethanol EPTC/Eptam/S-Ethyl dipropylthiocarbamate Ethanamine, N-ethyl-N-nitroso-/N-Nitrosodiethylamine Ethane, 1,2-dibromo-/Ethylene dibromide Ethane, 1,1,1,2,2,2-hexachloro-/Hexachloroethane Ethane, 1.1.1-trichloro-/1.1.1-Trichloroethane/Methyl chloroform Ethane, 1,1,2-trichloro-/1,1,2-Trichloroethane/Vinyl trichloride Fenvalerate/Alpha-Cyano-3-phenoxybenzyl 2-(4-chlorophenyl)-3-methyl butyrate Flamprop-methyl/Methyl N-benzoyl-N-(3-chloro-4-fluorophenyl)-2-aminopropionate Fosamine/Fosamine-ammonium/Ammonium ethyl carbamoylphosphonate Glufosinate, ammonium salt/Glufosinate-ammonium Glvphosate, salts/N-(Phosphonomethyl)glvcine Hexachlorocyclohexane (gamma isomer)/Lindane Hexachlorocyclopentadiene Hexazinone/3-Cyclohexyl-6-dimethylamino-1-methyl-1,3,5-triazine-2, 4-dione

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Lead carbonate Lead chlorite Lead dioxide Lead nitrate Lead oxide Lead phosphate/Phosphoric acid, lead salt Lead subacetate/Monobasic lead acetate Linuron/N-(3,4-Dichlorophenyl)-N'-methoxy-N'-methylurea Malathion/O,O-Dimethyl S-1,2-di(ethoxycarbonyl)ethyl phosphordithioate Mercuric ammonium chloride Mercuric benzoate Mercuric bromide Mercuric iodide Mercuric nitrate Mercuric oleate Mercuric oxide Mercuric oxide (red and yellow) Mercuric-potassium iodide Mercuric salicylate Mercuric subsulfate Mercuric sulfate Mercurol Mercurous bromide Mercurous gluconate Mercurous nitrate Mercurous oxide Mercurous sulfate Mercurv Metal carbonyls Metam/Metham-sodium Methane, trichlorofluoro-/Trichlorofluoromethane $Methoxychlor/2, 2\text{-}Bis(\underline{p}\text{-}methoxyphenyl)\text{-}1, 1, 1\text{-}trichloroethane$ Melphanlan Methyl chloromethyl ether Metolachlor/Metachlor Metsulfuron-methyl/Ally/2-[3-(4-Methoxy-6-methyl-1,3,5-triazin-2-yl) ureidosulphonyl] benzoic acid Mitomycin C Mustard gas Naled/Dimethyl 1,2-dibromo-2,2-dichloroethyl phosphate 2-Naphthylamine/alpha-Naphthylamine Nickel acetate Nitrophenol (ortho, para) N-Nitrosopyrrolidine/Pyrrole, tetrahydro-N-nitroso Permethrin/3-Phenoxybenzyl(<u>+)cis,trans</u>-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropane carboxylate Phenol, 2,3,4,6-tetrachloro-/2,3,4,6-Tetrachlorophenol Phenol, 2,4,5-trichloro-/2,4,5-Trichlorophenol Phenol, 2,4,6-trichloro-/2,4,6-Trichlorophenol Phoxim/O,O-Diethyl Alpha-cyanobenzylideneamino-oxyphosphonothioate Picloram, salts/4-Amino-3,5,6-trichloropicolinic acid, salts Polybrominated biphenyls/PBBs Polychlorinated biphenyls/PCBs Pyrethrins/Pyrethrum Simazine/2-Chloro-4,6-bis-ethylamino-s-triazine Tebuthiuron/N-[5(1,1-Dimethylethyl)-1,3,4-thiadiazol-2-yl]-NN' -dimethylurea $Temephos/\underline{O}, \underline{O}, \underline{O}', \underline{O}' \text{-} Tetramethyl \ \underline{O}, \underline{O}' \text{-} thiodi-p\text{-} phenylene \ diphosphorothioate}$

2,4,5-T/2,4,5- Trichlorophenoxyacetic acid

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HAZARDOUS SUBSTANCES AND WASTE DANGEROUS GOODS

Tetradiphon/Tetradifon/2,4,5,4',-Tetrachlorodiphenyl sulfone Treosulphan Triclopyr, esters/[(3,5,6-Trichloro-2-pyridinyl)oxy]acetic acid, esters Trichlorphon/Trichlorfon/Dimethyl (2,2,2-trichloro-1-hydroxyethyl) phosphonate Trifluralin/2,6-Dinitro-<u>N,N</u>-dipropyl-4-trifluoromethylaniline Vinyl chloride

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Appendix D

WASTE DANGEROUS GOODS

Used oil, including crankcase oils, hydraulic oils, gear oil, quench oil, transformer oil, differential oil, cutting oil, lubricating oil, turbine oil and transmission oil.

Filters containing used oils listed above unless drained and crushed to less than 25% of the original physical volume of the filter.

Filters containing waste dangerous goods where the filter media meets any of the criteria set out in Part III of the *Transportation of Dangerous Goods Regulations* (Canada)

Waste antifreeze solutions.

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