



*Environmental Management Act*  
**HAZARDOUS WASTE REGULATION**  
**B.C. Reg. 63/88**

Deposited February 18, 1988 and effective April 1, 1988  
Last amended November 1, 2017 by B.C. Reg. 243/2016,  
as amended by B.C. Reg. 195/2017

**Consolidated Regulations of British Columbia**

*This is an unofficial consolidation.*

B.C. Reg. 63/88 (O.C. 268/88), deposited February 18, 1988 and effective April 1, 1988, is made under the *Environmental Management Act*, S.B.C. 2003, c. 53, ss. 6, 9, 10, 21, 138 and 139.

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This consolidation includes any amendments deposited and in force as of the currency date at the bottom of each page. See the end of this regulation for any amendments deposited but not in force as of the currency date. Any amendments deposited after the currency date are listed in the B.C. Regulations Bulletins. All amendments to this regulation are listed in the *Index of B.C. Regulations*. Regulations Bulletins and the Index are available online at [www.bclaws.ca](http://www.bclaws.ca).

See the User Guide for more information about the *Consolidated Regulations of British Columbia*. The User Guide and the *Consolidated Regulations of British Columbia* are available online at [www.bclaws.ca](http://www.bclaws.ca).

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*Environmental Management Act*

**HAZARDOUS WASTE REGULATION**

**B.C. Reg. 63/88**

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**PART 1 – INTERPRETATION AND APPLICATION**

**Interpretation**

- 1** (1) In this regulation:
- “100 year flood”** means a flood of such a magnitude that the chance of it being equalled or exceeded in any given year is one in one hundred;
  - “200 year flood”** means a flood of such magnitude that the chance of it being equalled or exceeded in any given year is one in two hundred;
  - “200 year floodplain”** means land where the chance of a flood occurring in any given year is at least one in two hundred;
  - “Act”** means the *Environmental Management Act*;
  - “aquifer”** includes any soil or rock formation that has sufficient porosity and water yielding ability to permit the extraction or injection of water at reasonably useful rates;
  - “authorized consignee”** means a consignee who has
    - (a) a registered site number and an operational plan approved by a director, or
    - (b) a written authorization from a director to accept hazardous waste;
  - “biomedical waste”** means waste generated by
    - (a) human or animal health care facilities,
    - (b) medical or veterinary research and teaching establishments,
    - (c) health care teaching establishments,
    - (d) clinical testing or research laboratories, and
    - (e) facilities involved in the production or testing of vaccines,and includes
    - (f) human anatomical waste, consisting of human tissue, organs and body parts,
    - (g) animal waste, including
      - (i) animal tissues, organs, body parts, carcasses and bedding, and
      - (ii) animal blood and blood products, consisting of
        - (A) animal fluid blood and blood products,
        - (B) items saturated or dripping with animal blood,
        - (C) body fluids contaminated with animal blood, and
        - (D) animal body fluids removed for diagnosis or during surgery, treatment or autopsy,
    - (h) microbiology laboratory waste consisting of

- (i) laboratory cultures,
- (ii) stocks of specimens of micro-organisms,
- (iii) live or attenuated vaccines,
- (iv) human or animal cell cultures used in research, and laboratory material that has come into contact with any of the above,
- (i) human blood and blood products, consisting of
  - (i) human fluid blood and blood products,
  - (ii) items saturated or dripping with human blood,
  - (iii) body fluids contaminated with human blood, and
  - (iv) human body fluids removed for diagnosis or during surgery, treatment or autopsy, and
- (j) clinical and laboratory waste sharps consisting of needles, syringes, blades or laboratory glass capable of causing punctures or cuts, but does not include
  - (k) waste from animal husbandry,
  - (l) household waste,
  - (m) waste controlled in accordance with the *Health of Animals Act* (Canada),
  - (n) waste generated in food production, general building maintenance or office administration activities in a facility referred to in paragraphs (a) to (e), or
  - (o) microbiology laboratory waste, human blood and body fluid waste or waste sharps after those wastes have been disinfected or decontaminated by an approved process,
  - (p) waste described in paragraph (g) after a medical or infection control professional has certified that the waste does not contain a virus or agent listed in Risk Group 2, 3 or 4, as defined in the federal transportation of dangerous goods regulations,
  - (q) human teeth, hair or nails,
  - (r) animal teeth, hair, nails, hooves or feathers, or
  - (s) human urine or feces;

**“buffer zone”** means land used to separate a facility from other land;

**“bulk load”** means a shipment in which 2 or more individual hazardous waste consignments are carried together within a larger container;

**“carrier”** means a person to whom section 10 (2) of the Act applies because the person transports more than the quantity of hazardous waste prescribed in section 46 (1) of this regulation;

**“cell”** means a compartment within a landfill;

**“chlorobiphenyls”** means the chlorobiphenyls that have the molecular formula  $C_{12}H_{10-n}Cl_n$  in which “n” is greater than 2;



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**“consignee”** means a person to whom section 10 (3) of the Act applies because the person receives more than the quantity of hazardous waste prescribed in section 46 (1) of this regulation;

**“consignor”** means a person to whom section 10 (1) of the Act applies because the person

(a) produces or stores hazardous waste, and

(b) causes or allows more than the quantity of hazardous waste prescribed in section 46 (1) of this regulation to be transported from the property where it is produced or stored;

**“container”** means a portable receptacle in which waste is stored, transported, treated, disposed of, or otherwise handled;

**“contaminated site”** has the same meaning as in Part 4 of the Act;

**“contamination”** has the same meaning as in Part 4 of the Act;

**“dangerous goods”** means dangerous goods as defined in section 2 of the federal Act and as regulated in the federal dangerous goods regulations, except for the exemption for dangerous goods within manufacturing or processing facilities under section 1.25 of the federal dangerous goods regulations;

**“dioxin TEQ”** means the dioxin toxicity equivalent value which is determined by adding the products of the measured concentrations of each dioxin and furan congener listed in Column 1 of Schedule 1 multiplied by the toxicity equivalency factor (TEF) listed opposite in Column 2, as measured by test methods approved by a director;

**“displacement”** means the relative movement of any 2 sides of a fault measured in any direction;

**“disposal”** means the introduction of waste into the environment through any discharge, deposit, emission or release to any land, water or air by means of facilities designed, constructed and operated so as to minimize the effect on the environment;

**“disposal in a secure building”** means the storage of hazardous waste that is intended to be permanent in an above ground secure building;

**“ex situ”**, in relation to soil, sediment, surface water or groundwater, means that the soil, sediment, surface water or groundwater has been physically removed or excavated from where it originated;

**“facility”** means any works that are designed to or do handle, store, treat, destroy or dispose of hazardous waste, and includes recycle facilities, storage facilities, treatment facilities, incinerators, thermal treatment facilities, mobile facilities, secure landfills, piles, surface impoundments, land treatment facilities and secure buildings;

**“fault”** means a geological fracture along which rocks on one side have been displaced with respect to those on the other side;

“**federal Act**” means the *Transportation of Dangerous Goods Act, 1992* (Canada), as amended from time to time;

“**federal dangerous goods regulations**” means the Transportation of Dangerous Goods Regulations, SOR/2001-286, as amended from time to time;

“**federal interprovincial movement regulations**” means the Interprovincial Movement of Hazardous Waste Regulations, SOR/2002-301, as amended from time to time;

“**free liquid**” means any quantity of a liquid which is separated from a solid when subjected to the Free Liquid Test Procedure described in Part 3 of Schedule 4;

“**groundwater**” means water below the ground surface in a zone of saturation;

“**hazardous waste**” means

- (a) dangerous goods if they
  - (i) are no longer used for their original purpose, and
  - (ii) meet the criteria for Class 2, 3, 4, 5, 6, 8 or 9 of the federal dangerous goods regulations,  
including those that are recycled, treated, abandoned, stored or disposed of, intended for recycling, treatment or disposal or in storage or transit before recycling, treatment or disposal,
- (b) PCB wastes,
- (b.1) biomedical wastes,
- (c) wastes containing dioxin,
- (d) waste oil,
- (e) waste asbestos,
- (f) waste pest control product containers and wastes containing pest control products, including wastes produced in the production of treated wood products using pest control products,
- (g) leachable toxic waste,
- (h) waste containing tetrachloroethylene,
- (h.1) wastes listed in Schedule 7,
- (h.2) Repealed. [B.C. Reg. 261/2006, s. 1 (b).]
  - (i) waste containing polycyclic aromatic hydrocarbon, and
- (i.1) Repealed. [B.C. Reg. 319/2004, s. 3 (e).]
- (i.2) on site media that is stored ex situ unless the on site media is stored for one of the purposes set out under subsection (3),  
but does not include
  - (j) household refuse that is collected from residential premises,
  - (k) domestic sewage,

**HAZARDOUS WASTE REGULATION**Part 1 – Interpretation and Application

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- (l) dangerous goods that are defective, surplus or otherwise not usable for their intended purpose and that are in the process of being returned directly to a manufacturer or supplier,
- (m) asphalts and tars used in the manufacture of asphaltic concrete and roofing materials,
- (n) and (o) Repealed. [B.C. Reg. 214/2004, s. 1 (l).]
- (p) waste wood products treated with wood preservatives or wood protection products registered under the *Pest Control Products Act* (Canada),
- (q) household hazardous waste that
  - (i) is removed from a return collection facility in accordance with an authorization from the owner of the return collection facility, and
  - (ii) is to be reused for its originally intended purpose,
- (r) wood ash, or pulp mill dregs and grit, that would be hazardous waste only because they are classified under the federal dangerous goods regulations as class 8, or
- (s) waste that
  - (i) has a pH greater than or equal to 2.0 and less than or equal to 12.5, and
  - (ii) would be a hazardous waste only because it is classified under the federal dangerous goods regulations as class 8 because of pH,
- (t) on site media;

**“holocene fault”** means a fault which is or has been active or has had displacement during the last 11 000 years;

**“household hazardous waste”** means a hazardous waste that

- (a) results from any of the following involving anything in a “product category” as defined in the Recycling Regulation, B.C. Reg. 449/2004:
  - (i) a domestic activity at a residence,
  - (ii) personal use, or
  - (iii) a person’s use in relation to his or her own residence, and
- (b) under a regulation must be accepted at a return collection facility;

**“household hazardous waste collection facility”** means a permanent place that is operated for the collection and storage of household hazardous waste;

**“hydrocarbon contaminated soil”** means soil, sand, gravel, rock or similar naturally occurring material which is only contaminated with a petroleum product including, but not limited to, gasoline, diesel, fuel oil, hydraulic oil and lubricating oil;

**“ignitable”** means having the properties of

- (a) gases in Class 2.1,

- (b) flammable liquids in Class 3, or
- (c) flammable solids, substances liable to spontaneous combustion or substances that on contact with water emit flammable gases in Class 4 of the federal dangerous goods regulations;

**“impervious”** means having a permeability not greater than  $1 \times 10^{-7}$  cm per second when subjected to a head of 0.305 m of water;

**“incinerator”** means a thermal treatment facility using controlled flame combustion;

**“incompatible hazardous waste”** means a hazardous waste which, when in contact with another hazardous waste or substance and under normal conditions of storage or transportation, may react to produce

- (a) heat,
- (b) a gas,
- (c) a corrosive substance, or
- (d) a toxic substance;

**“indoor”** means enclosed and protected from precipitation and wind as in a building but does not include a shipping container used for passive storage;

**“labpack”** means a drum or a barrel with a maximum capacity of 454 litres that

- (a) is used to transport several containers of hazardous waste for storage, recycle or disposal, and
- (b) includes one or more inner linings that contain absorbent or cushioned packaging for safety of storage or transport of the containers of hazardous waste;

**“land treatment”** means the treatment of hazardous waste by applying it to land;

**“leachate”** means any liquid, including suspended materials which it contains, which has percolated through or drained from a hazardous waste facility;

**“leachable toxic waste”** means waste when subject to the extraction procedure described in the US EPA Method 1311 produces an extract with a contaminant concentration greater than those prescribed in Table 1 of Schedule 4;

**“liner”** means a continuous layer of synthetic or natural clay or earth materials, placed beneath and at the sides of a secure landfill, a surface impoundment or a pile, and intended to restrict the downward or lateral escape of hazardous waste or leachate;

**“manage”** means to handle, transport, store, treat, destroy or dispose of hazardous waste;

**“manifest”** means the form prescribed under section 46 (3) (a) or (b), as applicable;

**“mobile facility”** means any movable or transportable facility that is designed, constructed and operated to treat or destroy hazardous waste;

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Part 1 – Interpretation and Application

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**“mobile household hazardous waste collection facility”** means a movable or transportable truck or trailer that is operated for the collection and storage of household hazardous waste;

**“off site facility”** means a facility that is not an on site facility;

**“on site facility”** means a facility located on the property where the hazardous waste that it deals with is or was produced, and that is used solely to deal with the hazardous waste produced on that property, and for this purpose non-contiguous properties owned by the same person but connected by

(a) a right of way which the person controls and to which the public does not have access, or

(b) not more than 1 km of highway as defined in the *Motor Vehicle Act*,  
must be considered to be the same property;

**“on site media”** means contaminated soil, sediment, surface water or groundwater that would be hazardous waste only because it meets any of the criteria described in paragraphs (a) to (i) of the definition of “hazardous waste”, but which remains at the contaminated site where the contaminated soil, sediment, surface water or groundwater originated;

**“owner”** means the person who owns a facility or part of a facility and includes an operator who is authorized by the owner to act as the owner’s agent;

**“passive storage”** means storage of hazardous waste in a facility where the only activity that takes place is placement, retrieval or inspection of the hazardous waste;

**“PCB”** means a chlorobiphenyl;

**“PCB equipment”** means a manufactured item that contains or is contaminated with PCB liquids or PCB solids and includes transformers, capacitors and containers;

**“PCB liquid”** means any liquid containing more than 50 parts per million by weight of chlorobiphenyls;

**“PCB solid”** means any material or substance other than PCB liquid that contains or is contaminated with chlorobiphenyls at a concentration greater than 50 parts per million by weight of chlorobiphenyls;

**“PCB wastes”** means PCB liquid, PCB solid and PCB equipment that have been taken out of service for the purpose of treatment, recycling, reuse or disposal or for the purpose of storage prior to treatment, recycling, reuse or disposal;

**“pest control product”** means a product registered as a pest control product under the *Pest Control Products Act* (Canada);

**“polycyclic aromatic hydrocarbon TEQ”** or **“PAH TEQ”** means the polycyclic aromatic hydrocarbon toxicity equivalent value relative to benzo[a]pyrene which is determined by adding the products of the measured concentrations of each listed PAH in Column 1 of Schedule 1.1 multiplied by the toxicity

equivalency factor (TEF) listed opposite in Column 2, as measured by test methods approved by a director;

**“principal organic hazardous constituents”** or **“POHC”** means one or more organic components of a hazardous waste that are designated by a director;

**“product of incomplete combustion”** or **“PIC”** means a carbon containing compound, other than carbon dioxide, present in the exhaust stream of a thermal treatment facility;

**“Provincial identification number”** means

- (a) a generator registration number,
- (b) a licence to transport number, or
- (c) a registered site number;

**“radioactive waste”** means waste containing a prescribed substance as defined in the *Atomic Energy Control Act* in sufficient quantity or concentration to require a licence for possession or use under that Act and regulations made under that Act;

**“reactive”** means waste that

- (a) is an explosive substance as defined by Class 1 of the federal dangerous goods regulations,
- (b) is an oxidizing substance as defined by Class 5 of the federal dangerous goods regulations,
- (c) is normally unstable and readily undergoes violent change without detonating,
- (d) reacts violently with water or air,
- (e) forms potentially explosive mixtures with water,
- (f) when mixed with water, generates toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment,
- (g) is a cyanide or sulphide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment,
- (h) is capable of detonation or explosive reaction if it is subject to a strong initiating source or if heated under confinement,
- (i) is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure, or
- (j) polymerizes in whole or in part by chemical action and causes damage by generating heat or increasing in volume;

**“recharge area”** means any land within which water enters an aquifer;

**“recycle”** means to wholly utilize hazardous waste or residue from a hazardous waste management facility

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(a) in an agricultural, commercial, manufacturing or industrial process or operation, where the principal purpose of the process or operation is not waste management,

(b) by promptly packaging it for retail sale to meet a market demand, or

(c) by offering it for retail sale to meet a market demand,

but does not include

(d) the application of hazardous waste or residue into or onto land, or

(e) the disposal of hazardous waste or residue by burning, burning as a fuel or mixing with a fuel before burning;

**“return collection facility”** means a household hazardous waste collection facility or a mobile household hazardous waste collection facility;

**“seasonally high water table”** means the highest level of rise of the free surface of water below the ground surface at any time during the year;

**“secure building”** means an above ground indoor facility that meets the requirements set out in Division 8 of Part 4 of this regulation;

**“secure disposal”** means disposal in a secure building or secure landfill;

**“secure landfill”** means a disposal facility where hazardous waste is placed in or on land and that is designed, constructed and operated to prevent any pollution from being caused by the facility outside the area of the facility;

**“sewage”** means effluent from domestic sources but does not include effluent from industrial sources;

**“shipping name”**, in relation to waste, means

(a) in the case of dangerous goods, the shipping name as defined in the federal dangerous goods regulations,

(b) in the case of hazardous waste described by paragraph (h.1) of the definition of “hazardous waste”, its type number under Schedule 7, and

(c) otherwise, the hazardous waste as it is described in the definition of “hazardous waste”;

**“slope failure”** means a measurable downward and outward movement of soil, rocks, snow, ice, mud or debris caused by gravity acting on an unstable slope;

**“small inside container”** means an inner packaging, receptacle or container with a maximum capacity of 100 L;

**“storage”** means the storage of hazardous waste with the intention to move the hazardous waste for subsequent management;

**“storm sewer”** means a manmade drain, ditch or sewer used primarily to carry natural precipitation runoff;

**“surface impoundment”** or **“impoundment”** means a facility which is

(a) intended for the storage of hazardous waste, and

- (b) a man-made excavation or dyked area formed primarily of earthen materials;
- “tank”** means a stationary device constructed of non-earthen materials such as wood, concrete, steel or plastic which provides containment and is designed for the storage of hazardous waste;
- “thermal treatment”** means the treatment of hazardous waste in a device which uses elevated temperatures;
- “treatment”** means the handling or processing of hazardous waste in such a manner as to change the physical, chemical or biological character or composition of the hazardous waste, and **“treat”** has a corresponding meaning;
- “unconfined aquifer”** is an aquifer that extends downward from the surface with no low permeability material above it;
- “underground injection”** means the emplacement of fluids underground through a bored, drilled, driven or dug well;
- “uppermost aquifer”** means an aquifer that is nearest the natural ground surface as well as lower aquifers that are hydraulically connected with this aquifer within the boundaries of the waste disposal site;
- “washout”** means the movement of hazardous waste from any hazardous waste facility as a result of flooding;
- “waste asbestos”** means a waste containing friable asbestos fibres or asbestos dust in a concentration greater than 1% by weight either at the time of manufacture, or as determined using a method specified in section 40 (1);
- “waste containing dioxin”** means a waste containing dioxin TEQ in a concentration greater than 100 parts per billion by weight;
- “waste containing polycyclic aromatic hydrocarbon”** means waste containing polycyclic aromatic hydrocarbons (PAH) in a total concentration greater than 100 parts per million measured as polycyclic aromatic hydrocarbon TEQ by weight;
- “waste containing tetrachloroethylene”** means waste containing tetrachloroethylene in a concentration greater than 500 parts per million by weight;
- “waste oil”** means automotive lubricating oil, cutting oil, fuel oil, gear oil, hydraulic oil or any other refined petroleum based oil or synthetic oil where the oils are in the waste in a total concentration greater than 3% by weight and the oils through use, storage or handling have become unsuitable for their original purpose due to the presence of impurities or loss of original properties;
- “waste pile”** means any non-containerized accumulation of solid, nonflowing hazardous waste that is being stored or treated;
- “wetland”** includes any land such as a tidal flat, marsh, swamp, bog or fen which
- (a) is frequently inundated and for that reason has developed an organic soil, and



**HAZARDOUS WASTE REGULATION**Part 1 – Interpretation and Application

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- (b) occurs in an area which is lower lying than its surroundings.
- (2) If, under this regulation, anything is required to be approved, the approval
  - (a) must be in writing,
  - (b) may be made subject to the conditions or requirements the person giving the approval considers necessary or advisable, and
  - (c) must be obtained from a director unless another person's approval is specifically required.
- (3) On site media is not hazardous waste under paragraph (i.2) of the definition of "hazardous waste" if the on site media is stored ex situ for one of the following purposes:
  - (a) transport from the contaminated site within 60 days, or a different period approved by the director, from the date when the on site media was physically removed or excavated from where it originated;
  - (b) remediation activities that involve the handling, management or treatment of contamination in accordance with the Contaminated Sites Regulation, B.C. Reg. 375/96;
  - (c) another approved purpose.

[am. B.C. Regs. 10/89, s. 1; 106/89, s. 1; 132/92, s. 1; 52/95, s. 1; 214/2004, s. 1; 319/2004, ss. 2 and 3; 261/2006, ss. 1 to 5; 375/2008, ss. 1 and 2; 179/2016, App.1, ss. 1 and 2.]

**1.1** Repealed. [B.C. Reg. 319/2004, s. 4.]**General**

- 2** (1) If a facility is described by the definition of more than one kind of facility, the provisions of this regulation that apply in relation to each of those kinds of facility apply in relation to it.
- (2) If the minister has set a date by which an off site facility that existed before April 1, 1988 must comply with the siting standards, operational requirements and performance standards established in this regulation, the off site facility need not comply until that date.
- (3) The siting standards contained in this regulation do not apply in respect of an on site facility that existed on April 1, 1988 until the minister orders that those standards apply.
- (4) If the minister has set a date by which an on site facility that existed before April 1, 1988 must comply with the operational requirements and performance standards established in this regulation, the on site facility need not comply until that date.
- (5) This regulation, except sections 17.1 and 46 (1), does not apply in relation to hazardous waste that is produced or accumulated in a quantity of less than 5 kilograms or 5 litres in a 30 day period.

Part 2 – Minimum Siting Standards for All Hazardous Waste Facilities

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- (6) The owner of an on site treatment facility that is used solely to reduce the volume of hazardous waste is exempt from Parts 2 and 3 and Division 3 of Part 4.
- (7) The owner of a recycling facility is exempt from Parts 2 and 3 and Division 1 of Part 4, if
  - (a) the substances in the waste causing the waste to be classified as a hazardous waste are normally contained in the material fed into the process, or produced by the process, of the recycling facility, and
  - (b) in the case of an off site recycling facility, the hazardous waste is less than 5% by weight of all the material fed into the process.
- (8) Sections 3 to 9, 12, 13, 15 to 35, 37 and 40 do not apply in relation to a facility if only mine tailings or mine waste rock are managed at the facility.
- (9) A director, in an individual case, may substitute another requirement for a requirement of this regulation, except a requirement in relation to which the minister is authorized under this regulation to substitute requirements, if the director considers that
  - (a) the substitution is necessary to protect the public or the environment, or
  - (b) the intent of the original requirement will be met by the substitution.
- (10) A person who knowingly provides false or misleading information in a form required under this regulation commits an offence and is liable on conviction to a fine not exceeding \$200 000.
- (11) and (12) Repealed. [B.C. Reg. 179/2016, App. 1, s. 3.]
- (13) and (14) Repealed. [B.C. Reg. 375/2008, s. 3.]  
[en. B.C. Reg. 319/2004, s. 4; am. B.C. Regs. 375/2008, s. 3; 179/2016, App. 1, s. 3.]

**PART 2 – MINIMUM SITING STANDARDS FOR ALL  
HAZARDOUS WASTE FACILITIES****Siting standards**

- 3** A person must not establish, construct or operate any hazardous waste facility
  - (a) in a 200 year floodplain unless the hazardous waste facility
    - (i) is designed, constructed, operated and maintained to prevent washout, or
    - (ii) was in operation on the day this paragraph comes into force, in which case the facility must continue to be protected to the 100 year flood level,
  - (b) within 100 m of a holocene fault,
  - (c) in a place which is subject to tsunamis unless the hazardous waste facility is designed, constructed, operated and maintained to prevent washout of any hazardous waste by a tsunami,
  - (d) within 100 m of any land which is subject to slope failure, or

**HAZARDOUS WASTE REGULATION**Part 3 – Operational Requirements for All Hazardous Waste Facilities

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- (e) within the boundaries of any
  - (i) national, Provincial, regional or municipal park,
  - (ii) wildlife management area as designated under section 4 of the *Wildlife Act*,
  - (iii) critical wildlife area or wildlife sanctuary designated under section 5 of the *Wildlife Act*,
  - (iv) land acquired and administered under section 3 of the *Wildlife Act*,
  - (v) ecological reserve designated under the *Ecological Reserve Act*,
  - (vi) bird sanctuary designated under the regulations pursuant to the *Migratory Birds Convention Act* (Canada), or
  - (vii) wildlife area designated under the *Canada Wildlife Act* (Canada).

[am. B.C. Regs. 132/92, s. 3; 319/2004, s. 2; 375/2008, s. 1.]

### **PART 3 – OPERATIONAL REQUIREMENTS FOR ALL HAZARDOUS WASTE FACILITIES**

**Plans**

- 4** (1) Before beginning the construction or installation of a hazardous waste facility, the owner must obtain approval of any of the following that apply:
  - (a) plans and specifications of new works;
  - (b) plans for the modification of existing works;
  - (c) a new operational plan;
  - (d) a modified operational plan.
- (2) An operational plan under subsection (1) (c) must specify all of the following:
  - (a) which hazardous wastes will be stored, treated, recycled or disposed of at the facility;
  - (a.1) the maximum quantity of each hazardous waste specified under paragraph (a) that the owner estimates will be stored at the facility at any time;
  - (a.2) the facility's maximum daily capacity for treating, recycling or disposing of each hazardous waste specified under paragraph (a);
  - (b) details of the monitoring that will be carried out, including its content and frequency;
  - (c) details of the reporting that will be provided to a director, including its content and frequency;
  - (d) details of auditing activities.
- (2.1) The plans and specification referred to in subsection (1) (a) and (b) must include the plans and specifications for the facility's spill containment system.
- (2.2) On or before January 31, 2007, an owner that has not had an operational plan in relation to a facility approved under this section must submit for approval an operational plan that complies with subsections (2) and (2.1).

- (3) An owner who obtains the approval required under subsection (1) must carry out the construction, installation and operation of the hazardous waste facility in accordance with the approved plans.

[en. B.C. Reg. 319/2004, s. 5; am. B.C. Regs. 261/2006, s. 6; 375/2008, s. 1.]

**Waste information**

- 5** (1) An owner of a facility must not accept, handle, store, treat, destroy or dispose of hazardous waste at the facility or allow it to be accepted, handled, stored, treated, destroyed or disposed of at the facility without taking reasonable measures to identify all hazards associated with the hazardous waste through
- (a) physical, chemical or biological analyses,
  - (b) published scientific documentation,
  - (c) consultation with the waste generator, or
  - (d) consultation with the manufacturer in the case of manufactured goods which become waste,
- and without limiting the generality of this, the owner must again inquire into and ascertain those hazards wherever that owner has reason to believe that
- (e) a process or operation generating a hazardous waste delivered to the facility has changed, or
  - (f) the description of a hazardous waste received at the facility does not match the description of the hazardous waste on the accompanying waste manifest.
- (2) The owner of a facility must not accept a hazardous waste that
- (a) does not match the description on the accompanying manifest, or
  - (b) is not accompanied by a manifest,
- and where any person attempts to deliver such waste to the facility, the owner of the facility must immediately notify a director by telephone to seek
- (c) authorization to accept the hazardous waste, or
  - (d) other instructions.
- (3) A person must not accept, at any hazardous waste facility, hazardous waste which is described as a quantity more than 100 kg or 100 L on the accompanying manifest without first determining the quantity of waste delivered by measuring the weight or volume of the shipment.
- (4) Where the quantity of hazardous waste received at a hazardous waste facility is either
- (a) 5% greater than, or
  - (b) 5% less than
- the quantity described in Part A of the manifest, the owner of the facility must
- (c) describe the occurrence of the discrepancy on the manifest,

**HAZARDOUS WASTE REGULATION**Part 3 – Operational Requirements for All Hazardous Waste Facilities

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- (d) submit a copy of the manifest, including the description required under paragraph (c), to the director within 3 days of receiving the hazardous waste, and
  - (e) include the description of the discrepancy in the annual summary required under subsection (5).
- (5) If there has been an occurrence of a discrepancy as described in subsection (4), the owner of a hazardous waste facility must
- (a) prepare an annual summary of all occurrences of discrepancies for the previous year,
  - (b) include in the annual summary an explanation of actions taken to reduce further occurrences of discrepancies, and
  - (c) submit the annual summary to the director within 60 days of the end of the calendar year in which the discrepancies occurred.

[am. B.C. Regs. 319/2004, ss. 2 and 6; 261/2006, s. 7; 375/2008, ss. 1 and 4.]

**Waste record**

- 6** (1) The owner of a hazardous waste facility must keep for inspection by an officer an operating record at his or her facility and must record in a written or retrievable electronic form the following information for each hazardous waste received, stored or shipped:
- (a) the description including
    - (i) the name and identification number as described in the federal dangerous goods regulations, and
    - (ii) the physical state (i.e. whether it is solid, liquid, gaseous or a combination of one or more of these);
  - (b) the quantity in kilograms or litres;
  - (c) the method and date of storing, repacking, treating or disposing at the facility, cross-referenced to specific manifest document numbers applicable to the hazardous waste;
  - (d) the location of each hazardous waste within the facility and the quantity at each location.
- (2) The owner of a hazardous waste facility must keep the records required under subsection (1) for a minimum of 2 years after the waste has been removed from the facility.

[am. B.C. Regs. 132/92, s. 4; 214/2004, s. 4; 319/2004, s. 2; 375/2008, ss. 1 and 5.]

**Weather protection**

- 7** A person must not operate a hazardous waste facility unless the facility has been designed, constructed and maintained so that elements of the weather such as precipitation, heat, frost, wind and humidity have no detrimental effect on the capability of the facility to manage hazardous waste.

[am. B.C. Regs. 319/2004, s. 2; 375/2008, s. 1.]

**Access security**

- 8** A person must not operate a hazardous waste facility unless access to the facility by unauthorized persons or by animals is prevented by
- (a) a 24 hour surveillance system that continuously monitors and controls entry to the facility, and for this purpose television monitors or an approved system, or surveillance guards present at the facility must be used, or
  - (b) a barrier such as
    - (i) a 2.13 m high chain link fence topped with 3 strands of barbed wire to prevent scaling of the fence, or equally effective approved barrier, and
    - (ii) a means of controlled entry, at all times, through gates or other entrances,
  - (c) locks or locked covers on all valves, pumps, electrical controls and other operational controls which would be accessible if the prevention measures referred to in paragraph (a) or (b) above were breached, and
  - (d) a sign, legible from a distance of at least 10 m, reading
    - (i) “DANGER – UNAUTHORIZED PERSONNEL KEEP OUT”,
    - (ii) “DANGER – AUTHORIZED PERSONNEL ONLY”, or
    - (iii) “RESTRICTED AREA – AUTHORIZED PERSONNEL ONLY”,or equivalent wording, posted at each entrance to the facility and at such other locations as a director may fix.

[am. B.C. Regs. 132/92, s. 5; 319/2004, ss. 2 and 7; 375/2008, s. 1.]

**Prevention of fire, explosion and accidental reactions**

- 9** (1) The owner of a hazardous waste facility must prevent the accidental ignition or reaction of ignitable or reactive waste by protecting such waste from sources of ignition or reaction such as open flames, smoking, grinding and welding, hot surfaces, frictional heat, static, electrical or mechanical sparks, spontaneous ignition from heat producing chemical reactions and radiant heat by means of
- (a) electrical spark grounding where the potential for static buildup exists,
  - (b) suitable separation distances or a barrier with a minimum fire rating of 2 hours between the waste and ignition sources, and
  - (c) a warning sign, legible from a distance of 10 m, reading “DANGER – IGNITABLE/REACTIVE HAZARDOUS WASTE, NO OPEN FLAMES, SMOKING OR SPARKS”.
- (2) The owner of any indoor hazardous waste facility which manages reactive or ignitable hazardous waste must
- (a) provide and maintain a continuous 24 hour fire alarm system with
    - (i) smoke sensing alarms, and
    - (ii) heat sensing alarms,

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- capable of automatically stopping any forced air ventilation systems in the facility and summoning a 24 hour external emergency response through
- (iii) a local fire department,
  - (iv) a local response team, or
  - (v) on site security staff who have immediate communication access to a local response agency,
- (b) provide and maintain a fire suppression system specified by the Fire Commissioner or a local assistant to the Fire Commissioner as defined in the *Fire Services Act*, or where not so specified provide and maintain
- (i) a permanent, automatic system which uses foam, inert gas or dry chemical, or
  - (ii) one portable ABC rated fire extinguisher with a minimum 10 kg capacity for every 250 m<sup>2</sup> of the facility's space,
- (c) provide and maintain sufficient aisle space between containers of hazardous waste to allow the unobstructed movement of persons, fire protection equipment, spill control equipment and decontamination equipment to any part of the facility,
- (d) design and construct the facility so that the walls, doors and floor are noncombustible with a minimum fire rating of 2 hours, and
- (e) ensure that any heat required for the facility is provided only by indirect means such as hot water, steam or electrical resistance and not by any device which uses an open flame within 10 m of where wastes are located, nor by any other device prohibited by the Fire Commissioner or a local assistant to the Fire Commissioner under the *Fire Services Act*.
- (3) The owner of a hazardous waste facility that treats, stores or disposes of ignitable or reactive waste must take precautions to prevent reactions which may do any of the following:
- (a) generate extreme heat or pressure, fire or explosions;
  - (b) produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health or the environment;
  - (c) produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion;
  - (d) damage the structural integrity of the facility.

[am. B.C. Regs. 10/89, s. 3; 132/92, s. 6; 319/2004, s. 2; 375/2008, s. 1.]

**Spill protection and reporting**

**10** The owner of a hazardous waste facility must

- (a) provide and maintain an approved spill containment system to contain on site any release of spilled hazardous waste,
- (b) inspect the facility monthly and, where any free liquid hazardous waste is stored at the facility,

- (i) provide and maintain a 24 hour spill alarm system appropriate for the hazardous waste managed at the facility, or
  - (ii) inspect the facility weekly for any irregularities such as malfunctions, deterioration, operator error, leaks or spills which may lead to the escape of hazardous waste from the facility or may pose a threat to human health,
- (c) maintain at the facility a record of inspections conducted as required by paragraph (b) showing
  - (i) any irregularities in the facility,
  - (ii) dates that any such irregularities were discovered,
  - (iii) corrective action taken, and
  - (iv) date of corrective action, and
- (d) immediately report any irregularities to a director.

[am. B.C. Regs. 132/92, s. 7; 319/2004, ss. 2 and 8; 375/2008, s. 1.]

**Contingency plan****11** The owner of a hazardous waste facility must

- (a) prepare and maintain in up-to-date readiness a contingency plan, approved by a director, which documents procedures to be followed during emergencies, including
  - (i) shut down procedures,
  - (ii) communication networks to be used, and
  - (iii) notification procedures for
    - (A) police departments in the vicinity,
    - (B) fire departments in the vicinity,
    - (C) emergency response teams,
    - (D) ambulance and medical services,
    - (E) contractors carrying on business in the vicinity,
    - (F) schools, hospitals and residents,
    - (G) federal, Provincial and municipal governments,
  - (iv) evacuation procedures for facility staff,
  - (v) abatement measures,
  - (vi) inventories of spill response and cleanup equipment available
    - (A) at the facility,
    - (B) from contractors carrying on business in the vicinity,
    - (C) from agencies operating in the vicinity, and
    - (D) from regional suppliers,



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- (b) appoint one person and at least one alternate to act as an Emergency Response Coordinator with authority to carry out action in accordance with the contingency plan,
- (c) provide a copy of the contingency plan to
  - (i) the Emergency Response Coordinator,
  - (ii) each alternate Emergency Response Coordinator, and
  - (iii) a director, and
- (d) provide clean up equipment, sorbents and other material and protective equipment and clothing, for all emergency response staff at the facility, appropriate for all the hazardous wastes managed at the facility.

[am. B.C. Regs. 10/89, s. 4; 319/2004, ss. 2 and 9; 261/2006, s. 8; 375/2008, s. 1.]

**Emergency systems testing**

- 12** (1) The owner of a hazardous waste facility must test or inspect
- (a) the fire and explosion protection systems described in section 9 (2),
  - (b) the spill protection systems described in section 10 (a) and (b), and
  - (c) the contingency plan described in section 11 (a),
- at least once a year to ensure that such protective measures, systems, procedures, equipment and clothing are capable of proper operation in an emergency.
- (2) The owner of a hazardous waste facility must make a written record of each test carried out as required by subsection (1) and must include in the record
- (a) the measures, systems, procedures, equipment and clothing tested,
  - (b) a description of the test methods,
  - (c) the date of the tests on each component,
  - (d) the results of the tests, and
  - (e) description and date of any corrective action
- and the record must be available for inspection by an officer.
- (3) Where a facility manages more than 20 tonnes of hazardous waste in a calendar year, the owner of the facility must submit a copy of the record referred to in subsection (2) to a director within 90 days after each test.

[am. B.C. Regs. 132/92, s. 8; 319/2004, ss. 2 and 10; 375/2008, s. 1.]

**Personnel training**

- 13** (1) The owner of a hazardous waste facility must ensure that every person employed in the operation of the facility receives training which includes instruction on
- (a) the employed person's duties and responsibilities,
  - (b) use of personnel protective equipment,
  - (c) fire and explosion response procedures,
  - (d) spill response procedures,

- (e) communications and alarm systems,
  - (f) use of abatement and cleanup equipment,
  - (g) shut down operations, and
  - (h) hazards of all hazardous waste managed at the facility,
- before beginning employment in an operational capacity.
- (2) The owner of any facility must provide to each operational staff member an annual review of the training required by subsection (1).
- (3) An owner of a facility referred to in subsection (1) must maintain and must produce for inspection whenever required by an officer a record of
- (a) all persons employed in the operations of the facility and their duties and responsibilities,
  - (b) a description of the level of training received by each person so employed, and
  - (c) the date of the last training session for each person so employed.

[am. B.C. Regs. 132/92, s. 9; 319/2004, s. 2; 375/2008, s. 1.]

**Closure**

- 14** (1) The owner of a hazardous waste facility must not operate the facility unless that owner has prepared a written closure plan and has received approval of the plan.
- (2) A closure plan must include
- (a) a schedule of how and when the facility will be closed,
  - (b) a description of decontamination procedures to be followed,
  - (c) a description and estimate of the quantity of any hazardous waste residues which will remain at the site after closure, and
  - (d) an estimate of the total time required to close the facility.
- (3) The owner of a hazardous waste facility must, whenever changes in the operating plans, facility design or the expected year of closure are intended, submit amendments to the closure plan for approval.
- (4) The owner of a hazardous waste facility must
- (a) notify a director within 90 days after receiving or producing the final quantity of hazardous waste at the facility, and
  - (b) complete the closure of the facility within the period specified in, and in accordance with, the approved closure plan, or, where the closure plan has been amended, in accordance with the approved closure plan and its approved amendments.

[am. B.C. Regs. 319/2004, ss. 2 and 11; 261/2006, s. 9; 375/2008, s. 1.]

## **PART 4 – ADDITIONAL REQUIREMENTS**

### **Division 1 – Recycle Facilities**

#### **Operational requirements**

- 15** (1) The owner of a recycle facility must provide an automatic means of stopping
- (a) the process equipment, and
  - (b) the waste feed system
- in the event of an accidental release or in circumstances which might lead to an accidental release of a hazardous waste.
- (2) The owner of a recycle facility where liquid hazardous waste is being managed must
- (a) use a dripless hose connection, or a containment system that provides equal or better protection than the protection provided by a dripless hose connection, when transferring liquid hazardous waste by means of detachable hoses or pipes, and
  - (b) ensure that all materials on pipes, pumps, containers and any other equipment which comes in contact with the hazardous waste is compatible with the hazardous waste.

[am. B.C. Regs. 319/2004, s. 2; 261/2006, s. 10; 375/2008, s. 1.]

### **Division 2 – Storage Facilities**

#### **Operational requirements**

- 16** (1) The owner of a storage facility where free liquid hazardous waste is stored in containers or tanks must
- (a) provide space to allow for manual, visual inspection for leaks,
  - (b) provide and maintain an impervious containment system sufficient to hold the larger of
    - (i) 110% of the largest volume of free liquid hazardous waste in any given container or tank, or
    - (ii) 25% of the total volume of free liquid hazardous waste in storage,
  - (c) provide controlled forced air ventilation to any indoor facility so that 0.3 m<sup>3</sup>/min/m<sup>2</sup> of a facility is exhausted at all times unless a facility is used solely for passive storage,
  - (d) provide overflow protection for tanks by means of
    - (i) fixed piping to an empty adjacent tank with a capacity equal to or greater than 20% of the protected tank,
    - (ii) a high level alarm set at 90% of the full liquid level of the tank, or
    - (iii) an automatic feed cutoff system set at 95% of the full liquid level of the tank container,

- (e) use a dripless hose connection, or a containment system that provides equal or better protection than the protection provided by a dripless hose connection, when transferring liquid hazardous waste by means of detachable hoses or pipes,
  - (f) ensure that all materials on pipes, pumps, containers and any other equipment which comes in contact with the hazardous waste is compatible with the hazardous waste, and
  - (g) ensure that all hazardous waste transfer lines, hoses and pipes are equipped with automatic shutoff or close on failure valves which close off the flow of hazardous waste in the event of a sudden accidental escape unless a method of containment is provided to prevent the release of free liquid hazardous waste.
- (2) If an owner's primary business is not waste management and the owner's facility provides storage that is on site and passive storage, the owner
- (a) despite section 4 (1), must prepare and maintain, but unless requested to do so by a director, need not obtain and must not seek approval of, the plans and specifications referred to in section 4 (1) (a) and (b),
  - (b) despite section 4 (1), unless requested to do so by a director,
    - (i) need not prepare or maintain, and
    - (ii) need not obtain, and must not seek approval of, the operational plans referred to in section 4 (1) (c) and (d),
  - (c) despite section 11, unless requested to do so by a director, need not obtain and must not seek approval of the contingency plan required by that section, and
  - (d) despite section 14 (1) and (3), unless requested to do so by a director, need not obtain and must not seek approval of the closure plan, or amendments to the closure plan, required by that section.

[am. B.C. Regs. 132/92, s. 10; 319/2004, s. 2; 261/2006, ss. 10 and 11; 375/2008, ss. 1 and 7.]

### **Performance standards**

- 17** (1) The owner of a storage facility must ensure that
- (a) any emissions to the atmosphere resulting from the operation of the storage facility are controlled to meet approved emission specifications, and
  - (b) any discharge of liquid effluent to the environment, to storm sewers or to a municipal or industrial effluent treatment works which results from the operation of the storage facility meets the effluent criteria prescribed in Schedule 1.2.
- (2) A director may require an owner of a storage facility to give security for performance of the owner's obligations under the Act and this regulation in the amount and form and subject to the conditions the director may specify.

[am. B.C. Regs. 132/92, s. 11; 319/2004, s. 12; 375/2008, ss. 1 and 8.]

**HAZARDOUS WASTE REGULATION**Part 4 – Additional Requirements

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**Additional requirements for storage of PCB wastes**

- 17.1** (1) Notwithstanding section 2 (3) to (6) and (8), all storage facilities where
- (a) 1.0 kilogram or more of PCBs,
  - (b) 100 litres or more of PCB liquid, or
  - (c) 100 kilograms or more of PCB solids
- are stored must comply with sections 3 to 14, 16, 17 and this section.
- (2) For the purpose of determining the quantity, volume or weight by which PCBs, PCB liquids or PCB solids exceed the amount specified in subsection (1), the total amounts stored at each location owned or controlled by the same owner or operator must be added together.
- (3) The owner of a storage facility used to store PCB wastes must ensure that
- (a) drums up to 205 litre capacity used for PCB solids
    - (i) Repealed. [B.C. Reg. 132/92, s. 12 (a).]
    - (ii) are made of 18 gauge steel or heavier,
    - (iii) have a securely attached, close fitting removable steel lid and a gasket of PCB resistant material, and
    - (iv) are painted to prevent rusting,
  - (b) drums up to 205 litre capacity used for PCB liquids
    - (i) Repealed. [B.C. Reg. 132/92, s. 12 (b).]
    - (ii) are made of 16 gauge steel for PCB liquids placed in storage or repackaged on or after April 1, 1992 and 18 gauge steel for PCB liquids placed in storage before April 1, 1992,
    - (iii) have a closed top that is fitted with 2 screw plug bungs, and
    - (iv) are painted to prevent rusting,
  - (c) all containers used for PCB wastes, and all PCB equipment except transformers on skids, must be placed on pallets or an alternate system of storage that allows for visual inspection for leaks and easy removal of the waste,
  - (d) drums of PCB wastes must not be stacked more than 2 drums high,
  - (e) containers of PCB wastes other than drums are not stacked unless the containers have been specifically designed for stacking and in such case that they are not stacked more than 2 containers high,
  - (f) an up-to-date inventory and site map indicating where all PCBs are stored at the facility and a fire safety plan acceptable to the local assistant to the fire commissioner
    - (i) are provided to a director,
    - (ii) are provided to the local assistant to the fire commissioner, and
    - (iii) are kept on site for inspection by an officer,

- (g) capacitors containing 0.5 kilogram or more of chlorobiphenyls are labelled with either Environment Canada's serialized, black and white "CAUTION/ATTENTION PCB" label, measuring 76 mm by 76 mm, or a reasonable alternative, unless the capacitor was stored in a container before this section came into effect,
- (h) electrical transformers, electromagnets and other equipment containing chlorobiphenyls in a concentration exceeding 1% by weight are labelled with either Environment Canada's serialized, black and white "ATTENTION PCB" label, measuring 150 mm by 150 mm, or a reasonable alternative,
- (i) electrical transformers, electromagnets and other equipment containing chlorobiphenyls in a concentration exceeding 50 parts per million by weight but not greater than 1% by weight are labelled with either Environment Canada's "ATTENTION – Contaminated with PCBs" label, or a reasonable alternative,
- (i.1) containers containing chlorobiphenyls in a concentration exceeding 1% by weight are labelled with either Environment Canada's "ATTENTION – PCB Waste" label, or a reasonable alternative,
- (j) the floor or other surface of the storage site on which undrained PCB equipment or PCB liquids are stored, whether indoors or outdoors, must be constructed of steel, concrete or other durable material,
- (k) where undrained PCB equipment or PCB liquids are stored on a floor or other surface of the storage site, whether indoors or outdoors, the floor or surface of the site must be provided with curbing or sides sufficient to contain
  - (i) in the case where a single item is being stored, 125% of the volume of the PCB liquid in the item, and
  - (ii) in the case where more than one item is being stored, the greater of twice the volume in the largest item or 25% of the volume of all the PCB liquids stored on the floor or surface,
- (l) where the material of the floor or other surface of the storage site or the curbing or sides referred to in paragraph (k) are capable of absorbing PCBs, they are sealed with a durable PCB resistant coating,
- (m) where undrained PCB equipment or PCB liquids are stored on a floor or other surface of the storage site, any existing floor drains, sumps or other openings in the floor are closed and sealed to prevent the escape of liquid,
- (n) doors to storage sites, fencing and other security barriers enclosing storage sites are labelled with Environment Canada's non-serialized, black and white "ATTENTION PCB" label, measuring 150 mm by 150 mm, or a reasonable alternative.

**HAZARDOUS WASTE REGULATION**Part 4 – Additional Requirements

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- (4) Repealed. [B.C. Reg. 132/92, s. 13.]

[en. B.C. Reg. 10/89, s. 5; am. B.C. Regs. 132/92, ss. 12 and 13; 319/2004, s. 13; 261/2006, s. 12; 375/2008, ss. 1 and 9.]

**Division 3 – Requirements For Treatment Facilities****Operational requirements**

- 18** (1) The owner of a treatment facility must provide an automatic means of stopping
- (a) the process equipment, and
  - (b) the waste feed system
- in the event of an accidental release or in circumstances which might lead to an accidental release of hazardous waste.
- (2) Before beginning operation of a treatment facility the owner must conduct an approved demonstration trial to demonstrate the effectiveness of each process intended to treat a hazardous waste that will be received at the facility.
- (3) The demonstration trial referred to in subsection (2) must provide
- (a) an adequate test of the treatment process to be used,
  - (b) a qualitative and quantitative description of the physical, chemical and biological properties of
    - (i) the hazardous waste to be treated,
    - (ii) any liquid or solid residues remaining after treatment, and
    - (iii) any emissions to the atmosphere resulting from the treatment process,
  - (c) a description of operating conditions in the treatment process including but not limited to
    - (i) temperatures,
    - (ii) pressures, and
    - (iii) residence times, and
  - (d) a description of any conditions which may cause a detrimental effect on human health or the environment.
- (4) The owner of a treatment facility must submit a report with all the information described in subsection (3) to a director before beginning operation of the treatment facility.

[am. B.C. Regs. 319/2004, ss. 2 and 14; 261/2006, s. 13; 375/2008, s. 1.]

**Performance standards**

- 19** (1) The owner of a treatment facility must ensure that
- (a) any discharge of liquid effluent to the environment, to storm sewers or to a municipal or industrial effluent treatment works which results from the operation of the treatment facility meets the effluent criteria prescribed in Schedule 1.2, and

- (b) any emissions to the atmosphere resulting from
  - (i) a treatment facility process, or
  - (ii) the ventilation system of a treatment facility,meet approved emission specifications.
- (2) The owner of a treatment facility must not allow residue to be discharged from the treatment facility unless
  - (a) the residue is managed at a hazardous waste management facility in accordance with this regulation, or
  - (b) the owner demonstrates to the satisfaction of a director in accordance with test protocols or methods approved by a director under section 53 (1) that the residue no longer poses a hazard to human health or to the environment and that the residue is suitable for
    - (i) disposal to a landfill authorized by a permit, approval under section 15 of the Act, order or waste management plan, or
    - (ii) some other purpose under an approved management option.
- (3) Where an owner has demonstrated to a director in accordance with subsection (2) that a residue no longer poses a hazard to human health or to the environment, the director may, notwithstanding section 39, authorize disposal of the residue to a landfill other than a secure landfill.

[am. B.C. Regs. 132/92, ss. 11, 14; 319/2004, ss. 2 and 15; 261/2006, s. 14; 375/2008, s. 1.]

#### **Division 4 – Requirements for Incinerators and Thermal Facilities**

##### **Operational requirements**

- 20** (1) Before beginning construction or installation of an incinerator or thermal treatment facility, the owner must
- (a) provide a detailed engineering description of the incinerator or thermal treatment facility including the following information:
    - (i) manufacturer's name and model number (if available);
    - (ii) type of incinerator or thermal treatment facility;
    - (iii) internal dimension of the incinerator, or thermal treatment facility including the cross sectional area of the process chamber;
    - (iv) description of any auxiliary fuel system including fuel type and feed rate;
    - (v) capacity of air supply and exhaust systems;
    - (vi) description of the automatic waste feed cutoff system or systems;
    - (vii) any stack gas monitoring and pollution control equipment;
    - (viii) nozzle and burner design if the thermal treatment facility is an incinerator;
    - (ix) construction materials;



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- (x) location and description of temperature, pressure and flow sensing and control devices,
  - (b) predict the maximum ambient ground level concentration of emissions from the facility by means of an approved atmospheric dispersion model, and
  - (c) submit a report with the information described in paragraphs (a) and (b) to the district director or a director, as applicable.
- (2) Before beginning operation of an incinerator or thermal treatment facility, the owner must
- (a) conduct a demonstration trial in an approved manner to demonstrate the effectiveness of the facility to treat or destroy hazardous waste, and must conduct the trial for a sufficient time under normal operating conditions to obtain
    - (i) a qualitative and quantitative description of the physical, chemical and biological properties of
      - (A) the hazardous waste to be incinerated or thermally treated including all principal organic hazardous constituents (POHCs),
      - (B) any air emissions including all POHCs, products of incomplete combustion (PICs) and parameters listed in Schedule 2,
      - (C) any liquid effluent discharges including all POHCs, PICs and parameters listed in Schedule 1.2, and
      - (D) any solid residues including all POHCs, PICs and trace metals listed in Schedule 2,
    - (ii) a determination of the destruction and removal efficiency (DRE), using Equation 1:

$$DRE = \frac{W_{in} - W_{out}}{W_{in}} \times 100\% \quad \text{Equation 1}$$

where  $W_{in}$  = Mass feed rate of one POHC in the waste feed into the incinerator or thermal treatment facility,

$W_{out}$  = Mass emission rate of the same POHC present in the exhaust emissions,

- (iii) a determination of the combustion efficiency (CE), using Equation 2:

$$CE = \frac{CO_2}{CO_2 + CO} \times 100\% \quad \text{Equation 2}$$

where  $CO_2$  = Concentration of carbon dioxide in exhaust emissions,

$CO$  = Concentration of carbon monoxide in the exhaust emissions,

- (iv) a determination of operating conditions including but not limited to
    - (A) the temperature in the combustion zone or the zone of active thermal treatment,
    - (B) the residence time of gases in the combustion zone or the zone of active thermal treatment, and
    - (C) the concentration of excess oxygen in the exhaust emissionswhereby the DRE in Equation 1 was determined, and
  - (v) a determination of specific
    - (A) meteorological conditions, and
    - (B) ambient concentrations of POHCs, PICs and other contaminantsas approved, and
  - (b) submit a report with the information described in paragraph (a) to the district director or a director, as applicable.
- (3) The requirement in subsection (2) (a) (iii) does not apply to thermal treatment facilities which generate CO<sub>2</sub> from sources other than the combustion process.
- (4) The owner of an incinerator or thermal treatment facility must
- (a) provide an alarm system and an automatic cutoff system to stop the hazardous waste feed to the facility when operating conditions specified in the permit are not met,
  - (b) test the automatic cutoff system weekly, and
  - (c) report any malfunction of the automatic cutoff system to the district director or a director, as applicable, within 24 hours after it occurs.
- (5) The owner of an incinerator or thermal treatment facility must inspect the facility and all associated equipment such as pumps, valves, conveyors, pipes, etc. daily for any leaks, spills, fugitive emissions and signs of tampering or malfunction.
- (6) Any leaks, spills or fugitive emissions from any incinerator or thermal treatment facility must be controlled by keeping the works sealed or by maintaining the internal pressure lower than the atmospheric pressure.
- (7) The owner of an incinerator or thermal treatment facility must continuously measure and record for inspection by an officer
- (a) the temperature in the combustion zone or the zone of active thermal treatment,
  - (b) the waste feed rate,
  - (c) the gas flow rate at the exit from the combustion zone or the zone of active thermal treatment, and
  - (d) carbon monoxide, carbon dioxide and oxygen concentrations in the exhaust gas.

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- (8) The owner of an incinerator or thermal treatment facility must monitor any process emissions for approved parameters at approved intervals.
- (9) A report of the emissions monitoring including methods and results must be submitted to the district director or a director, as applicable, within 60 days after completion of the emissions monitoring referred to in subsection (8).
- (10) The owner of an incinerator or thermal treatment facility must monitor the ambient air quality and meteorological conditions using approved methods.
- (11) A report of the ambient air quality monitoring referred to subsection (10) must be submitted to the district director or a director, as applicable, within 60 days of the end of each calendar quarter.

[am. B.C. Regs. 10/89, s. 6; 132/92, s. 15; 319/2004, ss. 2 and 16; 375/2008, s. 1.]

**Performance standards**

- 21** (1) The owner of an incinerator or thermal treatment facility must ensure that during operation
- (a) the DRE (Equation 1) of the facility is equal to or greater than that specified in Table 1,

**Table 1**

Item	Parameter	DRE Standards
1	Principal Organic Hazardous Constituents (POHCs)	99.99%
2	Polychlorinated biphenyls (PCBs)	99.9999%
3	Polychlorinated dibenzofurans	99.9999%
4	Polychlorinated dibenzo-p-dioxins	99.9999%

- (b) the operating conditions are maintained at levels shown by the demonstration trial referred to in section 20 (2) to be necessary to meet the DRE criteria in Table 1,
  - (c) the CE (Equation 2) of an incinerator is equal to or greater than 99.9%,
  - (d) the exhaust emissions meet the emission standards as specified in Schedule 2, and
  - (e) any discharge of liquid effluent to the environment or to any system of waste disposal operated by a municipality or other public authority which results from the operation of an incinerator or thermal treatment facility meets the effluent standards prescribed in Schedule 1.2.
- (2) Section 20 (2) and subsections (1) (a), (b), (c) and (d) do not apply to any industrial utility boiler used for destruction of wastes containing low levels of PCBs or PCP, where
- (i) the PCB or PCP content of the waste is less than 500 parts per million,
  - (ii) the minimum rated capacity of the boiler is 15 MW,

- (iii) the boiler is operated at a minimum of 90% of the design steam generating capacity when the waste is fed into the boiler,
  - (iv) the mass flow rate of the wastes does not exceed 10% of mass flow rate of the fuel into the boiler,
  - (v) the carbon monoxide concentration in the exhaust gas is not greater than 50 parts per million for a boiler using gaseous or liquid fuel and the carbon monoxide concentration in the exhaust gas for a boiler using solid fuel is not greater than 100 parts per million,
  - (vi) the excess oxygen must be a minimum of 3% when the wastes are being burned, and
  - (vii) the concentrations of carbon monoxide and oxygen in the exhaust gas are monitored in an approved manner when the wastes are being burned.
- (3) The owner of an incinerator or thermal treatment facility must not allow solid residue to be discharged from it unless
- (a) the residue is managed at a hazardous waste management facility in accordance with this regulation, or
  - (b) the owner demonstrates to the satisfaction of a director in accordance with test protocols or methods approved by a director under section 53 (1) that the residue no longer poses a hazard to human health or to the environment and that the residue is suitable for
    - (i) disposal to a landfill authorized by a permit, approval under section 15 of the Act, order or waste management plan, or
    - (ii) some other purpose under an approved management option.
- (4) Where an owner has demonstrated to a director in accordance with subsection (3) that a residue no longer poses a hazard to human health or to the environment, the director may, notwithstanding section 39, authorize disposal of the residue to a landfill other than a secure landfill.

[am. B.C. Regs. 132/92, s. 16; 319/2004, ss. 2 and 17; 261/2006, s. 14; 375/2008, s. 1.]

## **Division 5 – Mobile Facilities**

### **Siting requirements**

- 22** Notwithstanding section 3, where the minister is satisfied that an equivalent level of safety will be maintained, the minister may specify less restrictive siting standards for specific sites on which any mobile facility
- (a) operates for less than a total of 1 800 hours in any continuous 3 year period, and
  - (b) treats or destroys less than 1 000 tonnes of hazardous waste during the 3 year period specified in paragraph (a).

[am. B.C. Regs. 319/2004, s. 2; 261/2006, s. 15.]

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**Operational requirements**

- 23** (1) Before a mobile facility is transported, the owner or operator of the facility must drain all open ended
- (a) hoses,
  - (b) pipes, and
  - (c) containers
- of any hazardous waste or hazardous reagents and ensure that the hazardous waste or reagents are not released to the environment.
- (2) In addition to the annual emergency system testing as required in section 12, the owner of a mobile facility must repeat the test required in section 12 before beginning operation at any new location.
- [am. B.C. Regs. 319/2004, s. 2; 375/2008, s. 1.]

**Performance standards**

- 24** The owner of a mobile facility must comply with the performance requirements pertaining to the appropriate specific type of facilities as prescribed in this Part.
- [am. B.C. Reg. 375/2008, s. 1.]

**Division 6 – Secure Landfills****Permit requirement**

- 24.1** (1) A person must not operate a secure landfill unless a permit has been issued under section 14 of the Act to operate the landfill.
- (2) Subsection (1) does not apply in relation to an on-site hazardous waste landfill associated with contaminated site remediation activities undertaken in accordance with the Contaminated Sites Regulation, B.C. Reg. 375/96.
- [en. B.C. Reg. 319/2004, s. 18; am. B.C. Regs. 375/2008, s. 1; 179/2016, App. 1, s. 4.]

**Siting requirements**

- 25** (1) A person must not locate a secure landfill within a wetland area or an area immediately adjacent to a wetland so that natural drainage from the secure landfill would flow directly into a wetland area.
- (2) A person must not locate a secure landfill on a site which has a predicted maximum peak seismic acceleration, in percent of gravity, greater than 8% with a probability of 10% exceedence in 50 years as determined from the National Building Code of Canada.
- (3) A person must not locate a secure landfill where the landfill (including the underlying dual liners) cannot be constructed
- (a) entirely above the seasonally high water table, and
  - (b) with a minimum separation depth of 3 m of unsaturated soil material with a permeability less than  $1 \times 10^{-6}$  cm/s above a seasonally high water table including the zone of capillary rise.

- (4) A person must not locate a secure landfill in a recharge area for an unconfined aquifer with one or more high capacity wells ( > 100 L/minute) or a significant number of lower capacity wells used for fish hatcheries, domestic, irrigation, industrial, municipal or livestock watering supply.
- (5) A person must not locate a secure landfill where it (including the underlying dual liners) would be underlain by less than 5 m of fine grained unconsolidated material with a permeability of less than  $1 \times 10^{-6}$  cm/s over fractured or permeable bedrock formations (e.g. sandstone, limestone, dolomite).
- (6) A person must not locate a secure landfill within 300 m of any nonintermittent watercourse or any other permanent waterbody.
- (7) A person must not locate a secure landfill within
  - (a) a designated community water supply watershed, Category I, as defined in Guidelines for Watershed Management of Crown Lands used as Community Water Supplies,
  - (b) the Greater Victoria Water District watershed, or
  - (c) the Greater Vancouver Water District watershed.
- (8) A person must not locate a secure landfill within an area where
  - (a) on average, when calculated on a monthly basis,  $P_t$  is greater than  $E_t + W_s$ , and
  - (b) on average, when calculated on an annual basis,  $P_t$  is greater than  $E_t$ .
- (9) In subsection (8), the formula used must be based on the following:
  - $P_t$  = precipitation falling on the surface of the closed secure landfill;
  - $E_t$  = maximum possible loss of water from the surface of the closed secure landfill to the atmosphere by evaporation and by transpiration;
  - $W_s$  = available soil water storage in any month in the final cover of the closed secure landfill (maximum value is total available water storage capacity of the final cover).
- (10) A person must not locate a secure landfill unless the person owns and provides an approved secure buffer zone surrounding the active area of the secure landfill.  
[am. B.C. Regs. 132/92, s. 17; 261/2006, s. 16; 375/2008, s. 1.]

**Operational requirements**

- 26** (1) The owner of a secure landfill must
- (a) at appropriate times during construction and installation, inspect
    - (i) synthetic liners and covers to ensure tight seams and joints and the absence of punctures, blisters or tears, and
    - (ii) soil or clay liners for imperfections (e.g. lenses, cracks, channels) which would increase permeability,

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- (b) during operation, inspect weekly and immediately after any storm event or catastrophic events
    - (i) liners, covers and drainage control facilities for evidence of deterioration, malfunction, leaks or improper operation, and
    - (ii) leak detection and leachate collection systems to ensure proper functioning and to determine if leachate is being generated or is accumulating, and
  - (c) immediately repair or correct any defects or malfunctioning works as determined by any inspections specified in paragraphs (a) and (b) to maintain the integrity of all works.
- (2) The owner of a secure landfill must carry out an approved monitoring program by
- (a) establishing a groundwater monitoring system with a sufficient number of wells, installed at appropriate locations (upgradient and downgradient) and depths to yield from the uppermost aquifer groundwater samples that
    - (i) represent the quality of groundwater that would not be affected by any leakage from a secure landfill facility, and
    - (ii) represent the quality of groundwater that would be affected by leachate, if any, from the secure landfill,
  - (b) ensuring the quality of groundwater monitoring data by
    - (i) casing sampling wells with appropriate materials to ensure the integrity of the boreholes,
    - (ii) preventing contamination
      - (A) of any part of the well during construction, and
      - (B) from the surface during operation, and
    - (iii) implementing procedures for
      - (A) decontamination of sampling equipment,
      - (B) sample collection,
      - (C) sample preservation and shipment,
      - (D) sample custody, and
      - (E) analytical procedures and quality assurance,
  - (c) selecting indicator parameters (e.g. specific conductance, pH, total organic carbon) and chemical constituents for analysis of groundwater that
    - (i) provide a reliable indication of the quality of groundwater below the secure landfill from the perspective of human health hazards and environmental quality,
    - (ii) reflect the physical and chemical characteristics of the waste in the secure landfill, and
    - (iii) provide a reliable indication of movement of any contaminant with groundwater flow,

- (d) sampling groundwater sufficiently often to provide data that is representative of varying groundwater flow conditions, but in any case no less frequently than once every 3 months,
  - (e) measuring the groundwater surface elevation each time the groundwater is sampled,
  - (f) measuring volumes, sampling and analyzing any leachate collected by the leachate collection system,
  - (g) ensuring detection of any liquid leaking into the space between the 2 liners, and
  - (h) reporting monitoring results at intervals specified by a director.
- (3) The owner of a secure landfill must, as one or more cells are being filled,
- (a) operate under cover of a portable structure that acts as a roof to keep out rain and snow, or
  - (b) design another system to prevent leachate generation during operation.
- (4) The owner of a secure landfill must, as operations proceed,
- (a) record on a map the exact location and dimensions, including depth of each cell in relation to permanently surveyed benchmarks,
  - (b) record the contents of each cell and the location of each hazardous waste type within each cell, and
  - (c) keep records referred to in paragraphs (a) and (b) available for inspection by an officer.
- (5) The owner of a secure landfill must,
- (a) within 3 days after detection of leakage into the space between the 2 liners, report the leakage to a director, and
  - (b) within 3 days after receiving monitoring data indicating non-compliance with respect to groundwater conditions, notify a director.
- (6) The owner of a secure landfill must empty any leachate or runoff storage facilities so as to maintain sufficient capacity to collect leachate and runoff at all times.

[am. B.C. Regs. 319/2004, ss. 2 and 19; 375/2008, s. 1.]

**Performance standards**

- 27**
- (1) The owner of a secure landfill must not use or operate the secure landfill to dispose of any waste listed in Schedule 3.
  - (2) The owner of a secure landfill must design, construct, install and maintain a dual liner system
    - (a) to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or groundwater during the operating life and after closure,
    - (b) with both liners constructed of impervious materials that prevent wastes from passing into or through the liner during the life of the facility, and



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- (i) if composed of soil or clay, each being not less than 0.5 m thick, and
    - (ii) if synthetic, each being at least 1 mm thick,
  - (c) with both liners constructed of materials having appropriate chemical properties, strength and thickness to prevent failure due to any of the following:
    - (i) pressure gradients;
    - (ii) contact with the waste or leachate to which the liners may be exposed;
    - (iii) climatic conditions;
    - (iv) stress of installation and operations, and
  - (d) with the liner system placed on base materials capable of providing support and resistance to pressure gradients above and below the liner system to prevent failure due to compression, uplift or settlement.
- (3) The owner of a secure landfill must design, construct, install and maintain a leachate detection, collection and removal system that includes the following minimum characteristics:
  - (a) a leak detection system between the 2 liners to detect any leaks or migration of liquid into the space between the liners;
  - (b) a leachate collection system that is
    - (i) installed at a slope greater than 2%, in a porous material drainage layer with a minimum thickness of 0.75 m and permeability greater than  $1 \times 10^{-3}$  cm/s immediately above the upper liner,
    - (ii) constructed of materials that are
      - (A) chemically resistant to waste placed in the landfill and any leachate which might be generated, and
      - (B) of sufficient strength to prevent failure due to pressure of overlying loads in the secure landfill, and
    - (iii) designed and constructed to prevent clogging during the life of the facility;
  - (c) a storage facility suitable to allow removal of leachate.
- (4) A secure landfill is in a non-compliance situation, with regard to groundwater quality, when analytical data from upgradient and downgradient groundwater monitoring wells for any parameters or chemical constituents are significantly different using approved statistical methods.
- (5) The owner of a secure landfill must design, construct and maintain
  - (a) a system capable of preventing water from draining onto any cells of the secure landfill, and
  - (b) a system to collect and control water draining from any cells of the secure landfill

during a storm with a magnitude that is exceeded, on average, only once in 25 years.

- (6) The owner of a secure landfill must ensure that any discharge of liquid effluent to the environment, to storm sewers or to a municipal or industrial effluent treatment works from the secure landfill meets the effluent criteria prescribed in Schedule 1.2.
- (7) If particulate matter subject to wind dispersal is placed in the secure landfill, the owner must cover or otherwise manage the facility to prevent dispersal by wind.
- (8) The owner of a secure landfill must, during closure of the landfill or any cell,
  - (a) make any modifications to works including drainage control, leachate collection, leak detection, monitoring and storage facilities to ensure long term operation with minimum maintenance and security,
  - (b) install and construct for the secure landfill a final cover with the following minimum characteristics:
    - (i) design and construction to function with minimum maintenance;
    - (ii) a foundation layer with a minimum thickness of 0.75 m constructed of soil, or other suitable granular material, compacted to maximum density at optimum moisture content according to acceptable engineering practice, to ensure the overall structural integrity of the final cover;
    - (iii) an intermediate layer of
      - (A) not less than 0.50 m of impervious soil or clay, or
      - (B) an impervious synthetic material not less than 1 mm thick;
    - (iv) a top layer of not less than 0.5 m of soil
      - (A) not containing waste, leachate or other material which would contaminate infiltrating water, and
      - (B) which would provide a suitable long term rooting medium;
    - (v) graded and maintained to prevent ponding and having slopes of 3% to 5%;
    - (vi) vegetation which
      - (A) is suitable to the area,
      - (B) is established by approved agronomic practices, and
      - (C) does not have a rooting depth greater than the depth of the top layer.
- (9) An owner of a secure landfill must, before closure, prepare, to the satisfaction of a director, a post closure plan for
  - (a) maintaining the integrity and effectiveness of the final cover,
  - (b) maintaining and monitoring the leak detection system, reporting any migration of leachate through the liner,

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- (c) maintaining and operating the leachate collection and removal system and keeping records of any leachate removed,
  - (d) maintaining and operating the groundwater monitoring system,
  - (e) maintaining the drainage control system, and
  - (f) protecting and maintaining the survey benchmarks.
- (10) On completion of closure the owner of the secure landfill site (including its buffer zone) must
- (a) comply with the post closure plan approved under subsection (9), and
  - (b) transfer title of the property to the Crown.
- [am. B.C. Regs. 132/92, s. 11; 319/2004, s. 20; 375/2008, s. 1.]

**Division 7 – Waste Piles, Surface Impoundments  
and Land Treatment Facilities****Siting requirements for waste piles, surface  
impoundments and land treatment facilities**

- 28**
- (1) A person must not locate a waste pile, surface impoundment or land treatment facility within a wetland area or an area immediately adjacent to a wetland so that natural drainage from the waste pile, surface impoundment or land treatment facility would flow directly into the wetland area.
  - (2) A person must not locate a waste pile or surface impoundment where it cannot be constructed
    - (a) entirely above the seasonally high water table, and
    - (b) with a minimum separation depth of 3 m of unsaturated soil material with a permeability less than  $1 \times 10^{-6}$  cm/s above a seasonally high water table including the zone of capillary rise.
  - (3) A person must not locate a land treatment facility where it cannot be constructed
    - (a) entirely above the seasonally high water table, and
    - (b) with a minimum separation depth of 1 m of unsaturated soil with a permeability less than  $1 \times 10^{-6}$  cm/s above a seasonally high water table including the zone of capillary rise.
  - (4) A person must not locate a waste pile, surface impoundment or land treatment facility in a recharge area for an unconfined aquifer with one or more high capacity wells (>100 L/minute) or a significant number of lower capacity wells used for fish hatcheries, domestic, irrigation, industrial, municipal or livestock watering supply.
  - (5) A person must not locate a waste pile, surface impoundment or land treatment facility where it would be underlain by less than 5 m of fine grained, unconsolidated material with a permeability less than  $1 \times 10^{-6}$  cm/s over fractured or permeable bedrock formations (e.g. sandstone, limestone, dolomite).

- (6) A person must not locate a waste pile, surface impoundment or land treatment facility within 150 m of any nonintermittent watercourse or any other permanent waterbody.
- (7) A person must not locate a waste pile, surface impoundment or land treatment facility within
  - (a) a designated community water supply watershed, Category I, as defined in Guidelines for Watershed Management of Crown Lands used as Community Water Supplies,
  - (b) the Greater Victoria Water District watershed, or
  - (c) the Greater Vancouver Water District watershed.

[am. B.C. Reg. 375/2008, s. 1.]

**Operational requirements for waste piles, surface impoundments and land treatment facilities**

- 29**
- (1) The owner of a waste pile, surface impoundment or land treatment facility must
    - (a) at appropriate times during construction and installation inspect any
      - (i) synthetic liners to ensure tight seams and joints and the absence of punctures, blisters or tears, and
      - (ii) soil or clay liners for imperfections (e.g. lenses, cracks, channels) which would increase permeability,
    - (b) during operation inspect weekly and immediately after any storm or catastrophic events
      - (i) any liners and drainage control facilities for evidence of deterioration, malfunction, leaks or improper operation, and
      - (ii) leak detection and leachate collection systems to ensure proper functioning and to determine if leachate is being generated or is accumulating, and
    - (c) immediately undertake to repair or correct any defects or malfunctioning works as determined by any inspections specified in paragraphs (a) and (b) to maintain the integrity of all works.
  - (2) The owner of a waste pile, surface impoundment or land treatment facility must carry out an approved monitoring program by
    - (a) establishing a groundwater monitoring system with a sufficient number of wells, installed at appropriate locations (upgradient and downgradient) and depths, to yield groundwater samples from the uppermost aquifer that
      - (i) represent the quality of groundwater that would not be affected by leakage or leachate, if any, from a surface impoundment, waste pile or land treatment facility, and
      - (ii) represent the quality of groundwater that would be affected by leakage or leachate, if any, from a surface impoundment or by leachate from a waste pile or land treatment facility,

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- (b) ensuring the quality of groundwater monitoring data by
    - (i) casing sampling wells with appropriate materials to ensure the integrity of the boreholes,
    - (ii) preventing contamination
      - (A) of any part of the well during construction, and
      - (B) from the surface during operation, and
    - (iii) implementing procedures for
      - (A) decontamination of sampling equipment,
      - (B) sample collection,
      - (C) sample preservation and shipment,
      - (D) sample custody, and
      - (E) analytical procedures and quality assurance,
  - (c) selecting indicator parameters (e.g. specific conductance, pH, total organic carbon) and chemical constituents for analysis of groundwater that
    - (i) provide a reliable indication of the quality of groundwater below the waste pile, surface impoundment or land treatment facility from the perspective of human health hazards and environmental quality,
    - (ii) reflect the physical and chemical characteristics of the waste being stored or treated, and
    - (iii) provide a reliable indication of movement of any contaminant with groundwater flow,
  - (d) sampling groundwater sufficiently often to provide data that is representative of varying groundwater flow conditions, but in any case no less frequently than once every 3 months,
  - (e) measuring the groundwater surface elevation each time the groundwater is sampled,
  - (f) measuring volumes, sampling and analyzing leachate or leakage collected, if any, by the leachate collection system,
  - (g) ensuring detection of any liquid leaking through a liner where a liner is required, and
  - (h) reporting monitoring results at intervals specified by a director.
- (3) The owner of a waste pile, surface impoundment or land treatment facility must
- (a) within 3 days after detection of leakage through a liner, report the leakage to a director, and
  - (b) within 3 days after receiving monitoring data indicating non-compliance with respect to groundwater conditions, notify a director.

- (4) The owner of a waste pile, surface impoundment or land treatment facility must empty any leachate or runoff storage facilities so as to maintain sufficient capacity to collect leachate and runoff at all times.

[am. B.C. Regs. 319/2004, s. 21; 375/2008, s. 1.]

#### **Performance standards for waste piles**

- 30** (1) The owner of a waste pile must not use a waste pile to store
- (a) waste materials which are or contain free liquids,
  - (b) ignitable or reactive waste, or
  - (c) liquids in containers.
- (2) The owner of a waste pile must design, construct, install, maintain and operate
- (a) an approved containment system to prevent release of any hazardous waste or leachate,
  - (b) an approved leak detection system to detect any leaks or migration of liquid through any required liners, and
  - (c) an approved leachate collection system.
- (3) A waste pile is in a non-compliance situation, with regard to groundwater quality, when analytical data from upgradient and downgradient groundwater monitoring wells for any parameters or chemical constituents are significantly different using approved statistical methods.
- (4) The owner of a waste pile must design, construct and maintain a system capable of preventing water from draining onto the site containing the waste pile during a storm with a magnitude that is exceeded, on average, only once in 25 years.
- (5) The owner of a waste pile must ensure that any discharge of liquid effluent to the environment, to storm sewers or to a municipal or industrial effluent treatment works which results from the waste pile meets the effluent criteria prescribed in Schedule 1.2.
- (6) If particulate matter, subject to wind dispersal, is placed on the waste pile, the owner must cover or otherwise manage the facility to prevent dispersal by wind.
- (7) The owner of a waste pile must during closure remove
- (a) all stored waste, and
  - (b) any affected underlying soil to an approved depth.

[am. B.C. Regs. 132/92, s. 11; 319/2004, s. 2; 375/2008, s. 1.]

#### **Performance standards for surface impoundments**

- 31** (1) The owner of a surface impoundment must not use a surface impoundment to store or treat ignitable or reactive waste.
- (2) The owner of a surface impoundment must design, construct, install and maintain
- (a) sufficient depth in the impoundment to ensure a freeboard of 0.5 m at all times,

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- (b) an inner, fenced buffer area, 20 m wide, immediately surrounding the impoundment, and
  - (c) devices to immediately shut off flow of hazardous waste to the impoundment in the event of any malfunction of the works.
- (3) The owner of a surface impoundment must design, construct, install and maintain an approved liner system
  - (a) to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or groundwater during the operating life and closure period,
  - (b) constructed of impervious materials that prevent wastes from passing into the liner system during the life of the facility, and that
    - (i) if composed of soil or clay materials, is not less than 0.5 m thick, and
    - (ii) if synthetic, is at least 1 mm thick,
  - (c) constructed of materials having appropriate chemical properties, strength and thickness to prevent failure due to
    - (i) pressure gradients,
    - (ii) contact with the waste or leachate to which it may be exposed,
    - (iii) climatic conditions, and
    - (iv) the stress of installation and daily operations, and
  - (d) placed on base materials capable of providing support and resistance to pressure gradients above and below the liner system to prevent failure due to compression, uplift or settlement.
- (4) The owner of a surface impoundment must design, construct, install and maintain
  - (a) an approved leak detection system to detect any leaks or migration of liquid through any required liners, and
  - (b) an approved leachate collection system.
- (5) A surface impoundment is in a non-compliance situation, with regard to groundwater quality, when analytical data from upgradient and downgradient groundwater monitoring wells for any parameters or chemical constituents are significantly different using approved statistical methods.
- (6) The owner of a surface impoundment must design, construct, install and maintain a system capable of preventing surface water from entering the surface impoundment during a storm with a magnitude that is exceeded, on average, only once in 25 years.
- (7) The owner of a surface impoundment must ensure that any discharge of liquid effluent to the environment, to storm sewers or to a municipal or industrial effluent treatment works from the surface impoundment meets the effluent criteria prescribed in Schedule 1.2.

- (8) If particulate matter, subject to wind dispersal, is placed in a surface impoundment, the owner must cover or otherwise manage the facility to prevent dispersal by wind.
- (9) The owner of a surface impoundment must during closure remove
  - (a) all stored waste, and
  - (b) any affected underlying soil to an approved depth.

[am. B.C. Regs. 132/92, s. 11; 319/2004, s. 2; 375/2008, s. 1.]

**Performance standards for land treatment**

- 32**
- (1) The owner of a land treatment facility must treat only wastes which are approved for treatment in that facility.
  - (2) The owner of a land treatment facility must design, construct, install and maintain
    - (a) an approved system to prevent any release of hazardous waste or leachate,
    - (b) an approved leak detection system to detect any leaks or migration of liquid through any required liners, and
    - (c) an approved leachate collection system.
  - (3) A land treatment facility is in a non-compliance situation, with regard to groundwater quality, when analytical data from upgradient and downgradient groundwater monitoring wells for any parameters or chemical constituents are significantly different using approved statistical methods.
  - (4) The owner of a land treatment facility must design, construct, install and maintain
    - (a) a system capable of preventing surface water from draining onto the site containing the land treatment facility, and
    - (b) a system to collect and control water draining from a land treatment facility during a storm with a magnitude that is exceeded, on average, only once in 25 years.
  - (5) The owner of a land treatment facility must ensure that any discharge of liquid effluent to the environment, to storm sewers or to a municipal or industrial effluent treatment works which results from the facility meets the effluent criteria prescribed in Schedule 1.2.
  - (6) If particulate matter, subject to wind dispersal, is placed on the surface of the land treatment facility, the owner must immediately incorporate the material into the land or otherwise manage the facility to prevent dispersal by wind.
  - (7) Unless otherwise approved by a director, the owner of a land treatment facility must, during closing, remove
    - (a) all residual hazardous waste, and
    - (b) any affected soil to an approved depth.

[am. B.C. Regs. 132/92, s. 11; 319/2004, s. 2; 261/2006, s. 17; 375/2008, ss. 1 and 10.]



## Division 8 – Disposal in a Secure Building

### Siting requirements

- 33**
- (1) A person must not locate a secure building within a wetland area or an area immediately adjacent to a wetland so that natural drainage from the secure building would flow directly into a wetland area.
  - (2) A person must not locate a secure building where it cannot be constructed
    - (a) entirely above the seasonally high water table, and
    - (b) with a minimum a separation depth of 3 m of unsaturated soil material with a permeability less than  $1 \times 10^{-6}$  cm/s above a seasonally high water table including the zone of capillary rise.
  - (3) A person must not locate a secure building where it would be underlain by less than 5 m of fine grained unconsolidated material with a permeability of less than  $1 \times 10^{-6}$  cm/s over fractured or permeable bedrock formations (e.g. sandstone, limestone, dolomite).
  - (4) A person must not locate a secure building within 100 m of any nonintermittent watercourse or any other permanent waterbody.
  - (5) A person must not locate a secure building within
    - (a) a designated community water supply watershed, Category I, as defined in Guidelines for Watershed Management of Crown Lands used as Community Water Supplies,
    - (b) the Greater Victoria Water District watershed, or
    - (c) the Greater Vancouver Water District watershed.

[am. B.C. Reg. 375/2008, ss. 1 and 12.]

### Operational requirements

- 34**
- (1) The owner of a secure building must
    - (a) at appropriate times during construction and installation inspect
      - (i) synthetic liners to ensure tight seams and joints and the absence of punctures, blisters or tears,
      - (ii) floors, walls, doors, hatches and roofs for defects, and
      - (iii) clay liners for imperfections (e.g. lenses, cracks, channels)which would increase permeability,
    - (b) during operation inspect weekly and immediately after any catastrophic event all floors, walls, doors, hatches, roofs and drainage control facilities, for evidence of deterioration, malfunction, leaks or improper operation, and
    - (c) immediately repair or correct any defects or malfunctioning works as determined by any inspections specified in paragraphs (a) and (b) so as to maintain the integrity of all works.

- (2) The owner of a secure building must carry out an approved monitoring program by
- (a) establishing a groundwater monitoring system with a sufficient number of wells, installed at appropriate locations (upgradient and downgradient) and depths, to yield from the uppermost aquifer groundwater samples that
    - (i) represent the quality of groundwater that would not be affected by leakage, if any, from a secure building, and
    - (ii) represent the quality of groundwater that would be affected by leachate, if any, from a secure building,
  - (b) ensuring the quality of groundwater monitoring data by
    - (i) casing sampling wells with appropriate materials to ensure the integrity of the boreholes,
    - (ii) preventing contamination
      - (A) of any part of the well during construction, and
      - (B) from the surface during operation, and
    - (iii) implementing procedures for
      - (A) decontamination of sampling equipment,
      - (B) sample collection,
      - (C) sample preservation and shipment,
      - (D) sample custody, and
      - (E) analytical procedures and quality assurance,
  - (c) selecting indicator parameters (e.g. specific conductance, pH, total organic carbon) and chemical constituents for analysis of groundwater that
    - (i) provide a reliable indication of the quality of groundwater below the secure landfill from the perspective of human health hazards and environmental quality,
    - (ii) reflect the physical and chemical characteristics of the waste, and
    - (iii) provide a reliable indication of movement of any contaminant with groundwater flow,
  - (d) sampling groundwater sufficiently often to provide data that is representative of varying groundwater flow conditions, but in any case no less frequently than once every 3 months,
  - (e) measuring the groundwater surface elevation each time the groundwater is sampled, and
  - (f) reporting monitoring results at intervals specified by a director.
- (3) The owner of a secure building must, as operations proceed, record in tabular and graphic form the exact location and type of hazardous waste in relation to one or more permanently secured datum points and keep this information available for inspection by an officer.

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- (4) The owner of a secure building must
  - (a) within 3 days after detecting any defects or malfunctioning works, notify a director, and
  - (b) within 3 days after receiving monitoring data indicating non-compliance with respect to groundwater conditions, notify a director.

[am. B.C. Regs. 319/2004, ss. 2 and 22; 375/2008, ss. 1 and 12.]

**Performance standards**

- 35**
- (1) The owner of a secure building must not use it to store any waste which is listed in Schedule 3.
  - (2) The owner of a secure building must design, construct, install and maintain an approved liner system
    - (a) to prevent any migration of leakage from the secure building to any subsurface soil or groundwater during the operating life and closure period,
    - (b) constructed of impervious materials that prevent wastes from passing into the liner during the life of the facility, and that
      - (i) if composed of clay materials, is not less than 0.5 m thick, and
      - (ii) if synthetic, is at least 1 mm thick,
    - (c) constructed of materials having appropriate chemical properties, strength and thickness to prevent failure due to
      - (i) pressure gradients,
      - (ii) contact with leakage to which it may be exposed, and
      - (iii) stress of installation and operations, and
    - (d) placed on base materials capable of providing support and resistance to pressure gradients above and below the liner system to prevent failure due to compression, uplift or settlement.
  - (3) A secure building is in a non-compliance situation, with regard to groundwater quality, when analytical data from upgradient and downgradient groundwater monitoring wells for any parameters or chemical constituents are significantly different using approved statistical methods.
  - (4) The owner of a secure building must design, construct and maintain a system capable of preventing surface water from entering the secure building during a storm with a magnitude that is exceeded, on average, only once in 25 years.
  - (5) The owner of a secure building must ensure that any discharge of liquid effluent to the environment, to storm sewers or to a municipal or industrial effluent treatment works from the facility meets the effluent criteria prescribed in Schedule 1.2.
  - (6) The owner of a secure building must, before closure, prepare, to the satisfaction of a director, a post closure plan for

- (a) maintaining the integrity and effectiveness of the entire structure including making repairs as necessary,
  - (b) maintaining and operating the groundwater monitoring system,
  - (c) maintaining the drainage control system, and
  - (d) protecting and maintaining the permanent datum points as references to locate the wastes within the facility.
- (7) On completion of closure, the owner of the secure building must
- (a) comply with the post closure plan approved under subsection (6), and
  - (b) transfer title for the property to the Crown.
- (8) A director may require the owner of a secure building to give security for performance of the owner's obligations under the Act and this regulation in the amount and form, and subject to the conditions, the director may specify.

[am. B.C. Regs. 132/92, s. 11; 319/2004, s. 23; 375/2008, ss. 1 and 12.]

## **PART 5 – PROHIBITED MANAGEMENT PRACTICES**

### **Mixing and dilution**

- 36** A person must not mix or dilute hazardous waste with any solid or liquid, including waste, water or rain water, or otherwise take action by dividing a hazardous waste to evade this regulation or similar regulations in another jurisdiction.

[am. B.C. Regs. 132/92, s. 18; 319/2004, s. 2; 375/2008, s. 1.]

### **Underground injection**

- 37** A person must not treat, store or dispose of hazardous waste by means of underground injection.

[am. B.C. Regs. 319/2004, s. 2; 375/2008, s. 1.]

### **Floating facilities**

- 38** A person must not operate a hazardous waste facility on a boat, barge or other vessel while it is floating on fresh water, but nothing in this section prohibits the transportation of hazardous waste.

[am. B.C. Regs. 319/2004, s. 2; 375/2008, s. 1.]

### **Prohibition**

- 39** A person must not deposit or discharge or allow or cause hazardous waste to be deposited or discharged into any system of waste disposal operated by a municipality or other public authority unless the deposition or discharge is expressly authorized by a permit, approval, order, regulation or a waste management plan approved by the minister.

[am. B.C. Regs. 319/2004, s. 2; 375/2008, s. 1.]

**HAZARDOUS WASTE REGULATION**Part 6 – Management of Specific Hazardous Wastes

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**PART 6 – MANAGEMENT OF SPECIFIC HAZARDOUS WASTES****Non-application of other Parts**

- 39.1** (1) Subject to subsection (2), Parts 2, 3 and 4 do not apply to wastes managed in accordance with this Part.
- (2) A director may order, in a particular case, that a provision of Part 2, 3 or 4 applies to waste managed in accordance with this Part.

[en. B.C. Reg. 319/2004, s. 24.]

**Management of waste asbestos**

- 40** (1) For the purposes of the definition of “waste asbestos” in section 1 (1) of this regulation, if the concentration of asbestos in the waste is not determined by weight at the time of manufacture, it must be determined using one of the following:
- (a) Method 600-R-93-116, as amended from time to time, published by the United States Environmental Protection Agency;
  - (b) NIOSH Method 9002, as amended from time to time, from the *NIOSH Manual of Analytical Methods*, 4th Edition, published by the National Institute for Occupational Safety and Health, United States.
- (2) A person must not deposit waste asbestos in a landfill other than a secure landfill unless
- (a) a permit or an approval has been issued under the Act to operate the landfill, or the landfill is operated under a waste management plan,
  - (b) the waste asbestos is confined during handling, storage and transportation by
    - (i) dry airtight containment techniques such as
      - (A) packing in 6 mil plastic bags placed within a non-reuseable drum and then sealed, or
      - (B) packing in a 6 mil plastic bag placed within a second 6 mil plastic bag and then sealed, or
    - (ii) wet containment techniques such as saturation with water and containment in non-leaking sealed drums or equivalent, or
    - (iii) approved containment techniques,
  - (c) the waste asbestos is disposed of at the landfill by being immediately buried with a minimum of 0.5 m of cover material,
  - (d) approval of the landfill owner is received before disposal takes place, and
  - (e) the deposit is authorized by a director and carried out in accordance with the director’s requirements.

[am. B.C. Regs. 132/92, s. 20; 319/2004, s. 25; 261/2006, s. 18; 375/2008, s. 1.]

**Waste oil**

**41** (0.1) In this section, “**product fuel**” means a hydrocarbon for which a Canadian General Standards Board fuel specification exists.

- (1) Subject to this section, waste oil may be disposed of
  - (a) in the manufacture of pavement, and
  - (b) by combustion as a fuel.
- (2) A person must not without approval mix waste oil with any material in the manufacture of pavement unless the waste oil meets the following specifications:

**Waste Oil Specifications for Manufacture of Pavement**

Item	Parameter	Allowable Level
1	flash point	60°C minimum
2	total arsenic	20 mg/L maximum
3	total cadmium	3.0 mg/L maximum
4	total organic halogens (as Cl)	2 000 mg/L maximum
5	total chromium	10 mg/L maximum
6	total lead	1 000 mg/L maximum
7	total polychlorinated biphenyls	5.0 mg/L maximum
8	total zinc	1 000 mg/L maximum

- (3) and (4) Repealed. [B.C. Reg. 319/2004, s. 26.]
- (5) A person must not, without approval, use waste oil as a fuel unless it meets the following specifications:

**Waste Oil Specifications for Use as a Fuel**

Item	COLUMN I Parameter	COLUMN II Allowable Level for Fuel in a Cement Kiln	COLUMN III Allowable Level for Fuel in Uses Other Than for Cement Kilns
1	total arsenic	20 mg/L maximum	5.0 mg/L maximum
2	total cadmium	3.0 mg/L maximum	2.0 mg/L maximum
3	total organic halogens (as Cl)	3 000 mg/L maximum	1 500 mg/L maximum
4	total chromium	10 mg/L maximum	10 mg/L maximum
5	total lead	1 000 mg/L maximum	50 mg/L maximum
6	total polychlorinated biphenyls	500 mg/L maximum	3.0 mg/L maximum

- (5.1) A person using waste oil as a fuel, or storing waste oil for use as a fuel, without approval, must keep a written record, for inspection by an officer, demonstrating, through analysis using analytical methods specified in section 49, that the waste oil meets the specifications under subsection (5).
- (6) Subject to subsection (7), a person must not mix or blend waste oil with any substance other than product fuel for use as fuel or to sell as fuel.

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## Part 6 – Management of Specific Hazardous Wastes

- (7) A person may mix or blend waste oil with a substance other than product fuel for use as fuel or to sell as fuel if the person has obtained prior written approval from a director.
- (8) A person must not use or sell a mixture or blend of waste oil with product fuel unless
- (a) the waste oil, prior to the blending or mixing, meets the specifications set out in the table in subsection (5), and
  - (b) the person keeps a written record, for inspection by an officer, demonstrating, through analysis using analytical methods specified in section 49, that the waste oil meets the required specifications.

[am. B.C. Regs. 132/92, s. 21; 319/2004, s. 26; 261/2006, s. 19; 375/2008, ss. 1 and 13.]

**Hydrocarbon contaminated soil**

- 41.1** (1) Subject to subsection (2), hydrocarbon contaminated soil is authorized for
- (a) Repealed. [B.C. Reg. 179/2016, App. 1, s. 5.]
  - (b) treatment and storage at any landfill or facility for which an authorization has been issued under the Act, or
  - (c) use in the manufacture of asphalt,
- if the hydrocarbon contaminated soil meets all of the following specifications:

**Standards for Management of Hydrocarbon Contaminated Soil**

Item	COLUMN I Parameter	COLUMN II Maximum Value (dry weight basis)
1	total benzene	25 mg/kg
2	total ethylbenzene	250 mg/kg
3	total toluene	150 mg/kg
4	total xylene	250 mg/kg
5	total oil	10%

- (2) A person must not store, treat or use hydrocarbon contaminated soil under the authority of subsection (1) unless
- (a) prior written notification of any proposed storage or treatment is provided to a director and the storage and treatment is carried out in accordance with the director's requirements,
  - (b) the hydrocarbon contaminated soil is a hazardous waste due only to the presence of one or more items listed in Column I of the table in subsection (1),
  - (c) the hydrocarbon contaminated soil is spread in single layers not exceeding 0.3 metres in thickness per year or a greater thickness approved by the director, which approval must specify a method of aeration to be used with the greater thickness, and

- (d) the daily quantity of hydrocarbon contaminated soil, if disposed of in the manufacture of asphalt, is not more than 10% of the total material fed to the asphalt plant.
- (2.1) Total oil for the purposes of the standard established by subsection (1) must be measured in accordance with the method established for the purposes of this regulation in the *British Columbia Laboratory Methods Manual: 2005 — for the Analysis of Water, Wastewater, Sediment, Biological Materials and Discrete Ambient Air Samples*, Victoria, August 2005, as updated from time to time, published by the minister.
- (3) Hydrocarbon contaminated soil which has been treated so that it is no longer a hazardous waste may be disposed of in a landfill if
  - (a) approval of the landfill owner is received before disposal takes place, and
  - (b) the deposit is authorized by a director and carried out in accordance with requirements specified by the director.

[en. B.C. Reg. 132/92, s. 22; am. B.C. Regs. 319/2004, ss. 2 and 27; 261/2006, s. 20; 375/2008, ss. 1 and 14; 179/2016, App. 1, s. 5.]

#### **Pest control product wastes and containers**

##### **42** (1) In this section:

**“appropriate solvent”** means a solvent that does not contain a pest control product and is capable of dissolving or removing a pest control product;

**“empty”** means

- (a) to drain a liquid product residue from a container into a spray tank or mixing tank for a period of not less than 30 seconds,
- (b) to remove an inner liner, where present, and shake all product residue into a spray tank or mixing tank, or
- (c) to use all the product in a pressurized metal container without puncturing the container;

**“pressure rinse”** means to clean by means of pressurized spraying of an appropriate solvent into an empty container for at least 30 seconds so that all interior surfaces of the container are rinsed;

**“product”** means pest control product;

**“rinse”** means

- (a) to introduce an appropriate solvent into an empty container in an amount not less than 20% of its volume,
- (b) to close and shake the container so that the solvent makes contact with all interior surfaces, and
- (c) to open and empty the container.

- (2) Subject to this section, the disposal of
  - (a) a waste product container, and



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- (b) a waste containing a product is authorized.
- (3) A waste containing a product is designated as a hazardous waste if
- (a) the waste fits the criteria for classes 3 to 6.1, 8 or 9 of the federal dangerous goods regulations, or
  - (b) the aquatic toxicity (the 96 hour  $LC_{50}$ ) of the waste is less than 500 mg/L as measured by methods that are approved in accordance with section 49.
- (4) A waste product container that is
- (a) emptied and rinsed in the manner set out in this section, or
  - (b) labelled “Domestic” by the manufacturer and emptied
- is not a hazardous waste.
- (5) Prior to disposal of a waste product container, the owner of it must
- (a) empty the container, and
  - (b) rinse it using the appropriate method indicated in the following table:

**TABLE**  
**Methods for Rinsing Waste Pest Control Product Containers**

Item	Type of Container	Rinsing Method
1	Rigid plastic or metal (nonpressurized)	Pressure rinse, or single rinse 3 times
2	Rigid plastic or metal (pressurized)	No rinsing required
3	Glass bottle	Rinse 3 times
4	Paper bag	Rinse
5	Plastic bag	Rinse
6	Containers labelled “Domestic”	No rinsing required
7	Any container type not listed above	As approved

- (6) The owner of a waste product container that has been emptied and rinsed must recycle the container or dispose of it
- (a) in an approved landfill, or
  - (b) by burying it, but only if
    - (i) the burial location
      - (A) is on land owned or leased by the person owning the container, or
      - (B) is on land owned, leased or maintained in a tree farm licence, as defined in the *Forest Act*, by the person owning the container,
    - (ii) the burial location is on flat ground, not in a swale and at least 200 m from surface water or a well,
    - (iii) the ground does not consist of gravel, sand or other similarly porous material, and

- (iv) the owner covers it with at least 0.5 m of soil immediately after burial.
- (7) Waste produced by cleaning pesticide application equipment or by rinsing waste product containers under this section must, if practicable, be used in mixing a product solution but, if not practicable, it may be applied to land if the area to which it is applied
  - (a) is on land to which the product contained in the waste has been applied for purposes of pest control,
  - (b) is flat ground, not in a swale, and at least 200 m from surface water or any well, and
  - (c) does not consist of gravel, sand or other similarly porous material.

[am. B.C. Regs. 132/92, s. 23; 214/2004, s. 5; 319/2004, s. 2; 464/2004, s. 4 (a); 375/2008, s. 1.]

**Waste paint**

- 42.1** (1) Subject to this section, the treatment and recycling of waste paint is authorized at facilities owned and operated by a paint manufacturer or formulator.
- (2) A person must not without approval recycle waste paint unless the paint meets the following specifications:

**Waste Paint Specifications for Recycling**

Item	Parameter	Allowable Level
1	PCB	2 mg/L
2	Lead	1.00%, by weight
3	Mercury	75 mg/L
4	Organic Chlorides as Cl	1.0%, by weight

- (3) A person who treats or recycles waste paint must
- (a) maintain records of quantities of waste paint recycled for 2 years from the date the paint is recycled, and
  - (b) report to a director, before January 31 in each year, the quantities recycled during the previous calendar year.
- (4) Section 9 (1) (b) and (c) of the Act does not apply to waste paint stored at a recycling facility or at a paint wholesale or retail operation.

[en. B.C. Reg. 132/92, s. 24; am. B.C. Regs. 319/2004, s. 28; 375/2008, s. 1.]

**Collection and storage of household hazardous waste**

- 42.2** (1) The collection and storage of household hazardous waste at a return collection facility, in accordance with this section and sections 42.3, 42.4 and 50, is authorized.
- (2) Section 10 of the Act does not apply if the household hazardous waste is transported directly to the return collection facility

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- (a) by an occupant of a residential property from his or her place of residence, or
  - (b) by a farmer from his or her farm.
- (3) Despite section 48 of this regulation, for the purposes of section 9 (1) of the Act, the maximum amount of all categories of household hazardous waste authorized for storage at any one time under the authority of subsection (1) is 25 000 kg by weight or 25 000 litres by volume.

[en. B.C. Reg. 52/95, s. 2; am. B.C. Regs. 319/2004, s. 29; 261/2006, s. 21; 375/2008, s. 15.]

**Requirements for establishment and operation  
of a return collection facility**

- 42.3** (1) Every person who proposes to establish and operate a return collection facility must, at least 30 days before commencement of collection and storage at the return collection facility, do all of the following:
- (a) provide to a director and to the municipality and regional district where the proposed return collection facility will be located or will operate, the following information:
    - (i) the street address of the proposed return collection facility;
    - (ii) the maximum quantity of each category of household hazardous waste described in Schedule 6 to be stored at the proposed return collection facility;
    - (iii) the name, address, telephone number and facsimile number of the owner of the proposed return collection facility;
    - (iv) the name, address, telephone number and facsimile number of a person available for 24 hour emergency contact;
    - (v) the proposed commencement date for the collection of household hazardous waste;
    - (vi) the name of each transporter and hazardous waste management company that will be initially responsible for the transportation and management of the household hazardous waste after it leaves the return collection facility;
  - (b) despite section 43 (1), (2) and (3), make a registration report and apply for a registered site number by completing and submitting to a director the information in Form 1 of Schedule 5 or, in the alternative, the information required by a form provided by a director for this purpose;
  - (c) despite section 43 (4), if there is a material change to the information submitted in a registration report, notify a director of the change by completing and submitting a report in Form 1 of Schedule 5 or, in the alternative, the information required by a form provided by a director for this purpose.
- (2) Every return collection facility must comply with all of the following specifications:

- (a) if household hazardous waste is stored in an indoor return collection facility, it must be designed, constructed, operated and maintained in compliance with the Building Regulations of British Columbia and the British Columbia Fire Code Regulation;
  - (b) it must conform to the land use, building and zoning requirements of the host municipality and regional district in which the return collection facility is located;
  - (c) it must be designed, constructed, operated and maintained so that the capability of the return collection facility to collect and store household hazardous waste is not adversely affected by the weather;
  - (d) it must be equipped with a suitable access security system to prevent unauthorized access by persons or by animals;
  - (e) it must have a sign at each entrance to the return collection facility which identifies it as a return collection facility and specifies
    - (i) the hours of operation of the return collection facility,
    - (ii) the categories of hazardous waste, as described in Schedule 6, accepted at the return collection facility and, if applicable, any appropriate safety warnings,
    - (iii) the name and telephone number of the owner of the return collection facility,
    - (iv) a 24-hour emergency contact number, and
    - (v) a prohibition against the depositing of materials outside the return collection facility;
  - (f) it must have an impervious spill containment system sufficient to hold 110% of the largest volume of free liquid household hazardous waste in any given container or tank;
  - (g) it must have a suitable controlled forced air ventilation system if household hazardous waste is stored in an indoor household hazardous waste collection facility.
- (3) A person must not establish, construct, set-up or operate a return collection facility within the boundaries of
- (a) a national, Provincial, regional or municipal park,
  - (b) a wildlife management area as designated under section 4 of the *Wildlife Act*,
  - (c) a critical wildlife area or wildlife sanctuary designated under section 5 of the *Wildlife Act*,
  - (d) land acquired and administered under section 3 of the *Wildlife Act*,
  - (e) an ecological reserve designated under the *Ecological Reserve Act*,
  - (f) a bird sanctuary designated under the regulations pursuant to the *Migratory Birds Convention Act* (Canada), or

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(g) a wildlife area designated under the *Canada Wildlife Act* (Canada).

- (4) A return collection facility must not discharge, into the environment, a storm sewer or a municipal or industrial effluent treatment works, effluent produced by the operation of the return collection facility unless the discharge meets the effluent standards prescribed in Schedule 1.2.

[en. B.C. Reg. 52/95, s. 2; am. B.C. Regs. 319/2004, ss. 2 and 30; 261/2006, s. 22; 375/2008, s. 16.]

**Operating requirements for a return collection facility**

- 42.4** (1) The owner of a return collection facility must keep an operating record at the return collection facility, for inspection by an officer, with the following information for each household hazardous waste stored at the return collection facility:
- (a) a description of each household hazardous waste including the name and, if applicable, the product identification number, classification and packing group number as described in the federal dangerous goods regulations;
  - (b) a statement as to whether the household hazardous waste is a solid, liquid or gas or a combination of 2 or more of these;
  - (c) a record, updated at least weekly, of the quantity, in kilograms or litres, of each household hazardous waste described for the purposes of paragraph (a) in storage at the return collection facility.
- (2) The records required under subsection (1) must be kept for a minimum of 2 years after the household hazardous waste has been removed from the return collection facility, and be made available for inspection by an officer.
- (3) The owner of a household hazardous waste collection facility where household hazardous waste is stored must do all of the following:
- (a) ensure that there is sufficient clearance between containers stored at the household hazardous waste collection facility to permit a visual inspection of the containers for leaks and spills;
  - (b) make a weekly inspection of the household hazardous waste collection facility for any irregularities including, without limitation, malfunctions, container damage, leaks and spills which may lead to the escape of the household hazardous waste from the household hazardous waste collection facility or may pose a threat to human health or the environment;
  - (c) maintain at the household hazardous waste collection facility, for inspection by an officer, a record of inspections conducted as required by paragraph (b) showing
    - (i) any irregularities at the household hazardous waste collection facility and the date the irregularities were discovered, and
    - (ii) the corrective action taken and the date the action was taken.
- (4) The owner of a return collection facility must

- (a) prepare and maintain a current contingency plan which documents procedures to be followed during emergencies, and
  - (b) test the contingency plan required by paragraph (a) if directed by a director, in writing, to conduct such a test.
- (5) The owner of a return collection facility must ensure that
  - (a) each person employed at the return collection facility is adequately trained in the handling of each specific household hazardous waste handled by that person and accepted at the return collection facility, and
  - (b) at least one person employed at the return collection facility is adequately trained in the handling of all household hazardous wastes accepted at the return collection facility.
- (6) The owner of a household hazardous waste collection facility must
  - (a) notify a director at least 90 days in advance of an impending closure of the household hazardous waste collection facility,
  - (b) prepare a written closure plan and obtain approval of the plan from a director, and
  - (c) complete the closure of the household hazardous waste collection facility in accordance with the approved closure plan.
- (7) Repealed. [B.C. Reg. 464/2004, s. 4 (b).]  
[en. B.C. Reg. 52/95, s. 2; am. B.C. Regs. 214/2004, s. 6; 319/2004, s. 31; 464/2004, s. 4 (b); 261/2006, s. 23.]

## **PART 7 – ADMINISTRATIVE REQUIREMENTS**

### **Registration of hazardous waste**

- 43** (1) A person who,
- (a) within a 30 day period, produces, or
  - (b) at any time, stores at an on site facility
- a quantity of a category of hazardous waste greater than the quantity set out in Column II of Schedule 6 opposite that category must register the hazardous waste and apply for a generator registration number by completing Form 1 of Schedule 5 and submitting it to the director.
- (2) A person who,
- (a) at any time, stores at a site a quantity of a category of hazardous waste greater than the quantity set out in Column II of Schedule 6 opposite that category that was generated at a different site, or
  - (b) in any one day period, treats, recycles or disposes of a quantity of a category of hazardous waste greater than the quantity set out in Column II of Schedule 6 opposite that category

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must register the hazardous waste and apply for a registered site number by completing Form 1 of Schedule 5 and submitting it to the director.

- (3) A person must comply with subsection (1) or (2) within 30 days of the date the applicable subsection first applies to the person.
- (4) A person must notify a director of any material change in the information the person provided to a director in Form 1 by submitting a completed Form 1 of Schedule 5 describing the material change to a director within 30 days after the material change.
- (5) Subsections (1) and (2) do not apply in relation to hazardous waste that is recycled at an on site facility if the hazardous waste is stored at the on site facility in compliance with this regulation.
- (6) Notice for the purposes of section 9 (2) of the Act must be given by completing and submitting Form 1 of Schedule 5 to the director.

[en. B.C. Reg. 375/2008, s. 17; am. B.C. Reg. 63/2009.]

**Provincial identification number**

- 44**
- (1) A person must not cause or allow a quantity of a category of hazardous waste greater than the quantity set out in Column II of Schedule 6 opposite that category to be transported unless
    - (a) the person receiving the hazardous waste is an authorized consignee,
    - (b) the person transporting the waste, if so required under section 45, has a licence to transport hazardous waste, and
    - (c) the person causing or allowing the hazardous waste to be transported,
      - (i) if required to obtain a generator registration number from a director under section 43, writes that number on every manifest the person is required to complete under section 10 (1) of the Act in the space marked “Provincial ID No.” in Part A of the manifest, or
      - (ii) if not required to obtain a generator registration number from a director under section 43, writes “not applicable” in the space marked “Provincial ID No.” in Part A of the manifest.
  - (2) A person must not transport a quantity of a category of hazardous waste greater than the quantity set out in section 46 (1) unless
    - (a) the person receiving the hazardous waste is an authorized consignee, and
    - (b) the person transporting the hazardous waste,
      - (i) if required to obtain a licence to transport from a director under section 45, writes the licence to transport number in the space marked “Provincial ID No.” in Part B of the manifest, or
      - (ii) if not required to obtain a licence to transport from a director under section 45, writes “not applicable” in the space marked “Provincial ID No.” in Part B of the manifest.

- (3) A person must not receive a quantity of a category of hazardous waste greater than the quantity set out in Column II of Schedule 6 opposite that category unless
- (a) the person is an authorized consignee, and
  - (b) the person,
    - (i) if required to obtain a registered site number from a director under section 43, writes the registered site number in the space marked “Provincial ID No.” in Part C of the manifest, or
    - (ii) if not required to obtain a registered site number from a director under section 43, writes the number from the written authorization of a director to receive the hazardous waste in the space marked “Provincial ID No.” in Part C of the manifest.

[en. B.C. Reg. 375/2008, s. 18.]

#### **Licence to transport**

- 45**
- (1) A person must not, after 90 days from the effective date of this regulation, transport by road hazardous waste for which a manifest is required without having a licence issued under this section.
  - (2) Subsection (1) does not apply
    - (a) to transportation solely within the boundaries of property owned, leased or controlled by the person who stores or generates the hazardous waste being transported, or
    - (b) if the hazardous waste is
      - (i) transported by the person who generated it, and
      - (ii) less than a quantity set out in Column II of Schedule 6.
  - (3) Every applicant for a licence under subsection (1) must complete the application in Form 2 of Schedule 5 and submit it to a director.
  - (4) A director may, on receipt of an application setting out the information referred to in subsection (3), issue a transport licence with such conditions as he considers necessary for the protection of the environment.
  - (5) Where a holder of a transport licence violates the terms of his or her licence or contravenes the Act or a regulation under the Act, a director may suspend or cancel his or her licence.
  - (6) Before suspending or cancelling a licence, a director must allow the licensee to make representations to the director and may hold a hearing on the matter.
  - (7) The carrier must keep or cause to be kept a copy of the licence in the cab of the vehicle while it is being used to transport hazardous waste.
  - (8) Where there is a substantial change in the circumstances under which hazardous waste is transported, so that the information provided in the application for the licence is no longer accurate, the licence is void.



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- (9) A holder of a licence to transport must not transport hazardous waste to a person unless that person is an authorized consignee.

[am. B.C. Regs. 10/89, s. 9; 319/2004, ss. 2 and 34; 375/2008, s. 19; 375/2008, ss. 1 and 19.]

**Classification of hazardous waste**

- 45.1** (1) In this section, “**shipping name**”, “**UN number**”, “**class**”, “**packing group**” and “**infectious substance category**” have the same meaning as in the federal dangerous goods regulations.
- (2) A person must not cause or allow hazardous waste to be transported unless the person classifies the waste in the following manner:
- (a) the person determines if the waste is hazardous waste within the meaning of section 1;
  - (b) if the waste is hazardous waste within the meaning of section 1 and is not subject to the federal dangerous goods regulations, the person
    - (i) identifies on the manifest the name of the hazardous waste listed in paragraphs (b) to (i) of the definition of “hazardous waste” in section 1, and
    - (ii) clearly labels the container in accordance with section 50 (3) (c) of this regulation;
  - (c) if the waste is hazardous waste within the meaning of section 1 and is subject to the federal dangerous goods regulations the person
    - (i) includes the following information on the manifest:
      - (A) the shipping name;
      - (B) the UN number;
      - (C) the class;
      - (D) either the packing group or the infectious substance category, as applicable, and
    - (ii) clearly labels the container in accordance with section 50 (3) (c) of this regulation.
- (3) A carrier must not accept a shipment of hazardous waste for transportation unless the following requirements are met:
- (a) if the waste is hazardous waste within the meaning of section 1 and is not subject to the federal dangerous goods regulations,
    - (i) the name of the hazardous waste listed in paragraphs (b) to (i) of the definition of “hazardous waste” in section 1 is identified on the manifest, and
    - (ii) the container in which the hazardous waste is transported is clearly labelled in accordance with section 50 (3) (c) of this regulation;
  - (b) if the waste is hazardous waste within the meaning of section 1 and is subject to the federal dangerous goods regulations,

- (i) the following information is on the manifest:
    - (A) the shipping name;
    - (B) the UN number;
    - (C) the class;
    - (D) either the packing group or the infectious substance category, as applicable, and
  - (ii) the container in which the hazardous waste is transported is clearly labelled in accordance with section 50 (3) (c) of this regulation;
- (4) A consignee must not accept hazardous waste unless the following requirements are met:
  - (a) if the waste is hazardous waste within the meaning of section 1 and is not subject to the federal dangerous goods regulations,
    - (i) the name of the hazardous waste listed in paragraphs (b) to (i) of the definition of “hazardous waste” in section 1 is identified on the manifest, and
    - (ii) the container in which the hazardous waste is transported is clearly labelled in accordance with section 50 (3) (c) of this regulation;
  - (b) if the waste is hazardous waste within the meaning of section 1 and is subject to the federal dangerous goods regulations,
    - (i) the following information is on the manifest:
      - (A) the shipping name;
      - (B) the UN number;
      - (C) the class;
      - (D) either the packing group or the infectious substance category, as applicable, and
    - (ii) the container in which the hazardous waste is transported is clearly labelled in accordance with section 50 (3) (c) of this regulation.

[en. B.C. Reg. 375/2008, s. 20.]

**Manifest requirements**

- 46** (1) For the purposes of section 10 (1) (a), (2) and (3) of the Act, the prescribed quantity of hazardous waste is
- (a) for solid hazardous waste, other than waste batteries, 5 kg,
  - (b) for liquid hazardous waste, other than waste oil, 5 L,
  - (c) for gaseous hazardous waste, any quantity that fits into a container that has a total liquid capacity of 5 L,
  - (d) for waste oil, 210 L,
  - (e) any quantity of liquid or solid hazardous waste that contain 500 grams or more of PCB,

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- (f) for waste batteries, 1 000 kg, and
  - (g) for waste paint, 210 L.
- (2) The transportation of hazardous waste is exempt from section 10 of the Act if
  - (a) the hazardous waste is transported only over property owned, leased or controlled by the consignor and the distance between the shipping site and the receiving site is less than 100 km,
  - (b) the hazardous waste is transported on a public road for less than 3 km, or
  - (c) the hazardous waste is transported by a homeowner or farmer from his or her home or farm directly to a facility operated by the government or, a municipality or an agent of the government or a municipality.
- (3) For the purposes of section 10 of the Act, the prescribed form of a manifest is
  - (a) if the hazardous waste being transported originated outside British Columbia, a form prescribed for that purpose by another province of Canada or by Canada, and
  - (b) if the hazardous waste being transported originated in British Columbia, a version of the “movement document”, as defined in section 4 of the Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (Canada), SOR 2005/149, that is issued, and imprinted with a unique manifest reference number, by the government.
- (4) A manifest under subsection (3) (a) must be completed in the manner set out in the regulations of the province or Canada, as applicable.
- (5) Subject to sections 47, 47.1 and 47.2, a manifest under subsection (3) (b) must be completed in accordance with the instructions printed on the back of the manifest.
- (6) A carrier must carry the manifest in accordance with the requirements for carrying a shipping document in the federal dangerous goods regulations and section 10 (2) of the Act when transporting hazardous waste.
- (7) A carrier who delivers hazardous waste to another carrier must provide the manifest relating to the hazardous waste to the next carrier.
- (8) A manifest must be filed in the following manner:
  - (a) the consignor must send the applicable copy of the manifest, with Parts A and B completed, to a director within 3 days after providing the manifest to a carrier;
  - (b) the consignee must send the applicable copy of the manifest, with Parts A, B and C completed, to a director, the consignor and the carrier who delivered the hazardous waste to the consignee within 3 days after receiving the hazardous waste.
- (8.1) If, after having made reasonable efforts to obtain the applicable copy of the manifest referred to in subsection 8 (b), the consignor is unable to obtain the applicable copy from the consignee, the consignor must notify a director within

10 days after having provided the manifest to a carrier that the consignor has been unable to obtain the applicable copy.

- (9) Consignors, carriers and consignees must retain the applicable copy of a manifest at their principal place of business in British Columbia for a period of 2 years after the hazardous waste is delivered to the consignee.

[en. B.C. Reg. 319/2004, s. 35; am. B.C. Regs. 261/2006, s. 26; 375/2008, s. 21.]

#### **Loads from multiple consignors**

- 47** (1) If a carrier collects hazardous waste with the same shipping name from more than one consignor to establish a bulk load, the carrier may use one manifest for the bulk load.
- (2) A carrier described in subsection (1) must
- (a) complete a multiple consignors' form in Form 3 of Schedule 5, or a form containing equivalent information, and attach it to the manifest, and
  - (b) before transferring the bulk load to a consignee,
    - (i) complete Parts A and B of the manifest, entering the word "multiple" for the company name and shipping site address in Part A, and
    - (ii) distribute copies of the manifest and multiple consignors' form as indicated on the multiple consignors' form.
- (3) On delivery of a shipment and documents by a carrier, a consignee must complete Part C of the manifest and retain the completed copy and copy C of the multiple consignors' form, or the form containing equivalent information, for a period of at least 2 years.
- (4) On completion of the shipment, the carrier must retain copy 2 of the manifest and copy B of the multiple consignors' form, or the form containing equivalent information, for a period of at least 2 years.

[en. B.C. Reg. 319/2004, s. 3; am. B.C. Regs. 261/2006, s. 27; 375/2008, s. 1.]

#### **Multiple carrier shipments**

- 47.1** (1) Where a consignor uses 2 or more carriers for a single shipment, the consignor must
- (a) use one manifest to record the shipment,
  - (b) complete Part A of the manifest and attach a multiple carriers form in Form 5 of Schedule 5, or a form containing equivalent information,
  - (c) complete Part B of the manifest by entering the words "see attached form" for the names of the carriers,
  - (d) send copy 1 of the manifest to the appropriate authority at the address shown on the reverse side of the manifest,
  - (e) attach the multiple carriers form referred to in paragraph (b) to copies 3, 4, 5 and 6 of the manifest and give it to the first carrier, and

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- (f) retain copies 2 and 6 of the manifest and copy D of the multiple carriers form, or the equivalent form, for a period of at least 2 years.
- (2) If 2 or more carriers transport a single shipment, each carrier must
  - (a) upon acceptance of shipment from the consignor or another carrier, complete and sign the multiple carriers form and carry it and the manifest in the vehicle with the shipment, and deliver these forms to the consignee after delivering the shipment, and
  - (b) retain a copy of copy 4 of the manifest and a copy of copy B of the multiple carriers form for a period of at least 2 years.
- (3) The consignee must
  - (a) complete Part C of the manifest,
  - (b) attach and distribute copies of the manifest and the multiple carriers form as indicated on the multiple carriers form, and
  - (c) retain copy 5 of the manifest and copy C of the multiple carriers form, or the equivalent form, for a period of at least 2 years.

[en. B.C. Reg 132/92, s. 28; am. B.C. Regs. 319/2004, s. 36; 375/2008, s. 1.]

**Shipments of multiple different wastes**

- 47.2** (1) Where a consignor ships more hazardous wastes than can be recorded on a single manifest, the consignor may use a single manifest to record the hazardous wastes shipped and must
- (a) complete a multiple wastes form in Form 6 of Schedule 5, or a form containing equivalent information,
  - (b) complete Part A of the manifest and enter the words “see attached form” for the description of the waste,
  - (c) send copy 1 of the manifest to the appropriate authority at the address shown on the reverse side of the manifest,
  - (d) attach the completed multiple different wastes form, or equivalent form, to the manifest and give it to the carrier to be kept in the vehicle and delivered to the consignee after delivery of the shipment, and
  - (e) retain copies 2 and 6 of the manifest and copy D of the multiple different wastes form, or the equivalent form, for a period of at least 2 years.
- (2) The carrier must
- (a) complete Part B of the manifest,
  - (b) carry the manifest and the multiple different wastes form in the vehicle and deliver these forms to the consignee after delivering the shipment, and
  - (c) retain copy 4 of the manifest and copy B of the multiple different wastes form, or the equivalent form, for a period of at least 2 years.
- (3) The consignee must
- (a) complete Part C of the manifest,

- (b) attach and distribute completed copies of the manifest and the multiple different wastes form, or the equivalent form, as indicated on the multiple different wastes form, and
- (c) retain copy 5 of the manifest and copy C of the multiple different wastes form, or the equivalent form, for a period of at least 2 years.

[en. B.C. Reg. 132/92, s. 28; am. B.C. Regs. 319/2004, s. 2; 375/2008, s. 1.]

**Storage of hazardous waste**

- 48** Parts 2 and 3 and sections 16, 42.3 (2) and (3) and 42.4 (1) to (6) do not apply to storage facilities storing less than the quantity set out in Column II of Schedule 6.

[en. B.C. Reg. 319/2004, s. 37.]

**Analytical methods**

- 49** (1) Samples of hazardous waste must be analyzed
- (a) by a method specified in this regulation,
  - (b) if this regulation does not otherwise specify a method for analyzing a sample of hazardous waste, by a method established under the *British Columbia Laboratory Methods Manual: 2005 — for the Analysis of Water, Wastewater, Sediment, Biological Materials and Discrete Ambient Air Samples*, Victoria, August 2005, as updated from time to time, published by the minister, and
  - (c) if neither this regulation nor the manual referred to in paragraph (b) provides a method for analyzing a sample of hazardous waste, by a method approved by a director.
- (2) A director may vary a method described in subsection (1) in whole or in part, if, in the director's opinion, an alternate method is more appropriate in relation to
- (a) particular hazardous wastes,
  - (b) particular waste management systems, or
  - (c) particular environmental circumstances.
- (3) If a director makes a variation under subsection (2), samples of hazardous waste to which the variation applies must be analyzed in accordance with that variation.

[en. B.C. Reg. 261/2006, s. 28; am. B.C. Reg. 375/2008, s. 1.]

**PART 8 – CONTAINERS FOR HAZARDOUS WASTE****Storage and transportation**

- 50** (1) For the purposes of this section, materials are compatible with one another when, under normal conditions of storage or transport,
- (a) hazardous waste will not be released into the environment,
  - (b) no heat, gas, corrosive or toxic substance is given off, and
  - (c) the effectiveness of the packaging of the hazardous waste is not reduced.

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- (2) Any person who
  - (a) transports hazardous waste, or
  - (b) is required to store hazardous waste in a container,must use a container that is designed, constructed or lined with materials that are compatible with the waste.
- (3) A person who uses a container to store or transport hazardous waste must
  - (a) keep the container closed at all material times during storage or transport,
  - (b) not open, handle, store or transport the container in a manner which may cause it to leak or rupture, and
  - (c) ensure that the outside of the container is clearly labeled with the shipping name of the hazardous waste it contains and, if the hazardous waste is a dangerous good, the class and UN number of that hazardous waste, both as set out in the federal dangerous goods regulations.
- (4) A person must not store or transport in the same container
  - (a) two or more hazardous wastes which are not compatible, or
  - (b) a hazardous waste which is not compatible with any substance placed in the container.
- (5) A person must not place hazardous waste in an unwashed container that previously held a material which is incompatible with that hazardous waste.
- (6) A person must not store or transport hazardous waste in a small inside container within a labpack unless
  - (a) the container is enclosed within an open head metal labpack which
    - (i) has a tight fitting gasketed lid, and
    - (ii) is lined with a plastic bag not less than 4 mil thick,
  - (b) the container is not leaking and is securely sealed,
  - (c) any container of liquid hazardous waste is put inside a clear plastic bag not less than 4 mil thick which is sealed before being placed inside the labpack,
  - (d) the waste within the container is identifiable either by
    - (i) the original label on the container, or
    - (ii) a new label applied to the container or plastic bag stating the correct shipping name,
  - (e) sufficient inert packing material is used to fill all spaces between the inside containers so as to prevent accidental breakage and leakage, and
  - (f) a list of the contents and size of each container is
    - (i) retained for inspection by an officer while the hazardous waste is being stored,
    - (ii) attached to the manifest while the hazardous waste is being transported, and

- (iii) attached, by the consignee, to the copies of the manifest which are sent to the appropriate authorities under the federal dangerous goods regulations.
- (7) A person must not use a container which contains residues of hazardous waste to hold, store or transport food, animal feed or a product which may directly become part of the human food chain.
- (8) A person must not store or transport hazardous waste unless it is placed in a container or otherwise secured so that under normal conditions of storage or transport the hazardous waste does not leak or escape into the environment.  
[am. B.C. Regs. 132/92, s. 30; 214/2004, s. 8; 319/2004, ss. 2 and 39; 261/2006, s. 29; 375/2008, s. 1.]

## **PART 9 – SPECIFIC EXEMPTIONS**

### **Application for change in requirements**

- 51**
- (1) Any person who seeks a change in the requirements of this regulation may make application to a director by completing and submitting the form containing the matters set out in Form 4 of Schedule 5.
  - (2) An application may be filed by an agent of the applicant, and unless a director authorizes otherwise, an obligation imposed by this section on an applicant may be carried out by the agent of the applicant.
  - (3) The applicant must, within 15 days from the date of signing the application,
    - (a) post at a conspicuous place, at or near the point where the hazardous waste is produced or managed, a signed copy of the application, and
    - (b) file with a director 2 signed copies of the application.
  - (4) The applicant must, if required by a director, do one or more of the following:
    - (a) publish a copy of the application in one or more newspapers specified by the director;
    - (b) serve a signed copy of the application on a person who, in the opinion of the director, may be adversely affected by the proposed change in requirements;
    - (c) display a copy of the application in one or more branch post offices of Canada Post Corporation.
  - (5) Any person who may be adversely affected by the proposed change in requirements may, within 30 days of the last date of
    - (a) posting under subsection (3) (a),
    - (b) publication, service or display under subsection (4), or
    - (c) any publication of the application in the British Columbia Gazettenotify a director in writing stating how the person may be affected.



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- (6) The applicant, if required by a director, must meet with a person or persons who, in the opinion of the director, may be adversely affected by the proposed change in the requirements to explain and clarify the intent of the application.
- (7) An applicant must demonstrate to the satisfaction of the director that
  - (a) the waste does not fit the criteria for classes 2 to 6, 8 or 9 of the federal dangerous goods regulations,
  - (b) the system used to manage or recycle the hazardous waste provides equal or better protection than the protection offered by this regulation, or
  - (c) site specific natural conditions mitigate the hazards associated with the hazardous waste,to such an extent that human health and the environment will not be substantially impaired.
- (8) A director may, on receipt of an application under this section
  - (a) request such additional information as the director requires to evaluate the application,
  - (b) refuse to grant the change in requirements, or
  - (c) grant all or part of the requested changes from any or all of the requirements of this regulation for a definite or indefinite period of time, and with such conditions as the director deems appropriate.
- (9) On the granting or refusing of the application, a director must serve a signed copy of the director's decision on the applicant and must give notice of it to all persons who have submitted written notification under subsection (5).
- (10) A director may cancel or amend a decision made under this section whenever
  - (a) new information shows that the previous decision was incorrect or incomplete,
  - (b) the previous decision was made in error, or
  - (c) the applicant provided incorrect material information in the application.
- (10.1) A director may cancel a previous decision at the request of the applicant.
- (11) Any decision made by a director under this section must be deemed to be a decision for purposes of Part 8 of the Act.

[am. B.C. Regs. 132/92, s. 31; 319/2004, ss. 2 and 40; 261/2006, s. 30; 375/2008, ss. 1 and 22.]

**Hazardous wastes from accidental spills or abandonment**

- 52** (1) A person is exempt from the requirements of this regulation for the purpose of managing hazardous waste that originates from an accidental spill, or the abandonment, of dangerous goods if the person satisfies a director that
- (a) the person will manage the hazardous waste in a manner that will not pose a threat to human health or the environment, and
  - (b) the exemption is in the public interest.

- (2) Part 7 of this regulation does not apply to an officer, as defined in the Act, during the performance of his or her duties where the officer is responding to an accidental spill or abandonment of dangerous goods.

[en. B.C. Reg. 132/92, s. 32; am. B.C. Reg. 319/2004, ss. 2 and 41.]

**Delisting**

- 53** (1) A director may approve test protocols or methods for the purposes of sections 19 (2) (b) and 21 (3) (b) and subsection (2).
- (2) If a director is satisfied on the basis of test protocols or methods approved under subsection (1) that a hazardous waste or a class of hazardous waste and the residue from the treatment or incineration of the hazardous waste or class does not pose a threat to human health or the environment if dealt with in accordance with the test protocol or method, the hazardous waste or class is exempt from this regulation when dealt with in accordance with the test protocol or method.

[en. B.C. Reg. 319/2004, s. 42.]

**PART 10 – TRANSITIONAL PROVISION****Transition – hazardous waste storage permits**

- 54** During the period that this provision is in force in accordance with section 141 (3) of the Act, despite the repeal of section 10 of the *Waste Management Act*, a director may
- (a) order that a specific permit issued under that section of the *Waste Management Act* authorizing the storage, treatment, disposal or recycling of hazardous waste remains valid and in force,
  - (b) exercise the authority under section 13 of the *Waste Management Act* in relation to a permit in respect of which the director has made an order under paragraph (a) as if that section had not been repealed, and
  - (c) cancel an order under paragraph (a).

[en. B.C. Reg. 319/2004, s. 43.]

## SCHEDULE 1

[en. B.C. Reg. 243/2016, App. 1, as am. by B.C. Reg. 195/2017, s. 1 (a).]

### DIOXIN TOXICITY EQUIVALENCY FACTORS

Column 1	Column 2
Congeners	Toxicity Equivalency Factor (TEF)
2,3,7,8-tetrachlorodibenzo-p-dioxin	1.00000
1,2,3,7,8-pentachlorodibenzo-p-dioxin	1.00000
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	0.10000
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	0.10000
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	0.10000
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	0.01000
octachlorodibenzo-p-dioxin	0.00030
2,3,7,8-tetrachlorodibenzofuran	0.10000
1,2,3,7,8-pentachlorodibenzofuran	0.03000
2,3,4,7,8-pentachlorodibenzofuran	0.30000
1,2,3,4,7,8-hexachlorodibenzofuran	0.10000
1,2,3,6,7,8-hexachlorodibenzofuran	0.10000
1,2,3,7,8,9-hexachlorodibenzofuran	0.10000
2,3,4,6,7,8-hexachlorodibenzofuran	0.10000
1,2,3,4,6,7,8-heptachlorodibenzofuran	0.01000
1,2,3,4,7,8,9-heptachlorodibenzofuran	0.01000
octachlorodibenzofuran	0.00030
PCB 77	0.00010
PCB 81	0.00030
PCB 126	0.10000
PCB 169	0.03000
PCB 105	0.00003
PCB 114	0.00003
PCB 118	0.00003
PCB 123	0.00003
PCB 156	0.00003
PCB 157	0.00003
PCB 167	0.00003
PCB 189	0.00003

**SCHEDULE 1.1**

[en. B.C. Reg. 243/2016, App. 1.]

**PAH TOXICITY EQUIVALENCY FACTORS**

Column 1	Column 2
PAH	Toxicity Equivalency Factor (TEF)
Benz(a)anthracene	0.10
Benzo(a)pyrene	1.00
Benzo(b)fluoranthene	0.10
Benzo(j)fluoranthene	0.10
Benzo(k)fluoranthene	0.10
Benzo(g,h,i)perylene	0.01
Chrysene	0.01
Dibenz(a,h)anthracene	1.00
Indeno(1,2,3,cd)pyrene	0.10

**SCHEDULE 1.2**

[en. B.C. Reg. 132/92, s. 34; am. B.C. Reg. 319/2004, s. 2.]

**EFFLUENT STANDARDS FOR HAZARDOUS WASTE FACILITIES**

Column 1	Column 2	Column 3
Parameter	Standard* for Discharges to the Environment or to Storm Sewers	Standard* for Discharges Directed to Municipal or Industrial Effluent Treatment Works
Physical		
pH	6.5 to 8.5**	5.0 to 11.0**
Temperature	32°C	—
Total suspended solids	20	—
Toxicity (limit bioassay – 50% survival of Rainbow trout after 96 hours)	100% effluent	50% effluent

**EFFLUENT STANDARDS FOR HAZARDOUS WASTE FACILITIES**

<b>Inorganics</b>		
Aluminum, dissolved	0.5	2.0
Ammonia, total (expressed as nitrogen)	2.0	—
Antimony, dissolved	0.25	0.5
Arsenic, dissolved	0.1	0.3
Barium, dissolved	1.0	2.5
Boron, dissolved	10.0	15.0
Cadmium, dissolved	0.05	0.1
Chromium, dissolved (hexavalent)	0.1	0.2
Chromium, total	0.5	1.0
Cobalt, dissolved	0.1	0.3
Copper, dissolved	0.1	0.3
Cyanide (weak acid dissociable)	0.1	0.2
Fluoride, dissolved	15	18
Lead, dissolved	0.1	0.3
Manganese, dissolved	0.5	1.0
Mercury, total	0.001	0.01
Molybdenum, dissolved	0.5	1.0
Nickel, dissolved	0.5	1.0
Selenium, dissolved	0.05	0.1
Tin, dissolved	0.5	1.0
Zinc, dissolved	0.2	0.5
<b>Organics</b>		
5 day Biochemical oxygen demand (BOD)	20	—
Dioxin TEQ	15 pg/L	15 pg/L
Oil	10	60
Phenol	0.2	0.5
Polychlorinated biphenyls, total	0.005	0.005
Total chlorinated phenol	0.006	0.05
Total organic halogens (as Cl)	1.0	1.0

\* Maximum concentration or range in (mg/L) unless otherwise specified. Pg/L is the abbreviation for picograms per litre

\*\* pH units are the negative log of the hydrogen ion concentration.

Note: Local municipal requirements may be more restrictive.

**SCHEDULE 2**

[en. B.C. Reg. 132/92, s. 35; am. B.C. Reg. 319/2004, s. 44.]

**EMISSION STANDARDS FOR THERMAL TREATMENT FACILITIES**

<b>Parameters</b>	<b>Maximum Concentration<sup>(1)</sup> (mg/m<sup>3</sup> unless otherwise indicated)</b>	<b>Averaging Period<sup>(2)</sup></b>	<b>Monitoring Method<sup>(3)</sup></b>
Carbon monoxide	55	4-hr RA	C
Hydrogen chloride	50	8-hr RA	C
Hydrogen fluoride	4	A	A
Nitrogen oxides (as NO <sub>2</sub> )	380	A	A
Opacity	5%	1-hr RA	C
Particulate matter	20	A	A
Sulphur dioxide	180	A	A
Total hydrocarbon (as methane)	32	A	A
Trace metals <sup>(4)</sup> :			
Class I (lead, antimony, copper, manganese, vanadium, zinc)	3.6	A	A
Class II (arsenic, chromium, cobalt, nickel, selenium, tellurium)	0.7	A	A
Class III (thallium, cadmium, mercury)	0.15	A	A

**NOTES:**

- (1) Concentrations are corrected to 11% oxygen and standard conditions of 20°C, 760 mm of mercury and dry basis.
- (2) Averaging period codes: RA means rolling average which is the moving time period over which the continuous monitoring data is averaged.  
A means as approved by a director.
- (3) Monitoring method codes: C means continuous.  
A means as approved by a director.
- (4) The concentrations prescribed apply to each individual metal.

**SCHEDULE 3**

[am. B.C. Regs. 319/2004, s. 2; 375/2008, s. 23.]

**WASTE PROHIBITED FROM SECURE DISPOSAL**

- 1 Liquids.
- 2 Waste materials which contain free liquids.
- 3 Containers with
  - (a) liquids, or
  - (b) waste materials which contain free liquids.
- 4 Empty waste containers unless they are crushed, shredded or similarly reduced in volume to the maximum practical extent.
- 5 Ignitable wastes.
- 6 Reactive wastes.
- 7 Wastes which contain greater than 1% (by mass) of total organic carbon excluding
  - (a) any organic carbon naturally contained in any soil, and
  - (b) any organic carbon occurring in a substance which is not a hazardous waste.
- 8 Wastes which contain halogenated organic compounds in total concentrations greater than or equal to 1 000 mg/kg.
- 9 Wastes which when subjected to the Modified Leachate Extraction Procedure referenced in Part 2 of Schedule 4 produce an extract which contains one or more contaminants in Column 1 of Table 1 of Schedule 4 in concentrations equal to or greater than the concentration specified for each contaminant in Column II of the Table.
- 10 Radioactive wastes.

## **SCHEDULE 4**

[am. B.C. Regs. 132/92, s. 36; 214/2004, s. 9; 319/2004, s. 45.]

### **ANALYTICAL METHODS**

*NOTE: This procedure is applicable to solids, liquids and mixtures of solids and liquids.*

#### **PART 1**

Repealed. [B.C. Reg. 214/2004, s. 9 (a).]

#### **PART 2 – MODIFIED LEACHATE EXTRACTION PROCEDURE**

##### **(1) Sampling**

- 1.1 For wastes with 0.5% solids weight by volume or greater, collect a sufficient amount of sample to provide approximately 100 g of solid material using techniques which ensure that the sample is representative of the waste.
- 1.2 If the waste has less than 0.5% solids weight by volume, collect at least 1 L of sample.

##### **(2) Equipment**

- 2.1 Sieve, 9.5 mm mesh opening, stainless steel or plastic material.
- 2.2 Stainless steel filtration unit, 142 mm diameter, minimum 1 L capacity, capable of sustaining a pressure of 5 kg/cm<sup>2</sup>, applied to the material to be filtered.
- 2.3 Membrane filter, 142 mm diameter, 0.45 µm diameter pore size, made of synthetic organic material such as cellulose acetate, cellulose nitrate, nylon or polycarbonate and which is compatible with the leachate to be filtered. Teflon is recommended for organic constituents.
- 2.4 Glass fibre prefilter, 124 mm diameter 3 µm to 12 µm pore size range.
- 2.5 Vacuum filtration unit, 90 mm diameter.
- 2.6 Membrane filter 90 mm diameter as per Step 2.3.
- 2.7 Glass fibre filter 70 mm diameter as per Step 2.4.



- 2.8 Solid waste rotary extractor – a device that rotates the bottles end over end about a central axis through 360°, with a speed of 10 rpm. The dimensions of the box will depend on the needs of each laboratory (Figure 1).

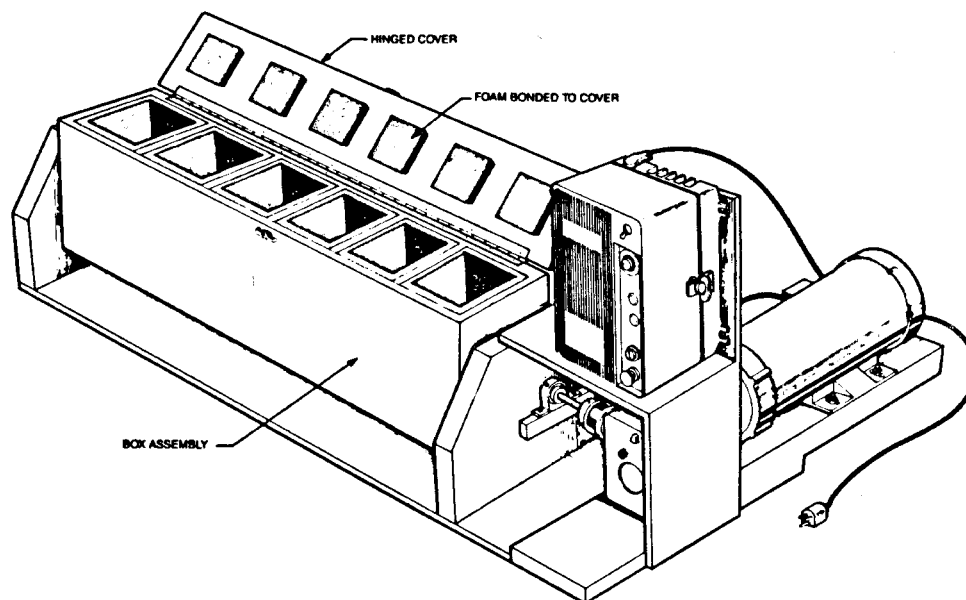
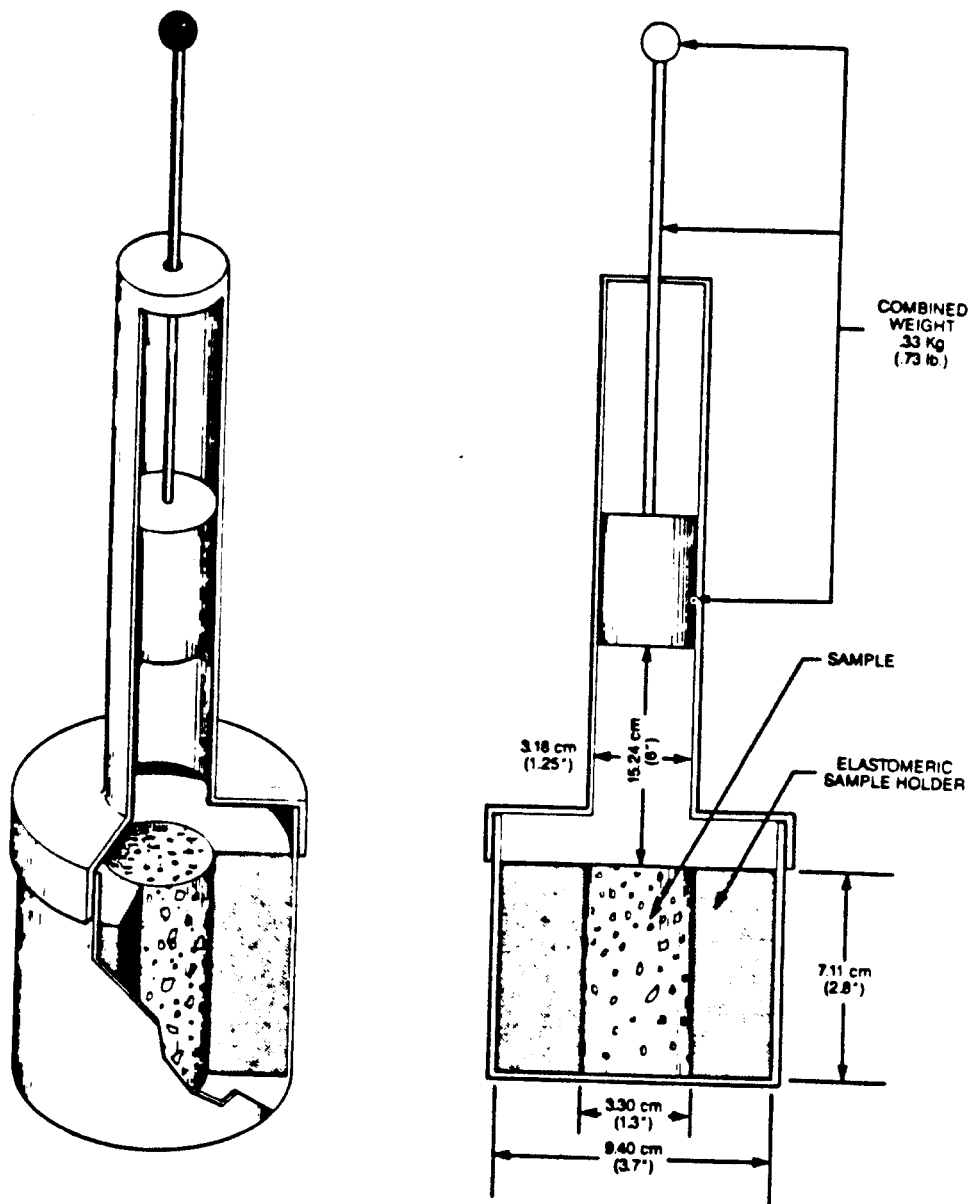


FIGURE 1  
SOLID WASTE ROTARY EXTRACTOR

- 2.9 Structural Integrity Tester with a 3.18 cm diameter hammer weighing 0.33 kg and having a free fall of 15.24 cm (Figure 2).



**FIGURE 2**  
**STRUCTURAL INTEGRITY TESTER**

- 2.10 pH meter, with a readability of 0.01 pH unit and accuracy of  $\pm 0.1$  pH units.
- 2.11 Cylindrical bottles, wide mouth, 1 250 mL capacity, polyethylene or glass with Teflon-lined cap for inorganic constituents; glass with Teflon-lined cap or Teflon bottles for organic constituents.

## 2.12 Cleaning Procedure

All glassware and equipment that comes into contact with the sample must be cleaned in the following way before each use:

- 2.12.1 Wash with a non-phosphate detergent solution.
- 2.12.2 Rinse twice with tap water.
- 2.12.3 Rinse twice with reagent water.
- 2.12.4 Wash with 10% nitric acids.
- 2.12.5 Rinse several times with reagent water.
- 2.12.6 Store bottles filled with 10% nitric acids, until ready to use.
- 2.12.7 Rinse several times with reagent water before use.
- 2.12.8 Rinse clean oven dried bottles with methylene chloride, followed by methanol, for organic constituents.

## **(3) Reagents**

- 3.1 Reagent water, Type IV (ASTM specification D1193).
- 3.2 Nitrogen gas, pre-purified, scrubbed through a molecular sieve.

## **(4) Separation procedure**

If the sample is not a dry solid separate it into its component phases using the following procedure:

- 4.1 Determine the dry weight of the solids in the sample at 60°C, using a well homogenized sample. Use this weight to determine the amount of material to be filtered.
- 4.2 Assemble the filtration unit with a filter bed consisting of a 0.45 µm pore size membrane filter and a coarse glass fibre pre-filter upstream of the membrane filter (per manufacturer's instructions).
- 4.3 Select one or more blank filters from each batch of filters. Filter 50 mL portions of reagent water through each test filter and analyze the filtrate for the analytical parameters of interest. Note the volume required to reduce the blank values to acceptable levels.
- 4.4 Wash each filter used in the leach procedure with at least this predetermined volume of water. Filter under pressure until no water flows through the filtrate outlet.
- 4.5 Remove the moist filter bed from the filtration unit and determine its weight to the nearest ± 0.01 g.
- 4.6 Re-assemble the filtration unit, replacing the filter beds, as before.
- 4.7 Commminute the sample, with a mortar and pestle, to a size that will pass through the opening of the filtration unit (less than 9.5 mm).
- 4.8 Agitate the sample by hand and pour a representative aliquot part of the solid and liquid phases into the opening of the filtration unit. Filter a sufficient amount of the sample to provide at least 60 g of dry solid material.

- 4.9 Pressurize the reservoir very slowly with nitrogen gas by means of the regulating valve on the nitrogen gas cylinder, until liquid begins to flow freely from the filtrate outlet.
- 4.10 Increase the pressure in increments of  $0.5 \text{ kg/cm}^2$  to a maximum of  $5 \text{ kg/cm}^2$ , as the flow diminishes. Continue filtration until the liquid flow ceases or the pressurizing gas begins to exit from the filtrate outlet of the filter unit.
- 4.11 De-pressurize the filtration unit slowly using the release valve on the filtration unit. Remove and weigh the solid material together with the filter bed to  $\pm 0.01 \text{ g}$ . Record the weight of the solid material.
- 4.12 Measure and record the volume and pH of the liquid phase. Store the liquid at  $4^\circ\text{C}$  under nitrogen until required in Step 5.8.
- 4.13 Discard the solid portion, if the weight is less than 0.5% (w/v) of the aliquot part taken and proceed to step 5.9. If not, proceed to Step 5.1.

Note: For mixtures containing coarse grained solids, where separation can be performed without imposing a  $5 \text{ kg/cm}^2$  differential pressure, a vacuum filtration unit with a filter bed as per Step 4.2 may be used. Vacuum filtration must not be used if volatile organic compounds are to be analysed.

#### (5) Extraction procedure

- 5.1 Prepare a solid sample for extraction by crushing, cutting or grinding, to pass through a 9.5 mm mesh sieve. If the original sample contains both liquid and solid phases, use the solid material from Step 4.13. The structural integrity procedure, Step 6, must be used for monolithic wastes which are expected to maintain their structural integrity in a landfill, (e.g. some slags and treated solidified wastes).

Note: Do not allow the solid waste material to dry prior to the extraction step.

- 5.2 Determine the moisture content of the de-watered sample, by drying a suitable aliquot part to constant weight at  $60^\circ\text{C}$  in an oven. Discard the dried solid material.
- 5.3 Place the equivalent of 50 g dry weight of the de-watered undried material into a 1 250 mL wide mouth cylindrical bottle. Use additional bottles if a larger volume of leachate is required for the analysis.
- 5.4 Add 800 mL (less the moisture content of the sample in mL) of reagent water to the bottle.
- 5.5 Cap the bottle and agitate it in the rotary extractor for 1 hour.
- 5.6 Add enough reagent water at the end of the extraction period so that the total volume of liquid is 1 000 mL.
- 5.7 Separate the material into its component liquid and solid phases as described under the Separation Procedure, Step 4. Discard the solid portion.

Note: It may be necessary to centrifuge the suspension at high speed before filtration, for leachates containing very fine grained particles.

- 5.8 Calculate the amount of free liquid from Step 4.12 corresponding to 50 g of the dry solid material. Add this amount to the leachate from Step 5.7.

**Note:** If the analysis is not performed immediately, store separate aliquot parts of the leachate at 4°C, after adding appropriate preservatives for the analytical parameters of interest.

- 5.9 If the weight of the solid portion in Step 4.1 was less than 0.5% (w/v), analyze the free liquid from Step 4.13; otherwise, analyze the combined solutions from Step 5.8 for contaminants listed in Table 1 of this Schedule that are likely to be present.
- 5.10 Report concentrations of contaminants in the combined leachate and the free liquid solution as mg/L.

**(6) Structural integrity procedure**

- 6.1 This procedure may be required prior to extraction for some samples as indicated in Step 5.1. It may be omitted for wastes with known high structural integrity.
- 6.2 Fill the sample holder with the material to be tested. If the sample of the waste is a large monolithic block, cut a portion from the block measuring 3.3 cm in diameter by 7.1 cm in length. For a treated waste (e.g. solidified waste) samples may be cast in a form with the above dimensions for the purposes of conducting this test. In such cases, the waste must be allowed to cure for 30 days prior to further testing.
- 6.3 Place the sample holder in the structural integrity tester, then raise the hammer to its maximum height and allow it to fall. Repeat this procedure 14 times.
- 6.4 Remove the material from the sample holder, and proceed to Step 5.2. If the sample has not disintegrated, it may be sectioned; alternatively use the entire sample (after weighing) and a sufficiently large bottle as the extraction vessel. The volume of reagent water to be initially added is 16 mL/g of dry sample weight. The maximum amount of 0.5 N acetic acid to be added is 4 mL/g of dry sample weight. The final volume of the leachate should be 20 mL/g of dry sample weight.

**PART 3 – FREE LIQUID TEST PROCEDURE**

**(1) Sampling**

Collect a minimum 100 g sample using techniques which ensure that the sample is representative of the waste.

**(2) Equipment**

- 2.1 Sieve, 9.5 mm mesh opening, stainless steel or plastic material.
- 2.2 Stainless steel filtration unit, 142 mm diameter, minimum 1 L capacity, capable of sustaining a pressure of 5 kg/cm<sup>2</sup>, applied to the solution to be filtered.
- 2.3 Membrane filter, 142 mm diameter, 0.45 µm diameter pore size, made of synthetic organic material such as cellulose acetate, cellulose nitrate, nylon or polycarbonate and which is compatible with the leachate to be filtered. Teflon is recommended for organic constituents.
- 2.4 Glass fibre pre-filter, 124 mm diameter, 3 µm to 12 µm pore size range.
- 2.5 Vacuum filtration unit, 90 mm diameter.
- 2.6 Membrane filter 90 mm diameter as per Step 2.3.

2.7 Glass fibre filter 70 mm diameter as per Step 2.4.

**(3) Separation procedure**

Separate the sample into its component phases using the following procedure:

- 3.1 Assemble the filtration unit with a filter bed consisting of a 0.45 µm pore size membrane filter and a coarse glass fibre pre-filter upstream of the membrane filter (per manufacturer's instructions).
- 3.2 Commminute the sample, with a mortar and pestle, to a size that will pass through the opening of the filtration unit (less than 9.5 mm).
- 3.3 Agitate the sample by hand and pour a representative aliquot part of the solid and liquid phases into the opening of the filtration unit.
- 3.4 Pressurize the reservoir very slowly with nitrogen gas by means of the regulating valve on the nitrogen gas cylinder. Increase the pressure in increments of 0.5 kg/cm<sup>2</sup> per minute to a maximum of 5 kg/cm<sup>2</sup>.
- 3.5 De-pressurize the filtration unit slowly using the release valve on the filtration unit.
- 3.6 Measure and record the volume of the liquid phase.

**Table 1**  
**Leachate Quality Standards**

The item column gives sequential item numbers for the entries in this Table.

Item	Column 1 Contaminant	Column 2 Concentration in Waste Extract (mg/L)
1	Aldicarb	0.9
2	Aldrin + Dieldrin ( <i>the concentration shown in column 2 is for aldrin and dieldrin together</i> )	0.07
3	Arsenic	2.5
4	Atrazine + N-dealkylated metabolites ( <i>the concentration shown in column 2 is for atrazine and N-dealkylated metabolites together</i> )	0.5
5	Azinphos-methyl	2.0
6	Barium	100.0
7	Bendiocarb	4.0
8	Benzene	0.5
9	Benzo(a)pyrene	0.001
10	Boron	500.0
11	Bromoxynil	0.5
12	Cadmium	0.5
13	Carbaryl/1-Naphthyl-N-methyl carbamate	9.0
14	Carbofuran	9.0
15	Carbon tetrachloride	0.5
16	Chloramines	300.0
17	Chlordane	0.7
18	Chlorobenzene	8.0

Schedule 4

19	Chlorpyrifos	9.0
20	Chromium	5.0
21	Copper	100
22	Cresols (total of all isomers)	200.0
23	Cyanazine	1.0
24	Cyanide	20.0
25	DDT (total of all isomers)	3.0
26	Diazinon	2.0
27	Dicamba	12.0
28	1,2-Dichlorobenzene	20.0
29	1,4-Dichlorobenzene	0.5
30	1,2-Dichloroethane	0.5
31	1,1-Dichloroethylene	1.4
32	Dichloromethane	5.0
33	2,4-Dichlorophenol	90.0
34	2,4-Dichlorophenoxyacetic acid	10.0
35	Diclofop-methyl	0.9
36	Dimethoate	2.0
37	2,4-Dinitrotoluene	0.13
38	Dinoseb	1.0
39	Diquat	7.0
40	Diuron	15.0
41	Endrin	0.02
42	Ethyl benzene	0.24
43	Ethyl methyl ketone	200.0
44	Fluoride	150.0
45	Glyphosate	28.0
46	Heptachlor + Heptachlor epoxide <i>(the concentration shown in column 2 is for Heptachlor and Heptachlor epoxide together)</i>	0.3
47	Hexachlorobenzene	0.13
48	Hexachlorobutadiene	0.5
49	Hexachloroethane	3.0
50	Lead	5.0
51	Lindane	0.4
52	Malathion	19.0
53	Mercury	0.1
54	Methoxychlor	90.0
55	Metolachlor	5.0
56	Metribuzin	8.0
57	1-Naphthyl-N-methyl carbamate	9.0
58	Nitrate	4500.0
59	Nitrate + Nitrite <i>(the concentration shown in column 2 is for Nitrate and Nitrite together)</i>	1000.0
60	Nitrilotriacetic acid	40
61	Nitrite	320.0

## Schedule 5

62	Nitrobenzene	2.0
63	Paraquat	1.0
64	Parathion	5.0
65	Parathion-methyl	0.7
66	Pentachlorophenol	6.0
67	Phorate	0.2
68	Picloram	19.0
69	Pyridine	5.0
70	Selenium	1.0
71	Silver	5.0
72	Simazine	1.0
73	Temephos	28.0
74	Terbufos	0.1
75	Tetrachloroethylene	3.0
76	Tetrachloromethane	0.5
77	2,3,4,6-Tetrachlorophenol	10.0
78	Toluene	2.4
79	Toxaphene	0.5
80	Triallate	23.0
81	Trichloroethylene	5.0
82	1,1,1-Trichloro-2,2-bis(p-methoxyphenyl) ethane	90.0
83	2,4,5-Trichlorophenol	400.0
84	2,4,6-Trichlorophenol	0.5
85	2,4,5-Trichlorophenoxyacetic acid	28.0
86	2-(2,4,5-Trichlorophenoxy) propionic acid	1.0
87	Trifluralin	4.5
88	Trihalomethanes (Total)	10.0
89	Uranium	10.0
90	Vinyl chloride	0.2
91	Xylenes	30.0
92	Zinc	500.0

**SCHEDULE 5****FORMS 1A AND 1B**

Repealed. [B.C. Reg. 261/2006, s. 31 (a).]

**FORM 1**

[en. B.C. Reg. 261/2006, s. 31 (a); am. B.C. Reg. 375/2008, s. 24.]

[s. 43]

**Registration Form**THIS FORM IS A REGISTRATION REPORT MADE UNDER  
SECTION 43 (1), (2) OR (4) OF THE HAZARDOUS WASTE REGULATION



Reason for Submittal:

☐ To provide an Initial Registration Report

☐ To provide Subsequent Notification of changes to a registration report for

Generator Registration (BCG) No. / Provincial ID No. .... Dated .....[dd/mm/yyyy]

**OR**

Registered Site (RS) No. .... Dated .....[dd/mm/yyyy]

If this is Subsequent Notification, please indicate what changes are being reported

☐ Facility Name Change      ☐ Mailing Address Change      ☐ Management Company Change

☐ Adding a Waste Type      ☐ Removing a Waste Type

☐ Changing Quantity of Previously Registered Waste(s)

☐ Other (Describe) .....

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**INSTRUCTIONS:**

- (1) A person required to register under section 43 (1) or (2) or to give notice under section 43 (4) must complete this form.
- (2) Identification numbers are site specific: complete a separate form for each hazardous waste site.
- (3) All persons must complete parts A and D. Part B is to be completed for facilities that generate hazardous waste. Part C is to be completed for management facilities. Some generator facilities may also be management facilities, and in that case, parts A, B, C and D must be completed. ***Note: a generator that temporarily stores hazardous waste before shipping it to a management facility is not considered to be a management facility.***
- (4) Send original Form 1 to: Regional Manager, Environmental Protection at the applicable regional office. Retain a copy for your records.
- (5) Please print or type the required information on the form.

**Definitions:**

Physical State:                      L=Liquid; S=Solid; G=Gas; SL=sludge.

Waste Identification:              Name of Waste: (a) TDG Regulations classified Hazardous Wastes – enter UN Number, TDG Class and waste name in accordance with TDG Regulations, (b) hazardous wastes not regulated by TDGR: enter “N/A” for UN Number and TDG Class, use defined hazardous waste name.

Generated/30-day period:          Estimate of amount generated.

Storage/Capacity:                   Maximum storage or capacity of the facility (under the regulation for each hazardous waste).

Units:                                      Use metric, litres or kilograms (L or kg).

Handling codes:                      01 storage; 02 thermal treatment; 03 chemical treatment;  
04 physical treatment; 05 biological treatment; 06 secure landfill;  
07 recycled; 08 solidification;  
09 other, please specify.....;  
10 land farming; 11 off site management.

**A. FACILITY INFORMATION:**

- (1) Registered corporate name (as filed with the Registrar of Companies in British Columbia).

Registered Name: .....

Trade Name: .....

Corporate Number issued by Registrar of Companies: .....

If the generator/facility owner is a partnership or proprietorship provide the full name of the principal(s).

.....  
.....

- (2) Corporate address (Full postal mailing address)

Street Address: .....

City: ..... Province:..... Postal Code:.....

- (3) Primary contact information at mailing address (Print Name, Telephone, Fax and email address)

Name: .....

Telephone Number: (.....)..... Fax Number: (.....).....

Email: .....

- (4) Facility/site physical address, PO Box is
- not
- acceptable.

Street Address: .....

City: ..... Province:..... Postal Code:.....

- (5) If no physical address can be provided for the site, complete the location coordinates below.

Latitude: ..... Deg. .... Min. .... Sec

Longitude: ..... Deg. .... Min. .... Sec

- (6) Standard Industrial Classification (SIC): .....

**Note: The SIC system was developed to provide a method to define and classify establishments according to their primary activity. Please provide the SIC code that best describes the activities of this facility/site.**

- (7) Are there any discharges from the facility? YES
- ☐
- NO
- ☐

If yes, indicate the nature of the discharge:

☐ Air Emission ☐ Effluent ☐ Residue (Solids, Sludge, etc.)

Describe the discharge: .....

- (8) If there are effluent discharges (as indicated above), indicate the receiving site:

Municipal Sewer YES ☐ NO ☐ Storm Sewer/Environment YES ☐ NO ☐**B. HAZARDOUS WASTE GENERATOR:**

**Note:** A generator ordinarily generates and stores hazardous waste onsite and ships the hazardous waste to a management or disposal facility. However, some generator facilities may also be management facilities. If a generator facility is also a management facility, the generator must also complete Part C.

- (1) Generator type (Sawmill, Restaurant, Petroleum Refinery, Residence, etc.)

.....

- (2) Source / process generating the Hazardous Waste (e.g. maintenance shop)

.....

- (3) List the name, address and License to Transport number of the principal intended hazardous waste carrier(s)/transporter(s) for each waste type; attach a separate sheet if necessary

.....

.....

.....

- (4) List the name and address of the principal intended receiver(s)/consignee(s) where you intend to ship the hazardous wastes generated for each waste type; attach a separate sheet if necessary

.....

.....

.....

- (5) Complete the following table:

Physical State	Waste Identification			Quantity		Units L or kg	Handling Code
	Name of Waste	TDG UN #	TDG Class	Generated / 30-day period	In Storage		
a)							
b)							
c)							
d)							
e)							

- (6) Is the mode of generation ongoing, intermittent or one-time only?

☐ Ongoing

☐ Intermittent

☐ One-time only

## C. HAZARDOUS WASTE MANAGEMENT FACILITY:

- (1) Check the appropriate box below:

Onsite Management Facility ☐

Receiver of Hazardous Waste ☐

Return Collection Facility (for household hazardous wastes) ☐

(2) Type of activity (Check all that apply)

☐ Store☐ Treat☐ Recycle☐ Dispose

(3) Complete the following table:

Physical State	Waste Identification			Quantity		Units L or kg	Handling Code
	Name of Waste	TDG UN #	TDG Class	Capacity			
a)							
b)							
c)							
d)							
e)							

**D. CERTIFICATION:**

1) I certify that the information provided on this form is correct and complete.

.....  
[print company name if applicable].....  
[print name].....  
[telephone number].....  
[fax number].....  
[signature].....  
[date (dd/mm/yy)]

2) If you are acting as an agent of the owner of the waste, please provide the information requested below and generator confirmation that you are acting on their behalf.

.....  
[print company name].....  
[print name].....  
[telephone number].....  
[fax number].....  
[signature].....  
[date (dd/mm/yy)]

---

GENERATOR/MANAGEMENT FACILITY AUTHORIZATION OF AGENT ARRANGEMENT:

.....  
[print name] [signature]

---

---

FOR MINISTRY USE ONLY:

DATE: ..... INITIALS: .....

Generator Registration (BCG) No. / Provincial ID No. ....

Registered Site (RS) # .....

**FORM 2**

[en. B.C. Reg. 261/2006, s. 31 (b).]

[s. 43]

**Province of British Columbia**APPLICATION FOR A LICENCE TO TRANSPORT  
HAZARDOUS WASTE

Ministry of Environment

I/we hereby apply for (check one)

☐ a licence to transport hazardous waste within the Province of  
British Columbia☐ a revision of a licence (number LT.....)☐ a renewal of a licence (number LT.....)File Number:  
66500-20/LT .....  
(office use only)

<b>SECTION 1</b>	<b>TRANSPORTER IDENTIFICATION</b>				
<b>Company Name</b>					
<b>Postal Mailing Address</b>	PO Box or Street	City	Prov/State	Country	Postal Code
<b>Phone Number:</b>	<b>Fax Number:</b>		<b>Cell Number:</b>		
<b>Email Address:</b>					
<b>NSC Number:</b>			<b>Date:</b>		
<b>Certificate of Registration under B.C. Business Corporations Act</b> (Please attach copy of certificate:)		<b>Registration Number:</b>		<b>Date:</b>	
<b>SECTION 2</b>	<b>HAZARDOUS WASTE TYPE</b>				
This undertaking relates to the transportation of the following wastes:					
	ANTIFREEZE		ENVIRONMENTALLY HAZARDOUS (Class 9)		PCBs
	ASBESTOS		FLAMMABLE LIQUIDS		PESTICIDES
	BATTERIES		FLAMMABLE SOLIDS		PETROLEUM PRODUCTS
	BIOMEDICAL		LAB PACKS		PHOTO IMAGING
	COMPRESSED GASES		LEACHABLE TOXIC		POISONS
	CONTAMINATED SOIL		OIL FILTERS		SOLVENTS
	CORROSIVE		OXIDIZING SUBSTANCES		WASTE CONTAINING DIOXINS
	DRY CLEANING		PAINT		WASTE CONTAINING PAHs
			OTHER		
by vehicles dispatched from an operation located at:					
<b>Dispatch Address</b>	PO Box or Street	City	Prov/State	Country	Postal Code

[If more than one address, attach list of all dispatch addresses]

RETAIN A COPY FOR YOUR RECORDS

Province of British Columbia  
Ministry of Environment

APPLICATION FOR A LICENCE TO TRANSPORT  
HAZARDOUS WASTE

<b>SECTION 3 VEHICLE DOCUMENTATION</b>						
<p>1. If <b>10 or fewer</b> vehicles/trailers are used for transporting hazardous waste, copies of the <b>registration and insurance</b> documents are required to be submitted to this office. <i>(A minimum \$5 million third party legal liability is required for each vehicle/trailer) or</i></p> <p>2. If <b>11 or more</b> vehicles/trailers are used to transport hazardous waste, a completed and dated fleet list may be used. In addition, a <b>current Certificate of Insurance/letter</b> from the insurance company <b>must</b> be attached indicating a minimum \$5 million third party legal liability for all vehicles/trailers noted on the fleet list.</p>						
<b>FLEET LIST - .....</b>						
<i>(Date)</i>						
Vehicle Year	Vehicle Make	Licence Plate No	Province or State	Net Load Capacity (kg or L)	Load Type (i.e. bags, bulk, barrels, roll off, tank, etc.)	Liability Insurance Coverage \$

*[Attach a separate sheet for additional vehicles/trailers operating under this licence]*

RETAIN A COPY FOR YOUR RECORDS

**Province of British Columbia**  
Ministry of Environment

APPLICATION FOR A LICENCE TO TRANSPORT  
HAZARDOUS WASTE

<b>SECTION 4</b>	<b>INSURANCE</b>
Liability Insurance provided by .. ..... is carried by the applicant on each vehicle.	

<b>SECTION 5</b>	<b>CERTIFICATION</b>	
I,		
<i>(Print Name)</i> , certify that I am aware of the requirements of the Hazardous Waste Regulation as related to the transportation of hazardous waste.		
<i>Print name of applicant</i>		<i>Signature of applicant</i>
<i>Date of Application</i>	<i>Telephone Number</i>	<i>Fax Number</i>

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**FORM 3 (s. 47)**

CREST PROVINCE OF BRITISH COLUMBIA [en. B.C. Reg. 132/92, s. 37; am. B.C. Reg. 109/2002, s. 1.]  
MINISTRY OF WATER, LAND AND AIR PROTECTION  
MANIFEST SUPPLEMENT - MULTIPLE CONSIGNORS

Instructions: The Carrier shall (a) complete this form;

(b) keep this form with the manifest;

(c) when the shipment has been completed:

Attach Copy A to Copy 1 of Manifest and mail to the appropriate authority in the jurisdiction where consignor is located

Attach Copy B to Copy 2 of Manifest and retain

Attach Copy C to Copy 5 of Manifest and deliver to consignee

Collection Point Information: Waste Name: ..... Reference Manifest No.: .....  
TDG Classification .....  
TDG Product Identification No. (PIN) .....

Name	Address	City	Postal Code	Telephone	Consignor Identification Number	Consignor's Signature	Quantity kg or L	Cumulative Total kg or L
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
						Total:		

Carrier's Name (Please Print): ..... Vehicle Licence Plate No. ....  
Date: .....(Y/M/D) Driver's Name: .....(Please Print) Driver's Signature .....

**FORM 4 (s. 51)**

[en. B.C. Reg. 132/92, s. 37; am. B.C. Reg. 319/2004, ss. 2 and 46.]

File No. .... (for official use)

**APPLICATION FOR A CHANGE IN REQUIREMENTS  
OF THE HAZARDOUS WASTE REGULATION**

Notice: A person who may be adversely affected by a change in requirements of the Hazardous Waste Regulation may, within 30 days from the last date of publishing, write to a director at ..... stating how the person is affected by the change.

1. I/We, .....  
(Full name, if a company, British Columbia registered name)  
of .....  
(Address, if a company, British Columbia registered address)  
hereby apply for a change in requirements of the Hazardous Waste Regulation.
2. The hazardous waste for which this application is made is from .....  
.....  
(Describe the process or operation which generated or is generating the hazardous waste)
3. The characteristics of the hazardous waste are as follows:  
.....  
.....  
(Describe hazardous waste characteristics. Attach documents as necessary)
4. The amount or generation rate of hazardous waste is .....  
.....  
(Give total volume or rate of waste generation over a specific time period)
5. The hazardous waste is: (give location or process for each as appropriate)  
☐ generated at .....  
☐ stored at .....  
☐ treated at .....  
☐ disposed of at .....
6. The hazardous waste is processed or treated by .....
7. Application is made to change the requirements of section(s) ..... of the Hazardous Waste Regulation because: (State reasons for change.)  
.....  
.....
8. The proposed changes are summarized as follows:
  - (a) Before:.....  
.....  
.....
  - (b) After:.....  
.....  
.....

Schedule 5

9. On .....,20..., a copy of this application was posted at or near the point where the hazardous waste is produced or managed.

10. Dated this ..... day of .....,20... .

.....  
(Print name of applicant or agent)

.....  
(Signature of applicant or agent)

Telephone No. ....

[REVERSE]

**ADDITIONAL INFORMATION**

1. In support of this application the following data is considered relevant: (List reports, references or data)

.....  
.....  
.....

**PUBLISHING ARRANGEMENTS**

If publishing of this Permit Application is required, Ministry staff can arrange for publication of the application. While there is no charge for this service, you will be responsible for expenses incurred in publishing the application in local newspapers. The undersigned applicant:

☐ will arrange for publication    ☐ requests that the Ministry arrange for publication

.....  
(Print name of applicant or agent)

.....  
(Signature of applicant or agent)

**AGENT AUTHORIZATION**

In order to assist in processing your application, your advice is requested as to whether you wish us to deal with you directly or through an agent. If you elect to appoint an agent, please complete the following:

I/We hereby authorize .....to deal with you directly on all aspects of the subject permit/amendment.

.....  
(Date)

.....  
(Signature of applicant)

**FORM 5 (s. 47.1)**

[en. B.C. Reg. 132/92, s. 37; am. B.C. Regs. 109/2002, s. 1; 319/2004, s. 2.]

**CREST** PROVINCE OF BRITISH COLUMBIA      MINISTRY OF WATER, LAND AND AIR PROTECTION      **MANIFEST SUPPLEMENT - MULTIPLE CARRIERS**

**CONDITIONS:**

This form can only be used as an attachment to a HAZARDOUS WASTE MANIFEST under the following conditions:

- (a) There is only one Consignor (Generator) and only one Consignee (Receiver) for the shipment described on the referenced manifest.
- (b) There are no additions to or deletions of waste from the consignment after the shipment leaves the consignor's site.
- (c) This form must be attached to the Reference Manifest and must be in the vehicle when the shipment is being transported.

**CONSIGNOR:** ..... **Reference Manifest No.:** .....

Carrier Name	Carrier LT#	Vehicle Registration (Lic. Plate No.)	Prov. or State	Date Carried		Shipping Locations		Carrier Signature
				Start YY/MM/DD	Finish YY/MM/DD	From	To	

I certify the above shipments have been made in compliance with all hazardous waste regulations.

.....  
 Consignor Contact Name (Please Print)      Signature      Telephone No.      FAX No.      Date (Y/M/D)

**INSTRUCTIONS:** When the shipment has been completed the Consignee (Receiver):

Attaches Copy A to Copy 3 of Manifest and mails to the appropriate authority in the jurisdiction where Consignee is located.

Attaches copies of Copy B to copies of Copy 4 of Manifest and returns to each Carrier.

Attaches Copy C to Copy 5 of Manifest and retains for 2 years.

Attaches Copy D to Copy 6 of Manifest and mails to Consignor.

**FORM 6 (s. 47.2)**

[en. B.C. Reg. 132/92, s. 37; am. B.C. Regs. 109/2002, s. 1; 319/2004, s. 2.]

CREST PROVINCE OF BRITISH COLUMBIA MINISTRY OF WATER, LAND AND AIR PROTECTION **MANIFEST SUPPLEMENT - MULTIPLE DIFFERENT WASTES**

**CONDITIONS:**

This form can only be used as an attachment to a HAZARDOUS WASTE MANIFEST under the following conditions:

- (a) There is only one Consignor (Generator) and only one Consignee (Receiver) for all of the waste listed on the referenced manifest and on this form.
- (b) There are no additions to or deletions of waste from the consignment after the shipment leaves the consignor's site.
- (c) The form must be attached to the Reference Manifest and must be in the vehicle when the shipment is being transported.

CONSIGNOR: .....

Reference Manifest No.: .....

Physical State S=solid L=liquid G=gas	Shipping Name of Waste	Waste Identification (TDGA/PIN)	Qty Shipped	Units L or Kg	Classification	Packing group	Packaging		Identify any Shipment Discrepancy Problems. Attach Addendum if Necessary	Decontamination			
							No.	Codes		Units Rec'd L or Kg	Packaging /Container		Vehicle
											Yes	No	Yes
											Yes	No	No

I certify the above shipments have been made in compliance with all hazardous waste regulations.

..... Consignor Contact Name (Please Print) Signature ..... Telephone No. ..... FAX No. ..... Date (Y/M/D)

INSTRUCTIONS: When the shipment has been completed the Consignee (Receiver):

- Attaches Copy A to Copy 3 of Manifest and mails to the appropriate authority in the jurisdiction where Consignee is located.
- Attaches copies of Copy B to copies of Copy 4 of Manifest and returns to each Carrier.
- Attaches Copy C to Copy 5 of Manifest and retains for 2 years.
- Attaches Copy D to Copy 6 of Manifest and mails to Consignor.

**SCHEDULE 6**

[en. B.C. Reg. 261/2006, s. 32.]

**TABLE 1**

[ss. 43, 48]

**REGISTRATION QUANTITIES**

	<b>Column I Category of Hazardous Waste</b>	<b>Column II Quantity (kg or L as appropriate)</b>
1	dangerous goods meeting the criteria for class 2.1 of the federal dangerous goods regulation	500*
2	dangerous goods meeting the criteria for class 2.2 of the federal dangerous goods regulation	1 000*
3	dangerous goods meeting the criteria for class 2.3 of the federal dangerous goods regulation	50*
4	dangerous goods meeting the criteria for class 3 of the federal dangerous goods regulation	500
5	dangerous goods meeting the criteria for class 4.1 of the federal dangerous goods regulation	1 000
6	dangerous goods meeting the criteria for Class 4.2 of the federal dangerous goods regulation	100
7	dangerous goods meeting the criteria for Class 4.3 of the federal dangerous goods regulation	100
8	dangerous goods meeting the criteria for Class 5.1 of the federal dangerous goods regulation	100
9	dangerous goods meeting the criteria for Class 5.2 of the federal dangerous goods regulation	5
10	dangerous goods meeting the criteria for Class 6.1 of the federal dangerous goods regulation	100
11	dangerous goods meeting the criteria for Class 6.2 of the federal dangerous goods regulation	100
12	dangerous goods meeting the criteria for Class 8 of the federal dangerous goods regulation, other than waste batteries	100
13	dangerous goods meeting the criteria for Class 9 of the federal dangerous goods regulation	500
14	PCB waste	5
15	biomedical waste	100
16	waste containing dioxin	5
17	waste oil whether or not contaminated with lead	5 000
18	waste asbestos	1 000
19	pest control product containers	500
20	waste pest control product	100
21	leachable toxic waste	500

Schedule 7

	Column I Category of Hazardous Waste	Column II Quantity (kg or L as appropriate)
22	waste containing tetrachloroethylene	200
23	waste containing polycyclic aromatic hydrocarbon	5
24	waste listed in Schedule 7	100
25	batteries that are hazardous waste	2 000

\* Total liquid volume of containers

### SCHEDULE 7

[en. B.C. Reg. 214/2004, s. 11.]

(s. 1 (1) "hazardous waste" (h.1))

#### Wastes

	Description
Type 1	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; and sludges from the recovery of these solvents in degreasing operations
Type 2	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, and trichlorofluoromethane; and the still bottoms from the recovery of these solvents
Type 3	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone; and methanol; and the still bottoms from the recovery of these solvents
Type 4	The following spent non-halogenated solvents: cresols and cresylic acid, nitrobenzene; and the still bottoms from the recovery of these solvents
Type 5	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulphide, isobutanol, and pyridine; and the still bottoms from the recovery of these solvents
Type 6	Wastewater treatment sludges from electroplating operations except for the following processes: (1) sulphuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (on a segregated basis) on carbon steel; (4) aluminum or aluminum- zinc plating on carbon steel; (5) cleaning, stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum
Type 7	Wastewater treatment sludges from the chemical conversion coating of aluminum
Type 8	Spent cyanide plating bath solutions from non-precious metal electroplating operations
Type 9	Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process
Type 10	Spent stripping and cleaning bath solutions from non-precious metal electroplating operations where cyanides are used in the process
Type 11	Quenching bath sludge from oil baths from non-precious metal heat treating operations where cyanides are used in the process

**Wastes**

Type 12	Spent cyanide solutions from salt bath pot cleaning from non-precious metal heat treating operations
Type 13	Quenching wastewater treatment sludges from non-precious metal heat treating operations where cyanides are used in the process
Type 14	Cyanidation wastewater treatment tailing pond sediment from mineral metals recovery operations
Type 15	Spent cyanide bath solutions from mineral metal recovery operations
Type 16	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol
Type 17	Wastewater treatment sludge from the production of chrome yellow and orange pigments
Type 18	Wastewater treatment sludge from the production of molybdate orange pigments
Type 19	Wastewater treatment sludge from the production of zinc yellow pigments
Type 20	Wastewater treatment sludge from the production of chrome green pigments
Type 21	Wastewater treatment sludge from the production of chromeoxide green pigments (anhydrous and hydrated)
Type 22	Wastewater treatment sludge from the production of iron blue pigments
Type 23	Oven residue from the production of chrome oxide green pigments
Type 24	Distillation bottoms from the production of acetaldehyde from ethylene
Type 25	Distillation side cuts from the production of acetaldehyde from ethylene
Type 26	Bottom stream from the wastewater stripper in the production of acrylonitrile
Type 27	Bottom stream from the acetonitrile column in the production of acrylonitrile
Type 28	Bottoms from the acetonitrile purification column in the production of acrylonitrile
Type 29	Still bottoms from the distillation of benzylchloride
Type 30	Heavy ends or distillation residues from the production of carbon tetrachloride
Type 31	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin
Type 32	Heavy ends from the fractionation column in ethyl chloride production
Type 33	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production
Type 34	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production
Type 35	Aqueous spent antimony catalyst waste from fluoromethanes production
Type 36	Distillation bottom tars from the production of phenol or acetone from cumene
Type 37	Distillation light ends from the production of phthalic anhydride from naphthalene
Type 38	Distillation bottoms from the production of phthalic anhydride from naphthalene
Type 39	Distillation light ends from the production of phthalic anhydride from ortho-xylene
Type 40	Distillation bottoms from the production of phthalic anhydride from ortho-xylene
Type 41	Distillation bottoms from the production of nitrobenzene by the nitration of benzene
Type 42	Stripping still tails from the production of methyl ethyl pyridines
Type 43	Centrifuge and distillation residues from toluene diisocyanate production
Type 44	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane
Type 45	Waste from the product stream stripper in the production of 1,1,1-trichloroethane
Type 46	Distillation bottoms from the production of 1,1,1-trichloroethane
Type 47	Heavy ends from the heavy ends columns from the production of 1,1,1-trichloroethane



**Wastes**

Type 48	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene
Type 49	Distillation bottoms from aniline production
Type 50	Process residues from aniline extraction from the production of aniline
Type 51	Combined wastewater streams generated from nitrobenzene or aniline production
Type 52	Distillation or fractionating column bottoms from the production of chlorobenzenes
Type 53	Separated aqueous stream from the reactor product washing step in the production of chlorobenzene
Type 54	By-product salts generated in the production of MSMA and cacodylic acid
Type 55	Wastewater treatment sludge from the production of chlordane
Type 56	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane
Type 57	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane
Type 58	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane
Type 59	Wastewater treatment sludges generated in the production of creosote
Type 60	Still bottoms from toluene reclamation distillation in the production of disulfoton
Type 61	Wastewater treatment sludges from the production of disulfoton
Type 62	Wastewater from the washing and stripping of phorate production
Type 63	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate
Type 64	Wastewater treatment sludge from the production of phorate
Type 65	Wastewater treatment sludge from the production of toxaphene
Type 66	Untreated process wastewater from the production of toxaphene
Type 67	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T
Type 68	2,6-Dichlorophenol waste from the production of 2,4-D
Type 69	Untreated wastewater from the production of 2,4-D
Type 70	Wastewater treatment sludges from the manufacturing and processing of explosives
Type 71	Spent carbon from the treatment of wastewater containing explosives
Type 72	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds
Type 73	Pink or red water from TNT operations
Type 74	Dissolved air flotation (DAF) float from the petroleum refining industry
Type 75	Slop oil emulsion solids from the petroleum refining industry
Type 76	Heat exchanger bundle cleaning sludge from the petroleum refining industry
Type 77	API separator sludge from the petroleum refining industry
Type 78	Tanks bottoms (leaded) from the petroleum refining industry
Type 79	Ammonia still lime sludge from coking operations
Type 80	Emission control dust or sludge from the primary production of steel in electric furnaces
Type 81	Spent pickle liquor from steel finishing operations
Type 82	Sludge from lime treatment of spent pickle liquor from steel finishing operations

**Wastes**

Type 83	Acid plant blowdown slurry or sludge resulting from the thickening of blowdown slurry from primary copper production
Type 84	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities
Type 85	Sludge from treatment of process wastewater or acid plant blowdown from primary zinc production
Type 86	Electrolytic anode slime or sludge from primary zinc production
Type 87	Cadmium plant leach residue (iron oxide) from primary zinc production
Type 88	Emission control dust or sludge from secondary lead smelting
Type 89	Waste leaching solution from acid leaching of emission control dust or sludge from secondary lead smelting use TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S.
Type 90	Brine purification muds from the mercury cell process in chlorine production where separately prepurified brine is not used
Type 91	Chlorinated hydrocarbon wastes from the purification step of the diaphragm cell process using graphite anodes in chlorine production
Type 92	Wastewater treatment sludge from the mercury cell process in chlorine production
Type 93	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead
Type 94	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
Type 95	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
Type 96	Residue from the use of activated carbon for decolourization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
Type 97	Decanter tank tar sludge from coking operations
Type 99	Wastes that on contact with water or air, emit toxic gases, vapours or fumes in sufficient quantity to present danger to human health or the environment
Type 100	Any cyanide or sulphide bearing waste liable, when exposed to pH conditions of not less than 2 and not greater than 12.5, to generate toxic gases in sufficient quantity to present danger to human health or the environment

**SCHEDULE 8**

Repealed. [B.C. Reg. 261/2006, s. 33.]