



Environmental Management Act

PETROLEUM STORAGE AND
DISTRIBUTION FACILITIES STORM
WATER REGULATION

B.C. Reg. 168/94

Deposited June 10, 1994 and effective September 1, 1994
Last amended September 1, 2023 by B.C. Reg. 177/2023

Consolidated Regulations of British Columbia

This is an unofficial consolidation.

B.C. Reg. 168/94 (O.C. 759/94), deposited June 10, 1994 and effective September 1, 1994, is made under the *Environmental Management Act*, S.B.C. 2003, c. 53, ss. 138 and 139.

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Environmental Management Act

**PETROLEUM STORAGE AND DISTRIBUTION FACILITIES
STORM WATER REGULATION**

B.C. Reg. 168/94

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SCHEDULE 1 [Repealed]

SCHEDULE 2 – DETERMINATION OF TOTAL EXTRACTABLE HYDROCARBONS

Interpretation

1 In this regulation:

“**effluent sample**” means a grab sample of effluent discharged by a petroleum storage and distribution facility that is taken just before the effluent is introduced into the environment;

“**operator**” means the person who is in charge and control of a petroleum storage and distribution facility and is accountable for its day to day operation;

“**petroleum**” means

- (a) refined hydrocarbons used as motive, aviation or heating fuel, or
- (b) waste oil;

“**petroleum storage and distribution facility**” means a facility, other than an oil refinery, situated at one location that stores petroleum in tanks;

“**separator**” means a device installed for the purpose of separating by gravity and capturing petroleum from water effluent;

“**separator system**” means a system consisting of a storm water drainage system and a separator;

“**storm water drainage system**” means a system consisting of catchment basins, piping or other works whose purpose is to collect rainwater and convey it from a fuel transfer area to a separator;

“**total extractable hydrocarbons**” means the sum of petroleum hydrocarbons 10-19 and 19-32 in water;

“**waste oil**” means waste oil as defined in B.C. Reg. 63/88, the Hazardous Waste Regulation.

[am. B.C. Regs. 321/2004, s. 21 (a); 177/2023, s. 1.]

Application

- 2** (1) Subject to subsections (2) to (5), this regulation applies to every petroleum storage and distribution facility in British Columbia.
- (2) Subject to compliance with this regulation, an operator may introduce hydrocarbon contaminated storm water effluent into the environment from a petroleum storage and distribution facility.
- (3) Repealed. [B.C. Reg. 321/2004, s. 21 (b).]
- (4) Notwithstanding any other provision of this regulation, if a director is satisfied on reasonable grounds that a substance is causing pollution, the director may, at any time, make an order under section 83 of the Act.
- (5) If a petroleum storage and distribution facility
- (a) has a cumulative storage capacity that does not exceed 100 000 litres,
 - (b) occupies a location for less than 180 consecutive days, or
 - (c) is part of a retail service station,
- the petroleum storage and distribution facility is exempt from sections 3 to 7.
- [am. B.C. Reg. 321/2004, s. 21 (b) to (d).]

Introduction of effluent into environment

- 3** (1) An operator may introduce effluent into the environment from a petroleum storage and distribution facility if the total extractable hydrocarbon in the effluent at any time does not exceed 15 mg/L.
- (2) For the purpose of subsection (1), the sampling protocol and analytical method for the determination of total extractable hydrocarbon is as set out in Schedule 2.
- [am. B.C. Reg. 177/2023, s. 2.]

Separator system or equivalent system

- 4** Every operator must construct and maintain a separator system or other system designed so that the effluent discharged from a petroleum storage and distribution facility complies with section 3.

Separator system design

- 5** Every operator of a separator system must ensure that the separator system required by section 4 complies with all of the following:
- (a) directs to the separator all drainage from a petroleum transfer area;
 - (b) receives only precipitation runoff, vehicular petroleum discharges and accidental discharges of petroleum from a petroleum transfer area;
 - (c) is designed and certified, by a professional engineer registered in British Columbia, to provide the hydraulic retention time required to separate droplets greater than 0.015 cm in diameter from storm water or is designed to another standard approved in writing by a director;

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- (d) is designed to prevent the discharge of an accidental spill by having
 - (i) a minimum volume of 1 000 litres,
 - (ii) a shutoff valve on the separator outlet, and
 - (iii) the capability to sample the effluent discharge from the separator outlet;
- (e) is designed for a 10 year return period storm event of 60 minutes duration for the nearest rainfall recording station;
- (f) is designed for a water temperature of 5 degrees Celsius and a petroleum specific gravity of 0.85;
- (g) is documented on a site plan which shows the location of the separator system, the areas serviced by the storm sewer and the point or points of discharge to the environment;
- (h) is constructed in accordance with the design referred to in paragraphs (c), (d), (e) and (f) and as depicted on the site plan referred to in paragraph (g), and certified as such by a professional engineer registered in British Columbia.

[am. B.C. Reg. 321/2004, s. 21 (c).]

Management of the separator system

- 6** (1) Subject to subsection (2), every operator must do all of the following:
- (a) visually inspect the separator system weekly, looking for any evidence of petroleum bypass or any other condition which might indicate malfunctioning of the separator;
 - (b) take action to correct any malfunction noticed under paragraph (a);
 - (c) measure monthly the thickness of accumulated petroleum on the surface of the separator;
 - (d) measure monthly the thickness of accumulated sludge in the bottom of the separator;
 - (e) measure the thickness of petroleum on the surface of the separator immediately following an accidental discharge of petroleum to the separator;
 - (f) record in the log referred to in subsection (4) (a)
 - (i) the results of the visual inspection required by paragraph (a),
 - (ii) the measurements required by paragraphs (c), (d) and (e), and
 - (iii) the details of any accidental discharge.
- (2) During periods of extended freezing temperatures, an operator may convert a separator to a spill interceptor by
- (a) emptying the separator,
 - (b) closing the outlet valve,

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- (c) recording the date that the separator is converted to a spill interceptor and returned to separator operation in the log referred to in subsection (4) (a), and
 - (d) discontinuing the inspections and measurements required under subsection (1) for the period of time that the separator functions as a spill interceptor.
 - (3) After each inspection and measurement required by subsection (1), the operator must
 - (a) immediately remove the accumulated petroleum from the surface of the separator if the accumulated thickness of petroleum exceeds 50 mm,
 - (b) immediately remove the accumulated sludge from the bottom of the separator if the accumulated thickness
 - (i) exceeds 150 mm, or
 - (ii) impairs the operation of the separator, and
 - (c) clean and inspect the separator, regardless of the accumulated thickness of petroleum and sludge, at least once every 2 years.
 - (4) Every operator must maintain, and make available on the request of an officer, the following records:
 - (a) an inspection and cleanout log for the separator which includes the date, visual appearance, measured thickness of oil and sludge layers, volume of oil and sludge removed, name and signature of the person entering the data and, if applicable, the name of the oil and sludge removal contractor;
 - (b) the date and quantity of accidental discharge of petroleum greater than 100 litres into the separator system;
 - (c) a copy of the site plan referred to in section 5 (g).
 - (5) The records required by subsection (4) must be kept for at least 2 years.
 - (6) An operator must not intentionally discharge or allow the intentional discharge of any substance into a separator system unless the substance is
 - (a) water, or
 - (b) water contaminated with hydrocarbon such that the resultant mixture is not waste oil.
 - (7) Notwithstanding subsection (6), an operator must not intentionally discharge or allow the intentional discharge of tank bottom water into a separator system.
 - (8) Every operator must close the separator outlet valve immediately after a petroleum spill is discovered and must not reopen the valve unless the thickness of accumulated petroleum on the surface of the separator is reduced to less than 50 mm.

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- (9) Every operator must institute a preventive maintenance, monitoring and inspection program to prevent the accidental discharge or spillage of petroleum products.
- (10) The program required by subsection (9) must include monthly or more frequent inspections of the following areas:
 - (a) hoses and nozzles at drum-filling and pump island areas;
 - (b) points at which petroleum is delivered into storage;
 - (c) truck loading racks;
 - (d) the equipment contained in pump cabinets;
 - (e) all visible joints, valves, flanges, and piping.
- (11) The results of the inspections required by subsection (10) must be maintained in a log format that includes the date, the name and signature of the inspector and a description of the corrective action taken.
- (12) Every operator must conspicuously display an emergency contact telephone number at all locations where petroleum transfer operations occur.
- (13) The inspections and actions under subsections (1) and (10) may be suspended after a period of 60 consecutive days during which no petroleum is transferred into or dispensed from the petroleum storage and distribution facility and, if suspended, must resume when petroleum transfer or dispensing is resumed.

Registration of petroleum storage and distribution facilities

- 7 Every operator must register with a director each petroleum storage and distribution facility under the operator's charge or control by submitting in writing to the director the following information:
 - (a) the name of the owner or operator;
 - (b) the address of the owner or operator;
 - (c) the address of the petroleum storage and distribution facility;
 - (d) the name and telephone number of a contact person;
 - (e) the number and total volume of tanks at the petroleum storage and distribution facility;
 - (f) the volume and capacity of any oil/water separator or treatment device at the petroleum storage and distribution facility;
 - (g) a description of the discharge point of all separators or treatment devices.

[am. B.C. Reg. 321/2004, s. 21 (e).]

Offence and penalty

- 8 (1) A person who contravenes section 3 (1), 4, 5, 6 or 7 commits an offence and is liable to a fine of not more than \$200 000.

- (2) A person who, with intent to mislead, submits false data under section 6 (4) or 7 commits an offence and is liable to a a fine of not more than \$200 000.

SCHEDULE 1

Repealed. [B.C. Reg. 321/2004, s. 21 (f).]

SCHEDULE 2

[en. B.C. Reg. 177/2023, s. 3.]

DETERMINATION OF TOTAL EXTRACTABLE HYDROCARBON

Sampling protocol

- 1** For the purposes of obtaining an effluent sample for the determination of total extractable hydrocarbons, the sampling protocol is as specified by the first of the following that applies:
 - (a) the director, by specifying the protocol on a publicly accessible website maintained by or on behalf of the director;
 - (b) the British Columbia Field Sampling Manual, 2013, as published by the ministry of the minister and as amended from time to time.

Analytical method

- 2** For the purposes of analysis of an effluent sample for the determination of total extractable hydrocarbons, the analytical method is as specified by the first of the following that applies:
 - (a) the director, by specifying the method on a publicly accessible website maintained by or on behalf of the director;
 - (b) the British Columbia Environmental Laboratory Manual, 2020, as published by the ministry of the minister and as amended from time to time.