

# **ENVIRONMENTAL PROTECTION ACT AIR QUALITY REGULATIONS**

# PLEASE NOTE

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For more information concerning the history of these regulations, please see the *Table of Regulations* on the Prince Edward Island Government web site (www.princeedwardisland.ca).

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Legislative Counsel Office Tel: (902) 368-4292 Email: legislation@gov.pe.ca



# ENVIRONMENTAL PROTECTION ACT Chapter E-9

# **AIR QUALITY REGULATIONS**

Pursuant to section 25 of the *Environmental Protection Act* R.S.P.E.I. 1988, Cap. E-9, Council made the following regulations:

#### 1. Definitions

In these regulations

- (a) "Act" means the Environmental Protection Act R.S.P.E.I. 1988, Cap. E-9;
- (b) "air" means the air surrounding the earth, but does not include air contained within a building or pressurized containers, or confined under the surface of the earth;
- (c) "biomedical waste" means waste that is generated by human or animal health care facilities and clinical testing or research laboratories, including
  - (i) human and animal anatomical waste,
  - (ii) infectious non-anatomical waste,
  - (iii) needles, sharp instruments and similar waste, and
  - (iv) chemical and pharmaceutical waste,

but does not include waste from animal husbandry or household in origin, or generated in the food production, general building maintenance and office administration of such facilities or laboratories;

- (d) "fuel-burning equipment" means any equipment, apparatus, device, mechanism or structure that burns solid, liquid or gaseous fuel for the purpose of vehicle transportation, heating, drying, generating power, processing steam or any combination thereof;
- (e) "**ground level**" means all that portion of the atmosphere beginning at one metre above the surface of the earth and extending vertically upwards for a distance of ten metres;
- (f) "hazardous substance" means any material that may pose a substantial threat or potential hazard to human health or the environment and includes those substances named in the Priority Substances List made under the *Canadian Environmental Protection Act* R.S.C. 1985 (4th Supp.), c. 16;
- (g) "**incinerator**" means any equipment, apparatus, device, mechanism or structure that is designed to incinerate waste, and that is capable of controlling the combustion temperature, the degree of gaseous mixing and the length of time that combustion gases reside in the incinerator;

- (h) "**industrial source**" means any facility, operation, activity or equipment but does not include fuelburning equipment or incinerators;
- (i) "permit" means an authority in writing, issued by the Minister pursuant to the Act or these regulations, to operate an undertaking;
- (j) "waste" means solid, liquid or gaseous waste and includes used lubricating oil. (EC377/92)

#### 2. Offence

(1) Subject to subsection 3(1), no person shall discharge a contaminant into the air from any industrial source, incinerator or fuel-burning equipment without a permit.

#### Idem

(2) Subject to subsection 3(1), no person shall discharge a contaminant into the air from an industrial source, incinerator or fuel-burning equipment which causes a concentration in the ambient air which is greater than the maximum concentration specified in a permit.

#### Determination of ambient air contaminant level

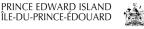
- (3) Maximum ambient air contaminant levels will be determined
  - (a) based on ground level concentration standards set out in Schedule A; or
  - (b) based on such factors as may be determined by the Minister. (EC377/92)

#### 3. Exemptions

- (1) In subsection 2(1) or (2), industrial source, incinerator or fuel-burning equipment, does not include
  - (a) motor vehicles, boats, aircraft and rail locomotives;
  - (b) equipment used on agricultural lands for seeding, harvesting, fertilizing or controlling pests and weeds or equipment used on forestry lands for forest management;
  - (c) a fire for the purpose of prevention or control of fires or the training of persons for fire fighting;
  - (d) the burning of brush for the purpose of clearing land for cultivation, a roadway, rail line, pipeline or any other right-of-way;
  - (e) a fire for the purpose of burning weeds or for forest management treatments;
  - (f) fuel-burning equipment used for the purpose of domestic comfort heating, recreation, or food preparation;
  - (g) fuel-burning equipment using fuel with a total sulphur content of less than 0.7% by weight; or
  - (h) a plant or operation for the grinding, mixing, drying, or dehydrating of primary agricultural products where
    - (i) the plant or operation burns fuel with a sulphur content of less than 0.7%, or
    - (ii) any emissions from the plant or operation do not contain contaminants.

#### Application, Fire Prevention Act

(2) Nothing in this section affects any requirement for a permit under the *Fire Prevention Act* R.S.P.E.I. 1988, Cap. F-11. (EC377/92)



### 4. Permit application

- (1) Every application for a permit or renewal of a permit, to operate an industrial source, incinerator or fuel-burning equipment shall
  - (a) be in the form set out in Schedule B with all the applicable information required thereunder;
  - (b) be signed by the applicant; and
  - (c) be accompanied by a fee in the amount required by section 4.1.

#### Information

(2) The applicant shall provide the Minister such additional information as the Minister may require. (EC377/92; 639/93; 161/04)

#### 4.1 Initial permit

- (1) The fee payable for an application for an initial permit under section 4 or 6 shall be
  - (a) made payable to the Provincial Treasurer;
  - (b) based on reasonable projections of fuel consumption made by the applicant and acceptable to the Minister; and
  - (c) in the amount as set out in Schedule D; and

#### Fees for permit

(2) The application fee for a permit or a renewal of a permit shall be in the amount as set out in Schedule D. (EC161/04; 423/04)

#### 5. Issue or refusal of permit

- (1) When an application for a permit containing the information required by section 4 has been received, the Minister shall either
  - (a) issue a permit authorizing the operation of the industrial source, incinerator, fuel-burning equipment, as the case may be, subject to any terms and conditions that the Minister considers appropriate; or
  - (b) refuse to issue a permit by written notice to the applicant indicating reasons for the refusal.

#### **Terms**

(2) The terms and conditions imposed under subsection (1) may be any or all of those set out in Schedule C.

#### **Expiry of permit**

(3) A permit issued under this section expires 12 months after the date of issue and may be renewed under section 4.

#### **Expiry of earlier permits**

- (3.1) For the avoidance of doubt, all permits issued prior to the coming into force of this subsection expire on the earlier of
  - (a) the expiry date stated in the permit; and
  - (b) the date that is 12 months from the date this subsection comes into force.

#### Alteration of terms

- (4) The Minister may, at any time, after issuing a permit revoke the permit or impose additional terms or alter the terms and conditions of the permit, where the Minister believes on reasonable and probable grounds that continued operation of the industrial source, incinerator or fuel-burning equipment, is or may be
  - (a) injurious to the health or safety or comfort of the public;
  - (b) injurious or damaging to property, plant or animal life;
  - (c) an interference with normal business;
  - (d) obnoxious to the public; or
  - (e) a threat to environmental health for any other reason.

#### Sale, etc.

(5) If an industrial source, incinerator or fuel-burning equipment is sold, leased or otherwise disposed of, the permit in respect thereof expires immediately on the date of the sale, lease or other disposition. (EC377/92; 161/04)

#### 6. Renewal

A permit may be renewed if

- (a) the application for renewal of a permit includes
  - (i) the existing permit number,
  - (ii) all details respecting any changes in the documentation and information with respect to the existing permit as outlined in Schedule B,
  - (iii) the renewal fee in the amount required by section 4.1, and
  - (iv) any other information required by the Minister; and
- (b) the application for renewal is filed with the Minister at least 30 days prior to the expiration of a permit. (EC377/92; 639/93; 161/04)

# 7. Accidental or emergency release or discharge

Where any accidental, emergency or unauthorized release or discharge of a contaminant into the air occurs the person in charge of the undertaking which caused the release or discharge shall immediately inform the Canadian Coast Guard at telephone number 1-800-565-1633, or such other number as may be listed, and within seven calendar days of the occurrence, submit a written report to the Minister specifying

- (a) the date and time of the release or discharge;
- (b) the duration of the release or discharge;
- (c) the composition of the release or discharge showing
  - (i) the concentration of air contaminants,
  - (ii) the emission rate, and
  - (iii) the total amount, by weight;
- (d) a description of the circumstances leading to the release or discharge;
- (e) the steps and procedures taken to control the release or discharge, as well as those taken to prevent similar releases or discharges in the future; and
- (f) the steps and procedures taken to clean up the release or discharge. (EC377/92)



#### 8. Prohibited burning

- (1) No person shall burn, except where authorized by and in accordance with a valid and subsisting permit the following materials:
  - (a) used lubricating oil;
  - (b) hazardous substances;
  - (c) biomedical waste;
  - (d) motor vehicle tires;
  - (e) animal or human cadavers;
  - (f) railway ties and other wood treated with wood preservatives;
  - (g) waste materials from building or construction sites, or resulting from building demolition, unless permitted under the *Fire Prevention Act*;
  - (h) trash, garbage, litter or other waste from commercial, industrial or municipal operations;
  - (i) materials containing rubber or plastic;
  - (j) spilled oil or oil production by-products except as may be required for the purposes of forest management or fire suppression treatment;
  - (k) materials disposed of as part of reclamation operations; or
  - (1) animal manure.

#### Idem, public disposal site

(2) No person shall burn or permit to be burned any waste, garbage or litter at a public disposal site, except where authorized by the Minister in writing.

#### Idem

(3) No person shall burn or permit to be burned in any industrial source, fuel-burning equipment or incinerator, fuel or waste which the source, equipment or incinerator was not designed to burn.

#### Idem

(4) No person shall burn or permit to be burned in any industrial source, fuel-burning equipment or incinerator, fuel or waste at a greater rate than that rate for which the source, equipment or incinerator was designed. (EC377/92)

# 9. Storage, etc.

(1) No person shall, without a permit, store, handle, use or transport any solid, liquid or gaseous material or substance in such a manner that a contaminant is discharged into the air.

#### **Exception**

(2) Subsection (1) does not apply to the storage, handling or use of any solid, liquid or gaseous material or substance for domestic or transportation purposes. (EC377/92)

#### 10. Offence, penalty

Any person who violates any provision of these regulations or fails to comply with any condition of a permit or fulfil any obligation imposed on him by these regulations is guilty of an offence and is liable on summary conviction to the penalties specified in section 32 of the Act. (EC377/92)

# **SCHEDULE A**

# AMBIENT AIR CONTAMINANT GROUND LEVEL CONCENTRATION STANDARDS

Contaminant (1)

Maximum Allowable Average Concentrations For Applicable Time Period (2)

Carbon Monoxide Hydrogen Sulphide Sulphur Dioxide Nitrogen Dioxide	1 Hour 35 mg/m <sup>3</sup> 15 μg/m <sup>3</sup> 900 μg/m <sup>3</sup> 400 μg/m <sup>3</sup>	8 Hours 15 mg/m <sup>3</sup>	24 Hours 5 μg/m <sup>3</sup> 300 μg/m <sup>3</sup>	Annual $60~\mu g/m^3$ $100~\mu g/m^3$
Total Suspended Particulates			$120~\mu\text{g/m}^3$	$70~\mu g/m^{3*}$

<sup>\*</sup> Geometric Mean

- (1) Sampling will be in a manner and location specified by the Minister
- (2) The values shown in this Schedule are the highest air contaminant concentrations which are normally allowed in the ambient air at ground level near industrial sources, incinerators and fuel burning equipment.

(EC377/92)

#### **SCHEDULE B**

#### APPLICATION FOR A PERMIT TO OPERATE AN INDUSTRIAL SOURCE, INCINERATOR OR FUEL-BURNING EQUIPMENT

Facility Information					
Business Name:					
Mailing Address:Telephon	e:				
	Postal Code:				
	Tax #:				
[ ] Industrial Source	[ ] Existing Operation				
[ ] Incinerator	New Operation				
[] Fuel-burning Equipment	[ ] Alteration to existing operation				
Signature of Applicant	Date:				
Site Information					
(1) A may or maps of the area within 500	metres of the land on which the undertaking is				
located or is proposed to be located showing	e e				
(a) the topography of the area, including	g land contours:				
(u) the topography of the area, merading fand contours,					

- - (b) the locations and description of buildings in the area;
  - (c) the property boundaries; and
  - (d) the land use of the area.

#### Plan

- (2) A plan of the site on which the industrial source, incinerator or fuel-burning equipment is located showing
  - (a) the exact or proposed location of the processing, manufacturing, fuel-burning, drying, storage or other equipment;
  - (b) the points or areas of emission of all contaminants and their proposed elevation;
  - (c) the location and description, including dimensions, of all buildings on the site; and
  - (d) the location of all air contaminant control equipment.

#### Emissions Information

- (3) Specific information with respect to the industrial source, incinerator or fuel-burning equipment including
  - (a) an overall description of the process, the expected production capacity, the maximum design production capacity and the hours of operation on a daily as well as an annual basis;
  - (b) a detailed description of the fuel-burning, manufacturing, drying or other sub-processes which directly result in the emission of air contaminants;
  - (c) a description and the amounts of raw materials, chemicals or other processing materials that are used;
  - (d) the size and capacity of the major pieces of processing equipment;
  - (e) the size, capacity, and design efficiency and description of the air contaminant control equipment;
  - (f) the expected operational availability and the normal or expected preventive maintenance requirements for the air contaminant control equipment;
  - (g) an overall flow diagram showing all major process equipment and expected flow rates, temperatures, pressures or other process operating variables which are relevant to the emission of air contaminants;
  - (h) the composition, volumetric flow rate, velocity and temperature of every discharge to the air under normal and maximum production conditions;
  - (i) the mass rate of release into the ambient air of all air contaminants on a daily as well as an annual basis, under normal and maximum production conditions;
  - (j) information as to whether the composition of any discharge to the air or the release rate of any air contaminant will vary under different production rates, during start up, shut down or upset conditions;



- (k) the calculated ground level concentration at the source property boundary of all air contaminants released under normal and maximum production conditions;
- (1) a description of the procedures that will be followed to prevent or minimize the discharge of air contaminants in the event of a power failure, a malfunction of the air contaminant control equipment or a processing equipment failure;
- (m) the proposed method and frequency of measuring air contaminant emission rates, including the procedures to be used;
- (n) the proposed method and frequency of ambient air monitoring including the equipment, the analytical procedures to be used and the location of ambient air monitoring systems; and
- (o) a materials balance which includes the following items:
  - (i) raw materials, chemicals and any other processing materials,
  - (ii) finished products and by-products, and
  - (iii) contaminants emitted respectively to air, land and water.

#### Specific information

- (4) Specific information about an incinerator including
  - (a) the type of undertaking to be served by the incinerator;
  - (b) the type and quantity of material to be incinerated on a daily and annual basis;
  - (c) the intended manner and frequency of operation of the incinerator;
  - (d) specification as to
    - (i) the size and capacity of the incinerator,
    - (ii) the method of charging the material into the incinerator,
    - (iii) the type and size of grate or hearth,
    - (iv) the maximum operating temperature,
    - (v) the provisions made for supplying fresh air for combustion, and
    - (vi) the retention time of gases in the combustion chambers,
    - (vii) the stack dimensions;
  - (e) plans and specifications for the proposed incinerator.

(EC377/92)

# **SCHEDULE C**

#### TERMS AND CONDITIONS

A permit may contain terms and conditions

- (a) requiring the operation of any equipment designed to control or eliminate the discharge of an air contaminant;
- (b) requiring that equipment designed to control or eliminate the discharge of an air contaminant be operated in a specified manner or at a specified minimum control efficiency:
- (c) requiring a specified level of maintenance or inspection of equipment designed to control or eliminate the discharge of an air contaminant;
- (d) specifying limits on the rate of emission or the total amounts of an air contaminant released to the ambient air;
- (e) specifying the maximum ambient air concentrations of an air contaminant in the immediate area of the industrial source;
- (f) requiring measurements of the rate or emission or the concentration of an air contaminant in the ambient air;
- (g) requiring the measurement or monitoring of meteorological conditions that have a bearing on the dispersion of an air contaminant;
- (h) requiring the collection of information, statistics or other data regarding operating conditions or circumstances that have a bearing on the emission of an air contaminant;
- (i) requiring the disposal of any wastes generated as a result of the control of an air contaminant in a manner or in a location acceptable to the Minister and consistent with any other Act or regulations governing the disposal of wastes;
- (j) specifying the nature, content and timing of reports to be submitted with respect to any condition contained in the permit;
- (k) requiring or specifying any other matter or thing that the Minister considers advisable in the circumstances.

(EC377/92)

# **SCHEDULE D**

#### FEE STRUCTURE

#### Part 1 Fuel-Burning Equipment (Heavy Fuel Oil Users)

Class 1A source, if the source has a permitted rate of release of one or more of the following:

- (a) sulphur dioxide > 1,000 tonnes per year, or
- (b) particulate matter > 1,000 tonnes per year

\$42,000 per year

Class 1B source, if the source has a permitted rate of release of one or more of the following:

- (a) sulphur dioxide > 500 tonnes per year, but ≤ 1,000 tonnes per year
- (b) particulate matter > 500 tonnes per year, but ≤ 1,000 tonnes per year

\$15,000 per year

Class 2 source, if the source has a permitted rate of release of one or more of the following:

- (a) sulphur dioxide > 250 tonnes per year, but ≤ 500 tonnes per year
- (b) particulate matter > 250 tonnes per year, but ≤ 500 tonnes per year

\$5,000 per year

Class 3 source, if the source has a permitted rate of release of one or more of the following:

- (a) sulphur dioxide > 100 tonnes per year, but  $\le 250$  tonnes per year
- (b) particulate matter > 100 tonnes per year, but  $\le 250$  tonnes per year

\$2,000 per year

Class 4 source, if the source has a permitted rate of release of one or more of the following:

- (a) sulphur dioxide > 10 tonnes per year, but ≤ 100 tonnes per year
- (b) particulate matter > 10 tonnes per year, but  $\le 100$  tonnes per year

\$500 per year

Class 5 source, if the source has a permitted rate of release of one or more of the following:

- (a) sulphur dioxide  $\leq 10$  tonnes per year
- (b) particulate matter ≤ 10 tonnes per year

\$100 per year

#### Part 2 Incinerators

- 1. Quantity of material incinerated  ${\leq}500$  tonnes per year: \$100 per year
- 2. Quantity of material incinerated > 500 tonnes per year: \$100 per year plus \$10 for each



additional 100 tonnes (or fraction thereof) of material incinerated

#### Part 3 Industrial Sources (Asphalt Plants and Used Oil Burners)

- 1.  $\leq$ 15,000 litres fuel burned per year, \$100 per year
- $2.>15,\!000$  litres fuel burned per year, \$100 per year plus \$10 for each additional 15,000 litres (or fraction thereof) of fuel burned

(EC423/04)