

PLEASE NOTE

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This document is *not* the official version of these regulations. The regulations and the amendments printed in the *Royal Gazette* should be consulted to determine the authoritative text of these regulations.

For more information concerning the history of these regulations, please see the *Table of Regulations*.

If you find any errors or omissions in this consolidation, please contact:

Legislative Counsel Office Tel: (902) 368-4291 Email: legislation@gov.pe.ca

CHAPTER E-9

ENVIRONMENTAL PROTECTION ACT

HOME HEAT TANKS 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 (1) In these reculations	
1. (1) In these regulations	Definitions
(a) "Act" means the <i>Environmental Protection Act</i> R.S.P.E.I. 1988, Cap. E-9;	Act
(b) "alter" means to repair, replace, upgrade, move or remove any part of a home heat tank system;	alter
(c) "combustible tank stand" means any wooden stand that supports a home heat tank and does not meet a fire-resistance rating that is acceptable to the Fire Marshall or the Deputy Fire Marshall;	combustible tank stand
(d) "CSA" means the Canadian Standards Association;	CSA
(e) "Deputy Fire Marshall" means the person appointed as the Deputy Fire Marshall under clause 2(b) of the <i>Fire Prevention Act</i> R.S.P.E.I. 1988, Cap. F-11;	Deputy Fire Marshall
(f) "double-bottom tank" means a primary tank that has(i) an additional bottom capable of being pressurized, and(ii) a means to monitor for leaks in the interstitial space between the two bottoms;	double-bottom tank
(g) "double-walled metallic tank" means a metallic home heat tank that is constructed with secondary containment and leak detection;	double-walled metallic tank
(h) "Fire Marshall" means the person appointed as the Fire Marshall under clause 2(c) of the <i>Fire Prevention Act</i> ;	Fire Marshall
(i) "Holland College" means Holland College as established by subsection 2(1) of the <i>Holland College Act</i> R.S.P.E.I. 1988, Cap. H-6;	Holland College
(j) "home heat tank" means an aboveground petroleum storage tank forming a part of a home heat tank system that has a total capacity of 2200 litres or less, that is used to store petroleum for heating residential, commercial or other premises;	home heat tank

home heat tank system

(k) "home heat tank system" includes

(i) a home heat tank, or

2

ULC

vent pipe

(ii) two or more home heat tanks and the piping connecting those tanks: (1) "identification tag" means an identification tag in the form identification tag required by Form 4 that is intended to be permanently affixed to a home heat tank: (m) "inside tank" means a home heat tank that is installed inside a inside tank building; (n) "inspector's licence" means a home heat tank inspector's licence inspector's licence issued under subsection 4(2): (o) "installer's licence" means a home heat tank installer's licence installer's licence issued under subsection 3(2); (p) "licensee" means a person who holds a valid installer's licence or licensee valid inspector's licence; (q) "manufacturer's label" means a label by which a home heat tank manufacturer's label manufacturer indicates compliance with the appropriate tank fabrication, and recognized testing agency standards; (r) "non-compliant", in respect of a home heat tank or home heat non-compliant tank system, means non-compliant with these regulations; (s) "outside tank" means a home heat tank that is not installed inside outside tank a building; (t) "owner" means the person who owns, controls or manages a owner home heat tank system; (u) "permanently affixed" means affixed in such a way that an permanently affixed identification tag cannot be removed without destroying or rendering the identification tag as unusable; (v) "petroleum" means a mixture of petroleum hydrocarbons in petroleum liquid form, with or without additives, that is used or can be used as a combustible fuel for heating purposes; (w) "prior regulations" means the Petroleum Storage Tanks prior regulations Regulations (EC322/01) made under the Act; (x) "product line protector" means a device that provides protection product line protector from accidental breakage for the shut-off valve and fuel filter assembly of a home heat tank;

(y) "ULC" means Underwriters Laboratory of Canada;

vent petroleum vapours to the atmosphere.

(z) "vent pipe" means a pipe that is installed on a home heat tank to

(2) These regulations apply to home heat tanks and home heat tank Application systems.

(3) For the purposes of these regulations,

Aboveground tanks

- (a) an inside tank is aboveground if 100% of the volume of the inside tank is installed above the lowest level of the building in which the tank is installed; and
- (b) an outside tank is aboveground if 100% of the volume of the outside tank is installed above the ground surface,

whether or not the piping associated with such tank is aboveground or underground. (EC241/07)

LICENCES

- 2. The fees for an application for, or renewal of, a licence under these Fees regulations shall be made payable to the Provincial Treasurer. (EC241/07)
- 3. (1) A person who wishes to install, alter or inspect home heat tanks or Application for an home heat tank systems shall apply for a home heat tank installer's installer' licence by

- (a) submitting a completed application to the Minister on Form 1;
- (b) providing such proof of the matters referred to in subsection (2) and such other information as the Minister may require; and
- (c) paying the application fee of \$50.
- (2) The Minister may, on receipt of an application, issue a home heat Licence, tank installer's licence to an applicant, on Form 2, if the Minister is qualifications satisfied that the applicant

- (a) is a holder of a valid trade certificate in the oil burner, sheet metal, refrigeration, air conditioning or plumbing trade;
- (b) has completed a home heat tank installer's course at
 - (i) Holland College,
 - (ii) a community college outside the province that the Minister considers to be equivalent to Holland College;
 - (iii) a private training school in the province licensed under the Private Training Schools Act R.S.P.E.I. 1988, Cap. P-20.1, or
 - (iv) a private training school outside the province that the Minister considers to be equivalent to a private training school referred to in subclause (iii),
- (c) is professionally competent as demonstrated by
 - (i) holding a current installer's licence or its equivalent in another jurisdiction in Canada, or
 - (ii) the successful completion by the applicant of such examination as may be established and administered, adopted or accepted by the Minister; and

(d) has professional knowledge and skills that are current.

Transitional

(3) An installer's licence issued under the prior regulations that was valid immediately before the date these regulations came into force is deemed to be an installer's licence issued under subsection (2).

Renewal

(4) The Minister may, on application, renew an installer's licence issued under subsection (2) to a person who holds the qualifications required by that subsection.

Expiry

(5) An installer's licence issued or renewed under this section expires on January 31 of the year following the date of the issue or renewal of the installer's licence. (EC241/07)

Application for an inspector's licence

- **4.** (1) A person who wishes to inspect home heat tanks or home heat tank systems shall apply for a home heat tank inspector's licence by
 - (a) submitting a completed application to the Minister on Form 1;
 - (b) providing such proof of the matters referred to in subsection (2) and such information as the Minister may require; and
 - (c) paying the application fee of \$50.

Licence, qualifications

- (2) The Minister may, on receipt of an application, issue a home heat tank inspector's licence to an applicant on Form 3, if after reviewing the application, the Minister is satisfied that the applicant
 - (a) has completed a home heat tank inspector's course at
 - (i) Holland College.
 - (ii) a community college outside the province that the Minister considers to be equivalent to Holland College;
 - (iii) a private training school in the province licensed under the *Private Training Schools Act*, or
 - (iv) a private training school outside the province that the Minister considers to be equivalent to a private training school referred to in subclause (iii),
 - (b) is professionally competent as demonstrated by
 - (i) the successful completion within the previous two years of an oil burning equipment inspector program described in clause (a);
 - (ii) holding a current inspector's licence or its equivalent in another jurisdiction in Canada, or
 - (iii) the successful completion by the applicant of such examination as may be established and administered, adopted or accepted by the Minister; and
 - (c) has professional knowledge and skills that are current, as indicated by the consideration by the Minister of
 - (i) the recency of the applicant's educational qualifications,
 - (ii) the examination of the applicant under subclause (b)(iii),
 - (iii) the active practice of the applicant as an inspector, or

- (iv) the taking of a refresher course, program or continuing education courses by the applicant that are acceptable to the Minister.
- (3) An inspector's licence issued under the prior regulations that was Transitional valid immediately before these regulations came into force is deemed to be an inspector's licence issued under subsection (2).

- (4) The Minister may, on application, renew an inspector's licence Renewal issued under subsection (2) to a person who holds the qualifications required by that subsection.
- (5) An inspector's licence issued or renewed under this section expires Expiry on January 31 of the year following the date of the issue or renewal of the inspector's licence. (EC241/07)
- 5. (1) Where, in the opinion of the Minister, a licensee has contravened Revocation of the Act or these regulations the Minister may revoke the installer's licence or inspector's licence held by the licensee.

(2) The Minister shall give written notice of the revocation of a licence Notice of revocation under subsection (1) to the licensee by

- (a) personal service; or
- (b) by registered mail to the last known address of the licensee as shown in the records of the Minister.
- (3) A notice sent by registered mail under clause (2)(b) shall be Service deemed to be served on the licensee
 - (a) on the date the licensee actually receives the notice; or
- (b) 5 days after the date on which the notice was mailed, whichever is earlier. (EC241/07)
- **6.** Every licensee who

Inspection

- (a) installs a home heat tank system; or
- (b) alters, moves or relocates a home heat tank system, shall carry out a home heat tank system inspection immediately after completing the installation, alteration, move or relocation. (EC241/07)
- 7. (1) A licensee who installs, alters or inspects a home heat tank system Compliance with shall ensure that the home heat tank system, as installed

standards, etc.

- (a) complies with the
 - (i) "Construction Standards for the Installation of Aboveground Home Heat Tank Systems" as described in Schedule B, if the tank was installed on or after March 1, 2004,
 - (ii) "Standard for the Inspection and Tagging of Home Heat Tank Systems on PEI With a Total Capacity of 2,200 Litres or Less for Home Heat Tanks Installed Prior To March 2004" as described in Schedule C if the tank was installed prior to March 1, 2004,

- (iii) Water Well Regulations (EC188/90) made under the Act,
- (iv) CSA B139-04 Installation Code For Oil-Burning Equipment,
- (v) CAN/ULC-S642-87(R2000) Compounds and Tapes for Threaded Pipe Joints,
- (vi) National Fire Code of Canada 1995 Revised 2002,
- (vii) CAN/ULC S602-03 Aboveground Steel Tanks for the Storage of Combustible Liquids Intended to be Used as Heating and/or Generator Fuels,
- (viii) CAN/ULC S643-00 Aboveground Shop Fabricated Steel, Utility Tanks,
- (ix) ULC/ORD-C80.1-00 Aboveground Non-Metallic Tanks for Fuel Oil; or
- (x) any other method approved by the Minister; and
- (b) bears the manufacturer's label.

Metallic tank, codes

- (2) Every person who installs a home heat tank shall ensure that such tank was built in conformance with the following codes, as amended:
 - (a) ULC ORD-142.5-1992 Aboveground Rectangular Steel Tanks;
 - (b) ULC ORD-142.21-1995 Used-Oil Systems, Aboveground Storage Tanks for Flammable and Combustible Liquids;
 - (c) ULC ORD-142.22-1995 Contained Vertical Steel Aboveground Tank Assemblies for Flammable and Combustible Liquids;
 - (d) ULC-S601-2000 Standard for Shop Fabricated Steel Aboveground Horizontal Tanks for Flammable and Combustible Liquids;
 - (e) CAN/ULC-S602-03 Aboveground Steel Tanks for Fuel Oil and Lubricating Oil;
 - (f) ULC-S630-2000 Tanks Aboveground, Vertical, Shop Fabricated Steel for Flammable and Combustible Liquids;
 - (g) CAN/S653-1994 Aboveground, Shop Fabricated Steel, Utility Tanks:
 - (h) ULC/ORD-C80.1-2000 Standard for Aboveground Non-Metallic Tanks for Fuel Oil.

Inspection report, ID tag, etc.

- (3) Where a licensee completes a home heat tank system inspection and is satisfied that the home heat tank system complies with the requirements of subsections (1) and (2), the licensee shall
 - (a) complete an identification tag in Form 4;
 - (b) calculate the expiry year
 - (i) for a single tank by referring to Schedule D, and
 - (ii) for more than one tank in a multiple tank system by referring to Schedule D in respect of the oldest tank in the system;
 - (c) ensure that the expiry month and year for which the identification tag is completed is single stamped and legible on the identification tag using a numerical stamping tool;

- (d) complete an inspection report on Form 5 for each tank on which an identification tag was permanently affixed;
- (e) permanently affix the identification tag to the vent pipe of the tank identified in the inspection report
 - (i) as close as may be practicable to the intake fill pipe and in prominent view, by riveting or some other method approved by the Minister, and
 - (ii) in such a manner that the identification tag is rendered unusable if removed; and
- (f) submit a copy of the inspection report immediately
 - (i) to the owner, and
 - (ii) to the employer of the licensee, if any.
- (4) The licensee who affixes the tag under clause (3)(e) shall remove Removal of old tag any existing identification tags from the home heat tank and forward them to the Department. (EC241/07)

8. A self-employed licensee, and an employer of a licensee, shall submit Notification, copies of the inspection reports required under clause 7(3)(d) to the Minister not later than 5 business days after the end of the month in which the inspection was made. (EC241/07)

reports, submitted to Minister

- **9.** (1) The Minister shall, at the written request of
 - (a) a self-employed licensee; or
 - (b) an employer who employs licensees,

issue identification tags to such licensee or employer.

ID tags issued to employer

(2) The Minister may refuse to issue identification tags to a self- Refusal to issue tags employed licensee or an employer of a licensee, if the Minister believes that the licensee or employer, as the case may be, has not submitted inspection reports as required by section 8.

- (3) An employer who is issued tags under subsection (1),
 - (a) shall assign the identification tags only to employees who hold a valid installer's or inspector's licence;
 - (b) shall maintain a record of which identification tags are assigned to each employee; and
 - (c) may re-assign any identification tag to another employee who holds a valid installer's or inspector's licence.
- (4) A record of identification tags kept under clause (3)(b) shall be

(a) maintained by a licensee or employer for at least two years from the date they are issued by the Minister; and

(b) made available to an environment officer on the request of such officer.

Assignment of ID tags by employer

Records of id tags

Return of ID tags by licensee whose licence expires (5) Every person whose installer's licence or inspector's licence has expired and has not been renewed, or has been revoked, by the Minister shall return all unused identification tags to the Minister within 10 working days from the date of expiry or revocation.

Employer returns tags

(6) An employer who no longer employs licensees shall return all unused identification tags to the Minister within 10 working days of ceasing to employ licensees.

ID tag no longer valid

- (7) An identification tag is no longer valid if the identification tag is removed from
 - (a) the property where it was first permanently affixed to a home heat tank vent pipe; or
 - (b) the home heat tank system where it was permanently affixed. (EC241/07)

Non-compliant tank with tag

10. Where a licensee discovers that a home heat tank system was not installed in accordance with these regulations and has an affixed identification tag, the licensee shall immediately notify the Minister of the particulars of the non-compliant home heat tank system. (EC241/07)

Sale transfer of ID tags

- 11. No person shall, except in accordance with subsection 9(3),
 - (a) give or transfer an identification tag to another person;
 - (b) sell an identification tag; or
 - (c) alter, re-use, remove or attempt to alter, remove or re-use an identification tag that has been permanently affixed to a home heat tank system. (EC241/07)

Licence required to install

12. (1) Subject to subsection (2), no person shall install, alter or remove any part of a home heat tank system unless the person holds an installer's licence.

Exception

(2) An owner may install a product line protector or a fuel gauge protector on or near a home heat tank. (EC241/07)

Sale of home heat tanks

13. (1) No person shall sell, or offer to sell, a home heat tank to any other person unless the other person holds a valid installer's licence.

Exception

(2) Subsection (1) does not apply to a wholesaler who sells home heat tanks to a retailer for the purpose of resale. (EC241/07)

No home delivery, when

- **14.** (1) No person shall deliver petroleum to an outside home heat tank system if
 - (a) the tank
 - (i) has a shut-off valve or a fuel filter assembly that is not installed directly under the tank, or
 - (ii) is not equipped with a product line protector; or
 - (b) the tank has a combustible tank stand.

- (2) After September 1, 2007, no person shall deliver petroleum to a Sept. 1, 2007 home heat tank where such tank is non-compliant for any of the following reasons:
 - (a) there is no identification tag permanently affixed to the vent pipe;
 - (b) the identification tag has no tank expiry date stamped on it;
 - (c) the tank expiry date stamped on the identification tag has been
 - (d) the person has reason to believe that the identification tag has been altered;
 - (e) the person has reason to believe that the identification tag affixed to the vent pipe was not issued by the Minister.
- (3) Notwithstanding anything to the contrary in subsection (2), a Exception person may, subject to subsection (3.1), deliver petroleum to a home heat tank that does not have an identification tag permanently affixed to the tank's vent pipe if the person finds, after making a visual inspection of the home heat tank, that the tank does not constitute an immediate hazard.

(3.1) A person shall not deliver petroleum to a home heat tank under No subsequent subsection (3), if the delivery is made after the date set out on a notice delivery after date sent by the Department to fuel oil suppliers under subsection (3.3).

on notice

(3.2) Where a person delivers petroleum to a home heat tank under Notice to owner and subsection (3).

Department

- (a) the person shall notify the fuel oil supplier who employs the person, as soon as possible, that such a delivery of petroleum has been made: and
- (b) the fuel oil supplier who employs the person who made the delivery of petroleum shall
 - (i) notify the owner of the home heat tank, in writing, within one working day from the date the fuel oil supplier received notice of the delivery, that petroleum cannot be delivered to the home heat tank 120 days after the date of delivery unless the tank is inspected and tagged by a licensee as required under subsection (2), and
 - (ii) notify the Department, in writing, within one working day from the date the fuel oil supplier received notice of the delivery, that petroleum has been delivered to the home heat tank and that there is no identification tag permanently affixed to the tank's vent pipe.
- (3.3) Where the Department has been notified, in writing, by a fuel oil Notification to supplier under subsection (3.2) that a home heat tank does not have an identification tag permanently affixed to the tank's vent pipe and that

petroleum has been delivered to the home heat tank under subsection (3), the Department shall notify all fuel oil suppliers, in writing, of

- (a) the location of home heat tank; and
- (b) the last date on which petroleum may be delivered to the home heat tank, which shall be 120 days after the date of the petroleum delivery referred to in the written notice.

Notice to owner and Minister

- (4) Where a person attempting to deliver petroleum to a home heat tank finds that
 - (a) the home heat tank does not comply with subsection (1) or (2); and
 - (b) the delivery of petroleum to the home heat tank cannot be made under subsection (3),

the person or the fuel oil supplier who employs the person shall

- (c) give notice to the owner of the home heat tank, as soon as possible, that
 - (i) the home heat tank does not comply with subsection (1) or (2), and
 - (ii) the person is prohibited by these regulations from delivering petroleum to that home heat tank; and
- (d) report the person's finding to the Minister within one working day of discovering that the home heat tank does not comply with subsection (1) or (2). (EC241/07; 740/07)

Leaking tank

- **15.** (1) Every person who has reason to believe that petroleum is leaking or has leaked from a home heat tank system shall immediately
 - (a) notify the owner of the home heat tank system; and
 - (b) report the leak by telephoning the Canadian Coast Guard at 1-800-565-1633.

Duty of owner

(2) Upon receiving a notification under subsection (1), the owner shall immediately cause the system to be taken out of service until the home heat tank system is replaced or repaired in accordance with these regulations. (EC241/07)

Double-walled metallic tank

- **16.** The owner of a double-walled or double-bottom metallic tank shall
 - (a) ensure that the tank has an operational leak detecting device; and
 - (b) immediately notify the Department if such device indicates that there is a petroleum leak within the interstitial space. (EC241/07)

Access by environment officer

17. At an environment officer's request, the owner of a home heat tank system, and the owner or person in possession of the property on which the home heat tank system is located, shall permit access by the environment officer to the home heat tank system. (EC241/07)

Non-compliant home heat tank system **18.** (1) Where, in the opinion of an environment officer, a home heat tank system does not comply with these regulations, the environment

officer may remove, or request an installer to remove, the identification tag and submit the identification tag to the Minister.

(2) The Minister shall send written notification of the removal of the Notice to owner identification tag to the owner of the home heat tank system not later than the next working day following the day that the identification tag is received by the Minister. (EC241/07)

19. Where a home heat tank system has reached its expiry date as Replacement of indicated on Form 5, the owner of the home heat tank shall replace or remove the home heat tank not later than the month in which the inspection was completed, as shown on Form 5. (EC241/07)

20. Every owner of a home heat tank system shall ensure that (a) the home heat tank system is inspected and tagged in accordance with section 7: or

Inspection, upgrading deadline

(b) the home heat tank system is upgraded or replaced and tagged in accordance with these regulations,

on or before September 1, 2007. (EC241/07)

21. Where a home heat tank is replaced by a licensee, the licensee No water or sludge performing the replacement shall ensure that no water or sludge contamination is transferred from the home heat tank system to the new tank. (EC241/07)

22. The forms and schedules referred to in these regulations are set out in Forms the Schedule. (EC241/07)

Applicant Contact Information

SCHEDULE

SCHEDULE A - FORMS

FORM 1 APPLICATION FOR INSTALLER'S OR INSPECTOR'S LICENCE

The Home Heat Tanks Regulations made under the *Environmental Protection Act* R.S.P.E.I. 1988, Cap. E-9 require a person to apply for an installer's licence if the person intends to install, alter, remove, inspect or affix identification tags to home heat tank systems (s. 3) or an inspector's licence if the person intends to inspect and affix identification tags to home heat tank systems (s. 4).

Personal information on this form is collected under subsections 3(1) and 4(1) of the Home Heat Tanks Regulations as it relates directly to and is necessary for an application for an installer's licence or an inspector's licence. If you have any questions about this collection of personal information, you may contact the Director of Pollution Prevention Division, Home Heat Tank Program, 11 Kent Street, Jones Building, Charlottetown, PEI C1A 7N8, Phone: (902) 368-5474.

Name:	Company Name:	
Partners of Company (if applicable)		
Phone:	Fax:	
Mailing Address:	•	
Community:	Province:	Postal Code:
Type of Licence Applied For		
 □ installer's licence (installing, altering, □ inspector's licence (inspections only) 	removing and inspe	ecting)
□ New Applicant □ Renewal		
Present I	Licence Number:	
A P AE		
Applicant Experience Describe successful completion of a relevant		(in also de detect).
•		,
Describe experience in inspecting and install number of installations and/or inspections in		ome heat tank systems (e.g.
Applicant Signature:		e:of a partner, or an

Updated 2007 Environmental Protection Act Home Heat Tanks Regulations

Cap. E-9

13

The fee to apply for an installer's or inspector's licence is \$50.

Method of PaymentPlease forward application and payment to:(Check appropriate box)Department of Environment, Energy & Forestry

Cheque Pollution Prevention Division
Money Order Home Heat Tank Program
Cash (hand delivery only) PO Box 2000, 11 Kent Street
Charlottetown, PE C1A 7N8

Amount Enclosed: \$...... Fax: (902) 368-5830

 $Cheques \ and \ money \ orders \ should \ be \ made \ payable \ to \ the \ Provincial \ Treasurer.$

14

FORM 2 INSTALLER'S LICENCE		
Prince Edward Island Environment, Energy and Forestry Home Heat Tank Installer's Licence Pursuant to section 3 of the Environmental Protection Act Home Heat Tanks Regulations	LICENSEE Surname: Given Name: Issue Date: Expiry Date: The person named herein is licensed to install, alter, inspect, remove and affix tags to home heat tank systems pursuant to the Environmental Protection Act Home Heat Tanks Regulations.	
Licence Number:	Authorized Signature:	

FORM 3 INSPECTOR'S LICENCE LICENSEE Prince Edward Island Surname:_ Environment, Energy and Forestry Given Name: **Home Heat Tank** Issue Date:_ Inspector's Licence Expiry Date: The person named herein is licensed to inspect and affix tags to home heat tank Pursuant to section 4 of the ${\it Environmental \ Protection \ Act}$ Home Heat Tanks Regulations systems pursuant to the *Environmental* Protection Act, Home Heat Tank Regulations. Licence Number: Authorized Signature:

Environmental Protection Act Home Heat Tanks Regulations

FORM 4 IDENTIFICATION TAG

PEI ABOVEGROUND OIL TANK I.D. TAG

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17

FORM 5 INSPECTION REPORT

Environmental Protection Act

Home Heat Tanks Regulations

Homeowner Information Full Name Civic # Street/Road Name or Route # Installer/Inspector Information Installer/Inspector Name Company **Inspection Information** Type of Inspection: Routine Replacement Alteration □ New Home □ PEI Aboveground Tank ID Tag # In Basement □ Tank Location: Outdoors Other (specify) Piping Type: Bottom Outlet End Outlet □ Top Feed □ Tank Gauge: 14 Gauge □ 12 Gauge □ Non-Corrosive □ Tank Year of Manufacture Tank Expiry Date ULC Serial Number **Passed Inspection** Yes □ No \square I certify that the home heat tank system described in this report has been inspected by me and is installed in accordance with the requirements of the Environmental Protection Act, and the Construction Standards for Installation of Aboveground Home Heat Tank Systems. Inspector's Signature.... Comments (EC241/07)

SCHEDULE B

CONSTRUCTION STANDARDS FOR THE INSTALLATION OF ABOVEGROUND HOME HEAT TANK SYSTEMS

Section 1.0 General

Section 1.1

This standard is intended to highlight the mandatory installation requirements for all home heat tank systems installed in the Province of Prince Edward Island after March 2004. It is intended to be used in conjunction with the CSA B139-04 Installation Code For Oil-Burning Equipment, CAN/ULC S643-00 Aboveground Shop Fabricated Steel, Utility Tanks and CAN/ULC S602-03 Aboveground Steel Tanks for the Storage of Combustible Liquids Intended to be Used as Heating and/or Generator Fuels. For the purposes of installing home heat tanks on Prince Edward Island, any differences between the B139-04, CAN/ULC S602-03, and S643-00 codes and these standards, these standards shall prevail.

Section 1.2

Home heat tanks shall not be reused except with the oral permission of the Minister.

Section 2.0 Installation of Outside Tanks

Section 2.1

It is the responsibility of a home heat tank installer to ensure that outside home heat tanks or systems are installed in accordance with all applicable codes and regulations in force at the time of installation and in accordance with Figures 1, 2 and 3. The installer shall ensure that:

- (a) a prepared support base is constructed by removing a minimum of 150 mm (6 in)
 of top soil and replacing it with an equal amount of tamped sand, clean gravel,
 or poured concrete;
- (b) the support base is situated at least 1.5 meters (5 ft) from a property line, wherever feasible;
- (c) two re-enforced 750mm x 750mm (30 in x 30in) patio stones are placed level on the tamped sand or gravel (pressure-treated wood material can be used under the tank legs provided that it is below grade and in contact with the ground. The top surface may be exposed);
- (d) four tank support legs are centred on the reinforced patio stones or concrete pad ensuring the bottom of the tank is between 100 mm (4 in) and 300 mm (12 in) off the support base;
- (e) product line and fuel gauge protectors are installed except where no portion of the valve or filter protrudes from underneath the tank;
- (f) a horizontal vibration loop is placed as close as possible to the shut-off valve;
- (g) wherever feasible, the product line maintains a continuous downward slope from the tank to the building;
- (h) wherever feasible, the fuel filter is located inside the building;
- (i) tanks are equipped with a working vent whistle and fuel gauge;
- (j) piping and tubing run as directly as practicable and provisions made for expansion, contraction, jarring, vibration, and settling;

- (k) piping and tubing is substantially supported and protected against physical damage;
- (l) two or more cross connected tanks are installed on a common poured cement pad; and
- (m) cross connected tanks are installed in accordance with section 14 of this standard.

Figure 1. Installation Diagram for Outside Tanks

A1 Concrete pad or reinforced patio stone
 A2 150 mm (6 in) tamped sand or clean gravel replacing 150mm (6 in) of topsoil
 A3 Horizontal vibration loop
 A4 Product line protector
 A5 Fuel gauge and gauge protector
 A6 Fill pipe, vent whistle

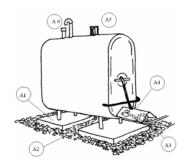


Figure 2 Fuel Clearance Values for the Installation of Multiple Outside Tanks

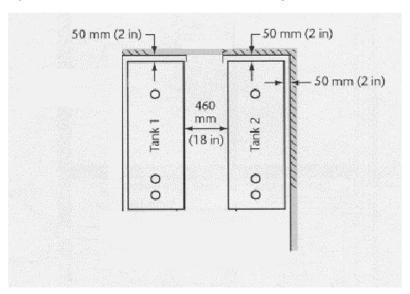
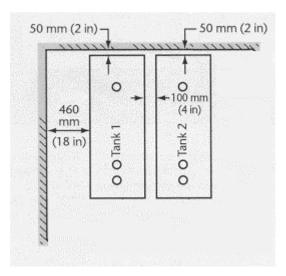


Figure 3 Fuel Clearance Values for the Installation of Multiple Outside Tanks



Section 3.0 Installation of Inside Tanks

It is the responsibility of a home heat tank installer to ensure that inside home heat tank systems are installed in accordance with all applicable codes and regulations in force at the time of installation and in accordance with Figures 4, 5, 6 and 7. The installer shall ensure that:

- (a) there is a minimum of 460 mm (18 in) clearance along one side and one end of the tank;
- (b) there is a minimum of 50 mm (2 in) clearance from any portion of the tank to a wall;
- sufficient clearance is provided to allow the temporary repair of any tank underside;
- (d) tanks do not impede exit from the building;
- (e) the horizontal distance from the tank to a petroleum fuel-fired appliance is at least 600 mm (2 ft);
- (f) the horizontal distance from the tank to a solid fuel fired appliance is at least 1500 mm (5 ft);
- (g) no portion of the tank prevents 900 mm (3 ft) clear access to an electrical panel;
- (h) fill and vent pipes terminate to the open air; and
- (i) tanks are equipped with a working vent whistle and fuel gauge.

Figure 4. Installation Diagram for Inside Tanks

- A Concrete flooring B Vent whistle

- C Vent pipe to outside D Fill pipe to outside E Fuel gauge

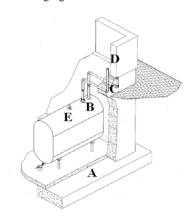
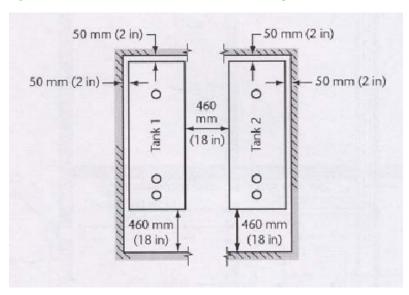


Figure 5 Fuel Clearance Values for the Installation of Multiple Inside Tanks



22

Figure 6 Fuel Clearance Values for the Installation of Multiple Inside Tanks

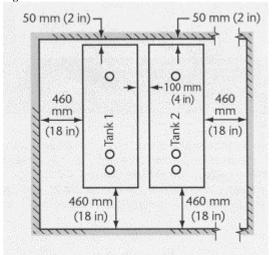
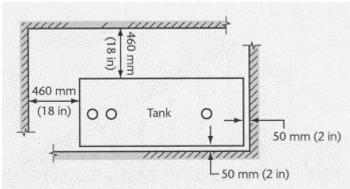


Figure 7 Fuel Clearance Values for Single Inside Tank Installations



Section 4.0 Fill Pipe Connections

Section 4.1

Fill pipes shall be installed in accordance with the requirements of all applicable codes and regulations at the time of installation.

Section 4.2

Fill pipes shall be not less than 50 mm (2 in) in diameter.

Section 4.3

The opening to a fill pipe shall terminate:

- (a) not less than 200 mm (8 in) above the outside elbow of an inside installation;
- (b) as close as possible to the tank for an outside installation;

- (c) not less than 600 mm (2 ft) from any building opening;
- (d) not less than 900 mm (3 ft) from an air intake; and
- (e) not less than 900 mm (3 ft) above ground level.

Section 5.0 Vent Pipe Connections

Section 5.1

Vent pipes shall be installed in accordance with the requirements of all applicable codes and regulations at the time of installation.

Section 5.2

Vent pipes shall terminate at least 150 mm (6 in) above the opening to a fill pipe.

Section 5.3

Single tanks having a capacity of 1250 litres (275 gal) or less capacity shall have vent pipes which correspond to the following chart.

Equivalent Length	Vent Pipe Diameter ID, mm (in)
up to 7.6 m (25 ft)	32 mm (1 ¼ in)
over 7.6 to 15.2 m (over 25 ft to 50 ft)	38 mm (1 ½ in)
over 15.2 m to 30.5 m (over 50 ft to 100 ft)	50 mm (2 in)
over 30.5 m (over 100 ft)	to be accepted by a professional engineer

Note.

One 32 mm (1 $\frac{1}{4}$ in) 90° elbow has an equivalent length of 1.0 meter (3 $\frac{1}{2}$ ft) of straight 32 mm (1 $\frac{1}{4}$ in) pipe.

One 38 mm (1½ in) 90° elbow has an equivalent length of 1.2 meters (4 ft) of straight 38 mm (1½ in) pine

One 50 mm (2 in) 90° elbow has an equivalent length of 1.5 meters (5 ft) of straight 50 mm (2 in) pipe.

Section 5.4

Single tanks with a capacity greater than 1250 litres but less than 2200 litres shall have vent pipes not less than 50 mm (2 in).

Section 5.5

Cross-connected tanks shall have 50mm (2 in) separate vent pipes, or 75 mm (3 in) manifold vents as prescribed in Figures 3 and 4, or as supplied by the tank manufacturer. A vent whistle shall be connected to the vent pipe on the same tank to which the fill pipe is connected.

Section 5.6

Vent pipes shall not be cross-connected with fill pipes or with fuel oil return lines from burners.

Section 5.7

The opening to a vent pipe shall terminate close to the building wall and:

- (a) not less than 150 mm (6 in) above a fill pipe;
- (b) not less than 600 mm (2 ft) from any building opening; and
- (c) not less than 900 mm (3 ft) from an air intake.

Section 6.0 Product Lines

Section 6.1

The product line from the tank to the appliance burner shall be replaced whenever a new home heat tank is installed.

Section 6.2

When any portion of a product line runs below a foundation wall, under a floor, or under the ground, it shall be a continuous length of poly-coated non-corrosive copper tubing approved for fuel oil use. This coated product line shall be placed inside a second continuous length of tubing with both ends of the second length of tubing protruding a minimum of 50 mm (2 in) above ground/floor level.

Section 7.0 Testing of New or Replacement Tanks

When installing a single-wall home heat tank system, the installer shall test the tank connections for leaks by means of a pneumatic test, or a hydrostatic test during first filling.

Section 8.0 Piping and Tubing

Section 8.1

All piping and tubing shall be new and shall be standard-weight wrought iron, steel, or brass pipe; or brass, copper, or steel tubing.

Section 8.2

Fill or vent pipes shall be steel or galvanized construction. Galvanized pipes, except as fill or vent pipes on storage or supply tanks, shall not be used when exposed to heat or for conveying preheated fuel oil.

Section 8.3

Flexible metal hose may be used when rigid connections are impracticable, or when required to reduce the effect of jarring or vibration. Such hose shall be of a type certified for the application and shall be installed strictly in accordance with the approval for the appliance.

Section 8.4

Joints and connections shall be made with standard pipe fitting or by welding.

Section 8.5

Cast iron fittings shall not be used.

Section 8.6

Cap. E-9

A joint in seamless copper, brass, or steel tubing shall be made by means of a flare joint or approved fitting, or shall be brazed with a material having a melting point exceeding 540°C (1000°F).

Section 8.7

Compression fittings shall not be used.

Section 8.8

Threaded joints in the vent and fill piping shall be made fuel-oil tight using joint compound or polytetrafluorethylene tape approved for use with fuel oil.

Section 9.0 Shut-off Valves

A shut-off valve shall be installed in the fuel line as near as practicable to the supply tank, and at such other locations as may be required to avoid spillage during servicing. Shut-off valves shall be:

- (a) of the manual type;
- (b) readily accessible;
- (c) installed to close against the supply of fuel oil;
- (d) substantially protected against physical damage; and
- (e) certified for its intended use.

Section 10.0 Fuel Oil Filters

A suitable fuel oil filter or strainer assembly shall be provided in the fuel supply line to the appliance or equipment, and shall be located inside the building where the appliance or equipment is located, wherever feasible.

Section 11.0 Tank Stands

Section 11.1

Wooden tank stands are permitted for outside installations if constructed using a minimum of 4x4 pressure treated wood for the posts and saddle. These posts must extend high enough on both sides to keep the tank from falling out. The four saddle pieces holding the tank in place shall be a minimum of 4x4 pressure treated wood and bolted together with the four posts. Additional support/cross pieces can be 2x6 pressure treated wood or larger, however, they shall be bolted together using a nut and washer. Except for the tank leg brackets and pipe legs, no portion of the tank shall rest on the wooden stand.

Section 11.2

Steel tank stands shall be constructed using a minimum of two inch tubular steel posts or other material as approved by the Minister. These posts must extend high enough on both sides to keep the home heat tank from falling out. The four saddle pieces holding the tank in place shall also be a minimum of two inch square tubular steel. Except for the pipe legs, no portion of the tank shall rest on the steel stand.

Section 12.0 Distance from a Well (New Home Construction)

No person shall construct, or permit to be constructed, a home heat tank system that is

- (a) 1,200 litres (265 gal.) or less in size, within 5 meters (16 ft) of a well; or
- (b) greater than 1,200 litres in size, within 15 meters (48 ft) of a well.

Section 13.0 PEI Aboveground Tank I.D. Tag

A PEI Aboveground Tank I.D tag shall be attached to the outside vent pipe by the installer as part of the installation process by means of rivets or other methods approved in writing by the Minister.

Section 14.0 Cross Connected Tanks

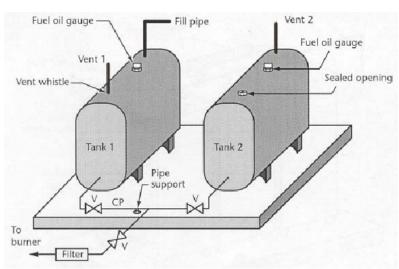
Figures 3 to 6 illustrates the acceptable connection arrangements for cross connected multiple tanks.

Section 14.1

Cross-connect steel tanks with separate vents shall be installed as outlined in Figure 8 and shall include the following specifications:

- (a) fill and vent pipes shall be a 50 mm (2 in) pipe;
- (b) shut-off valves (V) shall be installed for each tank;
- (c) the cross connecting pipe (CP) shall be a 50 mm (2 in) pipe and substantially supported; and
- (d) both tanks shall be installed on a common slab.

Figure 8 Cross-Connected Tanks with Separate Vents



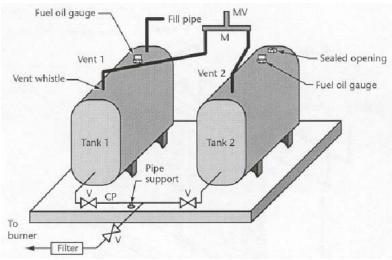
Section 14.2

Cross-connect steel tanks with a common manifold vent shall be installed as outlined in Figure 9 and shall include the following specifications:

- (a) fill and vent pipes shall be 50 mm (2 in) pipe;
- (b) the common manifold (M) and manifold vent (MV) shall be 75 mm (3 in) pipe;

- (c) the common manifold shall be at an elevation above the highest liquid level in the tanks;
- (d) shut-off valves (V) shall be installed for each tank;
- (e) the cross connecting pipe (CP) shall be 50 mm (2 in) pipe and substantially supported; and
- (f) both tanks shall be installed on a common slab;

Figure 9 Cross-Connected Tanks with Manifold Vents



Section 14.3

Two or more tanks with a total capacity of 2200 litres (1100 gal) or less that are connected with top-mounted manifolds shall be of identical manufacture and individual capacity. The fill and supply manifolds shall be supplied by the tank manufacturer or designed by a professional engineer.

(EC241/07)

SCHEDULE C

STANDARD FOR THE INSPECTION AND TAGGING OF HOME HEAT TANK SYSTEMS ON PEI WITH A TOTAL CAPACITY OF 2,200 LITRES OR LESS FOR HOME HEAT TANKS INSTALLED PRIOR TO MARCH 2004

Section 1.0 General

This standard provides a general overview of the inspection and tagging requirements for home heat tank systems installed prior to March 1, 2004 in the Province of Prince Edward Island. It is not intended to be all inclusive and should be used as a general guide in conjunction with applicable codes and training manuals. Home heat tank systems installed after March 2004 must be inspected and tagged in accordance with the requirements of Schedule B.

This standard is intended to highlight the mandatory inspection requirements for all home heat tanks installed in the Province of Prince Edward Island prior to March 1, 2004. It is intended to be used in conjunction with the applicable versions of CSA B139 Installation Code For Oil-Burning Equipment, CAN/ULC S643 Aboveground Shop Fabricated Steel, Utility Tanks and CAN/ULC S602 Aboveground Steel Tanks for the Storage of Combustible Liquids Intended to be Used as Heating and/or Generator Fuels. The specific version of the codes will depend upon when the tank was originally installed. For example, if the tank was installed in accordance with the CSA B139-00 code, it should also be inspected in accordance with that code.

For the purposes of inspecting home heat tanks on Prince Edward Island, any differences between the B139, CAN/ULC S602, and CAN/ULC S643 codes and these standards, these standards shall be considered paramount.

Section 2.0 Installation of Outside Tanks

Section 2.1

Outside home heat tank systems shall include:

- (a) a prepared support base constructed by removing a minimum of 150 mm (6 in) of top soil and replacing it with an equal amount of tamped sand, crushed gravel, or poured concrete;
- (b) two reinforced patio stones placed level on top of the gravel or tamped sand; (Note: Reinforced patio stones without the gravel, or 4x4 and larger pressure-treated or creosote timbers are permitted to be used if they are level and in good condition. Individual wooden or cement blocks shall not be used as part of an outside installation):
- (c) four tank support legs centred on the two re-enforced patio stones or concrete pad ensuring the bottom of the tank is at least 100 mm (4 in) off the support base. Tank legs longer than 300 mm (12 in) must be substantially braced;
- (d) a horizontal vibration loop placed in the product line as close as possible to the shut-off valve;
- (e) a fuel filter connected to the product line and located inside the building, wherever feasible;
- (f) a product line protector;
- (g) a working vent whistle attached to a 37 mm (1 ¼ in) vent pipe;
- (h) a 50 mm (2 in) fill pipe complete with a tight metal cover designed to discourage tampering;

Cap. E-9

- piping and tubing which is substantially supported and protected against physical damage; and
- (j) a common poured cement pad for two or more cross-connected tanks.

Section 3.0 Installation of Inside Tanks

Section 3.1

Inside home heat tank systems shall include:

- (a) four tank support legs which provide a minimum 100 mm (4 in) space between the tank bottom and the basement floor. (Note: wooden shims under the tank supports are permitted on an inside tank to provide stability to the tank system and individual cement blocks can be used inside instead of pipe legs provided that no portion of the tank shell is in contact with the cement blocks);
- (b) a fuel filter connected to the product line;
- (c) a working fuel gauge;
- (d) a working vent whistle attached to the vent pipe;
- (e) a 50 mm (2 in) fill pipe terminating to open air and equipped with a tight metal cover designed to discourage tampering;
- (f) piping and tubing substantially supported and protected against physical damage;
- (g) at least 600 mm (2 ft) horizontal distance from the tank to a petroleum fuelfired appliance;
- (h) the horizontal distance from the tank to a solid fuel fired appliance is at least 1500 mm (5 ft); and
- (i) there is unimpeded access by a home heat tank to an electrical panel.

Section 4.0 Fill Pipe Connections

Section 4.1

Fill pipes shall be not less than 50 mm (2 in) in diameter.

Section 4.2

Fill pipes shall be covered with a weatherproof cap.

Section 4.3

Fill pipes shall terminate:

- (a) to open air;
- (b) not less than 600 mm (2 ft) from any building opening;
- (c) not less than 900 mm (3 ft) from an air intake;
- (d) close to the building; and
- (e) below the opening of the vent pipe.

Section 5.0 Vent Pipe Connections

Section 5.1

Vent pipes shall be not less than 32 mm (11/4 in) in diameter.

Section 5.2

Vent pipes shall be covered with a weatherproof cap.

Section 5.3

Vent pipes shall terminate:

- (a) to open air;
- (b) not less than 600 mm (2 ft) from any building opening;
- (c) not less than 900 mm (3 ft) from an air intake;
- (d) close to the building; and
- (e) above the opening of the fill pipe.

Section 5.4

When vent pipes from two or more tanks are connected to a common vent, the common vent shall be at least one pipe size larger than the largest vent pipe from the individual tanks

Section 5.5

Vent pipes shall not be cross-connected with fill pipes or with fuel oil return lines from burners.

Section 6.0 Product Lines

Section 6.1

When any portion of a product line runs below a foundation wall, under a floor, or under the ground, it shall:

- (a) if installed prior to April 1, 2000, be a continuous length of plain or poly coated copper product line inside a continuous run of tubing which protrudes a minimum of 50 mm (2 in) above the ground or basement floor;
- (b) if installed after April 1, 2000, be a continuous length of poly coated copper product line inside a continuous run of tubing which protrudes a minimum of 50 mm (2 in) above the ground or basement floor.

Section 7.0 Piping and Tubing

Section 7.1

Fill or vent pipes shall be steel or galvanized construction. Galvanized pipes, except as fill or vent pipes on or supply tanks, shall not be used when exposed to heat or for conveying preheated fuel oil.

Section 7.2

Flexible metal hose may be used when rigid connections are impracticable, or when required to reduce the effect of jarring or vibration. Such hose shall be of a type certified for the application and shall be installed strictly in accordance with the approval for the appliance.

Section 7.3

Cast iron or compression fittings shall not be used.

Section 7.4

A joint in seamless copper, brass, or steel tubing shall be made by means of a flare joint or approved fitting, or shall be brazed with a material having a melting point exceeding 540°C (1000°F).

Section 7.5

Threaded joints shall be made fuel-oil tight.

Section 8.0 Shut-off Valves

A shut-off valve shall be installed in the fuel line as near as practicable to the exit from the supply tank, and at such other locations as may be required to avoid spillage during servicing.

Section 9.0 Fuel Oil Filters

A suitable fuel oil filter or strainer assembly shall be provided in the fuel supply line to the oil burner, and shall be located inside the building wherever feasible.

Section 10.0 Tank Stands

Section 10.1

Wooden oil tank stands are permitted for outside installations if constructed using a minimum of 4x4 pressure treated wood for the posts and saddle. These posts must extend high enough on both sides to keep the tank from falling out. The four saddle pieces holding the tank in place shall be a minimum of 4x4 pressure treated wood and bolted together with the four posts. Additional support/cross pieces can be 2x6 pressure treated wood or larger, however, they shall be bolted together using a nut and washer. Except for the leg brackets and pipe legs, no portion of the tank shall rest on the wooden stand.

Section 10.2

Steel tank stands shall be constructed using a minimum of two inch tubular steel posts or other material as approved by the Department. These posts must extend high enough on both sides to keep the home heat tank from falling out. The four saddle pieces holding the tank in place shall also be a minimum of two inch square tubular steel. Except for the pipe legs, no portion of the tank shall rest on the steel stand.

Section 11.0 PEI Aboveground Tank I.D. Tag

PEI Aboveground Tank I.D tags attached to the outside vent pipe as part of the inspection process shall be attached by means of rivets or other method approved in writing by the Minister.

(EC241/07)

32

Schedule D Mandatory Replacement Years for Home Heat Tanks (calculated from the year of manufacture)

Steel Thickness	Outlet/Connection	Mandatory Replacement Year
	Type	
Non-metallic Tanks	Not applicable	No mandatory replacement year
Double Bottom Metallic Tank	Not Applicable	No mandatory replacement year
Metallic Tank with Nominal	Tank end or top burner	15 years from year of tank
steel thickness of 2.0 mm*	connection	manufacture.
Metallic Tank with Nominal	Bottom outlet burner	20 years from year of tank
steel thickness of 2.0 mm*	connection	manufacture.
Metallic Tank with Nominal	Tank end or top burner	20 years from year of tank
steel thickness of 2.3 mm**	connection	manufacture.
Metallic Tank with Nominal	Bottom outlet burner	25 years from year of tank
steel thickness of 2.3 mm**	connection	manufacture.

^{*-} The permissible minimum steel thickness of a 2.0 mm (14 gauge) tank is between 1.80 mm and 2.09 mm.

(EC241/07)

^{**} - The permissible minimum steel thickness of a 2.3 mm (12 gauge) tank is 2.10 mm and above.