

# Technical Safety Standards Regulations Information Sheet

## Background

Industry sectors have told us that there is need to address existing technical safety legislation in light of advanced technology, and modern standards and industrial practices. It became clear to the Department that in order to sustain and improve the Province's level of technical safety, while at the same time responding to innovation and modernization, changes had to be made. The Department responded to industry's concerns by committing to a comprehensive review of technical safety legislation in Nova Scotia.

The focus of the review is on a modernized framework and how it may be streamlined to reflect technological change, improve consistency, and meet the needs of a changing economy now and in the future, while ensuring that minimum regulated safety standards are achieved. The intention is to develop a flexible, risk-managed, and results-based legislative framework, which provides for clear responsibilities and accountability.

The Minister's stakeholder Advisory Group on Technical Safety made 19 recommendations to the Minister for a modernized technical safety framework. In particular, the Advisory Group recommended that the following Acts be consolidated into one Act for technical safety: *Amusement Devices Safety Act*; *Crane Operators and Power Engineers Act*; *Electrical Installation and Inspection Act*; *Elevators and Lifts Act*; *Steam Boiler and Pressure Vessel Act*. The creation of the new Act would initially consolidate the *Steam Boiler and Pressure Vessel Act* and the *Crane Operators and Power Engineers Act*: and complement -- but not replace -- the other above-named Acts until future phases of the review. As well, the Advisory Group recommended that the consolidated Act become the enabling legislation for the *Fuel Safety Regulations* (which are currently under the *Fire Safety Act*). The fuel safety discipline, being technical in nature, has a more appropriate fit under the proposed new Act.

The new *Technical Safety Act* was passed during the Spring 2008 session of the House of Assembly and will receive proclamation (take effect) once new regulations for steam boilers and pressure equipment, crane operators, power engineers, and fuel safety, as well as regulations for general matters, fees, and standards, are made under the new Act. This may take place in 2009.

The Technical Safety Review Project is part of the Better Regulations, and Competitiveness and Compliance Initiatives: programs to improve regulatory systems and achieve better compliance. Meaningful consultation with stakeholders will take place throughout the entire regulatory review process. Most of the changes to the regulations are to align with the new Act.



Any questions you may have in relation to the proposed changes may be directed to:

Dave Wigmore, P.Eng.  
Risk Management  
Building, Fire and Technical Safety Division  
Department of Labour and Workforce Development  
5151 Terminal Road P.O. Box 697  
Halifax, NS B3J 2T8

Phone: (902) 424-5434  
E-mail: [wigmordr@gov.ns.ca](mailto:wigmordr@gov.ns.ca)

**Thank you for taking the time to provide us with your feedback.**

# Draft Technical Safety Standards Regulations

***The following version of the Technical Safety Standards Regulations is unofficial. It has been prepared for discussion purposes only, and is subject to change.***

## Citation

1. These regulations may be cited as the *Technical Safety Standards Regulations*.
2.
  - (1) The standards applicable to the regulated products and regulated work within the scope of the *Technical Safety Act* or regulations are as established by this regulation.
  - (2) It is the edition of the standard listed which is adopted in this regulation.
  - (3) The Minister will direct that 1 copy of each of these standards be made available for public viewing at the head office of the Department.

## Definitions

3. In these regulations:
  - (a) “API” means the American Petroleum Institute;
  - (b) “ASME” means the American Society of Mechanical Engineers;
  - (c) “ASHRAE” means the American Society of Heating, Refrigeration and Air-Conditioning Engineers;
  - (d) “CSA” means the Canadian Standards Association;
  - (e) “NBBI” means the National Board of Boiler Inspectors;
  - (f) “TEMA” means the Tubular Exchanger Manufacturers Association.

## Boiler and Pressure Equipment Standards

4. The following standards for boiler and pressure equipment are adopted as the BPE standards for the *Boiler and Pressure Equipment Regulations*:
  - (a) API 510, *Pressure Vessel Inspection Code In-Service Inspection, Rating, Repair, and Alteration*, edition issued 2006-06-01;
  - (b) API 570, *Piping Inspection Code Inspection, Repair, Alteration, and Re-Rating of In-Service Piping Systems*, edition issued 1998-10-01;

- (c) ASME B31.1, *Power Piping*, edition issued 2007-12-07;
- (d) ASME B31.3, *Process Piping*, edition issued 2008-12-31;
- (e) ASME B31.5, *Refrigeration Piping and Heat Transfer Components*, edition issued 2006-01-01;
- (f) ASME, *Boiler and Pressure Vessel Code, Section I - Rules for Construction of Power Boilers*, edition issued 2008-01-01;
- (g) ASME, *Boiler and Pressure Vessel Code, Section II Part A, Ferrous Metals*, edition issued 2007-01-01;
- (h) ASME, *Boiler and Pressure Vessel Code, Section II Part B, Nonferrous Metals*, edition issued 2007-01-01;
- (i) ASME, *Boiler and Pressure Vessel Code, Section II Part C, Specifications for Welding Rods, Electrodes and Filler Metals*, edition issued 2007-01-01;
- (j) ASME, *Boiler and Pressure Vessel Code, Section II Part D, Customary - Materials - Properties*, edition issued 2007-01-01;
- (k) ASME, *Boiler and Pressure Vessel Code, Section IV - Rules for Construction of Heating Boilers*, edition issued 2007-01-01;
- (l) ASME, *Boiler and Pressure Vessel Code, Section V, Nondestructive Examinations*, edition issued 2007-01-01;
- (m) ASME, *Boiler and Pressure Vessel Code, Section VI, Recommended Rules for the Care and Operation of Heating Boilers*, edition issued 2007-01-01;
- (n) ASME, *Boiler and Pressure Vessel Code, Section VII, Recommended Guidelines for the Care of Power Boilers*, edition issued 2007-01-01;
- (o) ASME *Boiler and Pressure Vessel Code, Section VIII Division 1-Rules for Construction of Pressure Vessels*, edition issued 2007-01-01;
- (p) ASME *Boiler and Pressure Vessel Code, Section VIII Division 2 Alternative Rules-Rules for Construction of Pressure Vessels*, edition issued 2007-01-01;

- (q) ASME *Boiler and Pressure Vessel Code*, Section VIII Division 3 *Alternative Rules-Rules for Construction of High Pressure Vessels*, edition issued 2007-01-01;
- (r) ASME, *Boiler and Pressure Vessel Code*, Section IX, *Welding and Brazing Qualifications*, edition issued 2007-01-01;
- (s) ASME, *Boiler and Pressure Vessel Code*, Section X, *Fiber-Reinforced Plastic Pressure Vessels*, edition issued 2007-01-01;
- (t) ASME-Controls and Safety Devices CSD-1, *Controls and Safety Devices for Automatically Fired Boilers*, edition issued 2006-12-29;
- (u) ASME PVHO-1, *Safety Standard for Pressure Vessels for Human Occupancy*, edition issued 2007-11-16;
- (v) ASME PVHO-2, *Safety Standard for Pressure Vessels for Human Occupancy: In-Service Guidelines for PVHO Acrylic Windows*, edition issued 2003-01-01;
- (w) CSA B51-09, *Boiler, Pressure Vessel and Pressure Piping Code*, edition issued 2009-01-01;
- (x) CSA B52-05, *Mechanical Refrigeration Code*, edition issued 2005-02-01;
- (y) CSA Z180.1-00, *Compressed Breathing Air and Systems*, edition issued 2000-03-01;
- (z) CSA Z276 - 07 UPD1, *Liquefied Natural Gas (LNG) - Production, Storage, and Handling*, edition issued 2008-07-01;
- (aa) NBBI - *National Board Inspection Code*, edition issued 2007-01-01;
- (ab) TEMA *Book of Standards*, edition issued 2007-01-01.

### **Crane Operators Standards**

5. The following standards for crane operators are adopted as the CO standards for the *Crane Operators Regulations*:

- (a) American Welding Society D14.1, *Specification for Welding of Industrial and Mill Cranes and other Material Handling Equipment*, edition issued 2005-01-01;
- (b) ASME B30.3, *Construction Tower Cranes*, edition issued 2004-01-01;

- (c) ASME B30.4, *Portal, Tower and Pedestal Cranes*, edition issued 2003-06-16;
- (d) ASME B30.5, *Mobile and Locomotive Cranes*, edition issued 2007-01-01;
- (e) ASME B30.9, *Slings*, edition issued 2006-01-01;
- (f) ASME B30.11, *Monorails and Underhung Cranes*, edition issued 2004-01-01;
- (g) ASME B30.16, *Overhead Hoists (Underhung)*, edition issued 2007-07-13;
- (h) ASME B30.17, *Overhead and Gantry Cranes (Top Running Bridge, Single Girder, Underhung Hoists)*, edition issued 2006-01-01;
- (i) ASME B30.18, *Stacker Cranes (Top or Under Running Bridge, Multiple Girder with Top or Under Running Trolley Hoist)*, edition issued 2008-10-01;
- (j) CSA B167-08, *Overhead Traveling Cranes -Design, Inspection, Testing Maintenance and Safe Operation*, edition issued 2008-10-01;
- (k) CSA Z150-98, *Safety Code on Mobile Cranes*, edition issued 1998-11-01;
- (l) CSA Z248, *Code For Tower Cranes*, edition issued 2004-03-01.

### **Fuel Safety Regulations Standards**

6. The following standards for fuel safety are adopted as the FS standards for the *Fuel Safety Regulations*

- (a) CSA - B139, *Installation Code for Oil Burning Equipment*, edition issued 2004-03-01;
- (b) CSA - B149.1-05, *Natural Gas and Propane Installation Code*, edition issued 2005-01-01;
- (c) CSA - B 149.2-05, *Propane Storage and Handling Code*, edition issued 2005-01-01;
- (d) CSA - B 149.3-05, *Code for the Field Approval of Fuel Related Components on Appliances and Equipment*, edition issued 2005-01-01;

- (e) CSA - B105-M93, *Code for Digester Gas and Landfill Gas Installation*, edition issued 1993-01-01;
- (f) CSA - B108- 99, *Natural Gas Fueling Stations Installation Code*, edition issued 1999-01-01.

### **Power Engineers Regulations Standards**

7. The following standards for power engineers are adopted as the PE standards for the *Power Engineers Regulations*

- (a) ASHRAE-15, *Safety Standard for Refrigerants*, edition issued 2007-01-01;
- (b) ASHRAE-34, *Designation and Safety Classification of Refrigerants*, edition issued 2007-01-01;
- (c) ASME B31.1, *Power Piping*, edition issued 2007-12-07;
- (d) ASME B31.3, *Process Piping*, edition issued 2008-12-31;
- (e) ASME B31.5, *Refrigeration Piping and Heat Transfer Components*, edition issued 2006-01-01;
- (f) ASME, *Boiler and Pressure Vessel Code, Section VI - Recommended Rules for the Care and Operation of Heating Boilers*, edition issued 2008-07-01;
- (g) ASME, *Boiler and Pressure Vessel Code, Section VII - Recommended Guidelines for the Care of Power Boilers*, edition issued 2008-07-01;
- (h) ASME-*Controls and Safety Devices CSD-1, Controls and Safety Devices for Automatically Fired Boilers*, edition issued 2006-12-29;
- (i) CSA B51-09, *Boiler, Pressure Vessel and Pressure Piping Code*, edition issued 2009-01-01;
- (j) CSA B52, *Mechanical Refrigeration Code*, edition issued 2005-02-01.