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## Proposed Amendments to the Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation

### Introduction

The Power Engineer, Boiler, Pressure Vessel and Refrigeration Safety Regulation (PEBPVRSR) under the *Safety Standards Act* came into force on April 1, 2004. Since that time, the regulation has undergone minor revisions as required to address individual matters as they arose.

In 2007 a review of the PEBPVRSR was initiated following recommendations cited by the Minister's Review Committee and in accordance with upcoming changes to provincial policies, in particular the implementation of the Trade, Investment and Labour Mobility Agreement (TILMA). Concurrently, in early 2007 the BC Safety Authority announced their future operating vision known as the "Accident Prevention Model," which emphasizes safety system management through education & outreach, enforcement, research and inspection. Given the recent changes at both the Provincial government and the BC Safety Authority, this review was conducted with the primary objectives of maintaining consistency and enhancing the integrity of the public safety system.

One of the major issues identified in this review was the affect of the Trade, Investment and Labour Mobility Agreement (TILMA) between British Columbia and Alberta that came into force on April 1, 2007. Under this Agreement, both provinces agree to recognize each other's trade qualifications for all regulated occupations and as a result, lead to increased labour mobility between these neighbouring provinces. Although the TILMA is currently under effect, there are a number of occupations granted a "transitional" status meaning that they are not subject to TILMA implementation until April 1, 2009. The occupations regulated under the PEBPVRSR fall within this category.

To that end, an inter-provincial committee was formed by the BC Safety Authority to meet and determine how to proceed with mutual obligations under the TILMA. These discussions were held under the direct supervision of the Provincial Safety Manager and in consultation with stakeholders representing industry and various training institutions. In addition, participation from our partners in Alberta included the Alberta government (Municipal Affairs) and the Alberta Boilers Safety Association (ABSA). What followed from these meetings is a two Part major initiative.

Part 1 deals with those matters related to the TILMA. Of primary importance are the qualification requirements and scope of work entitlements for all classes of power engineers. Part 2 proposes amendments that will, in general, maintain consistency with Provincial policies, the Accident Prevention Model, and general housecleaning items. The overall intent of Part 2 is to modify the PEBPVRSR to provide a more relevant, timely and user-friendly legal framework that recognizes and clarifies the roles and responsibilities of those who gain an economic benefit from performing regulated work or using regulated products.

This document does not specify the exact legal language that will ultimately be proposed for an amended PEBPVRSR unless necessary for explanatory purposes. The Province of BC maintains ultimate responsibility for the legal text contained in legislation. Rather, this document explains, in general terms as much as possible, what the intent of the proposed changes are. Amendments that will be proposed to the Province for strictly housecleaning purposes (i.e., where no substantive changes are proposed – e.g., moving a section from one place to another without changing its content) will generally not be discussed unless, as above, to clarify intent.

## Part 1 – Proposed Amendments to Comply with the BC/Alberta Trade, Investment and Labour Mobility Agreement

In the past, labour mobility between BC and the rest of Canada has been hampered due to a number of reasons. Traditionally, BC has had the longest qualifying times in Canada for several classes of power engineers. The result is that a power engineer wishing to relocate to BC must undergo more

qualifying time than originally anticipated. This is often the case with power engineers attempting to relocate from Alberta.

In addition, differences between educational requirements (e.g. in class) and scope of work for a particular class of certified power engineer (except 1<sup>st</sup> class) between BC and Alberta also compound this issue. In many cases, a person who was a Chief Engineer or Shift Engineer of a plant in one province would not be able to perform the same function at an identical or similar plant in the other province.

To this end, a series of the inter-provincial committee meetings focused on those two aspects; qualification requirements and scope of work. The goal was to reconcile the two provincial requirements as much as possible without compromising safety and to seek opportunities to enhance the future safety of pressure equipment.

Please note that all of the proposed changes that follow would result in corresponding changes to the definitions of different classes of plants. In order to minimize redundancy, no separate discussion (i.e., other than what is stated below) about plant classifications will be introduced.

#### **Proposed Changes**

#### 1 First Class

- 1.1 Qualification requirements for 1st class in months of qualifying time for different positions will be reduced to harmonize with Alberta, these changes will be done in regulations as follows:
  - 1.1.1 36 months as a chief engineer reduced to 30 months.
  - 1.1.2 36 months as an assistant chief engineer reduced to 30 months.
  - 1.1.3 48 months as a shift engineer reduced to 30 months; boiler operating capacity requirements for this position increased from 500 m2 to 1000 m2.
  - 1.1.4 48 months as an assistant shift engineer reduced to 45 months; Requirements to work in a 1st class plant will be added to this section.
  - 1.1.5 A new section will be added to accommodate pressure plants and supervisory rolls for individuals employed in the design, construction, installation, repair, maintenance or operation of pressure equipment in a capacity satisfactory to a provincial safety manager. Recommending ½ the normal operating requirements + 15 months in a pressure plant or 36 months in a supervisory capacity with the addition of a requirement to complete an approved first class power engineering course plus any prerequisite educational requirements as determined by a provincial safety manager.
  - 1.1.6 There were no changes to the 12 month credit for taking an approved 1st class course.
  - 1.1.7 Holding an engineering degree acceptable to the provincial safety manager changes the credit from 24 months to a 12 month total requirement for the positions and types of plants set out in the regulations dealing with an

application to write a 1st class exam. There is an additional requirement for completion of an approved first class power engineering course.

- 1.2 1st class Scope: There are no changes to the scope of operation for the 1st class.
- 1.3 1st class Plant Classifications: There are no changes to plant classifications for the 1st class.

#### 2 Second Class

- 2.1 Qualification requirements for 2nd class in months of qualifying time for different positions will be reduced to harmonize with Alberta, these changes will be done in regulations as follows:
  - 2.1.1 30 months as a chief engineer reduced to 24 months; power plant wording, "exceeding 150 m2", changed to, "3rd class power plant".
  - 2.1.2 36 months as a shift engineer or as an assistant chief engineer reduced to 24 months; power plant wording, "exceeding 250 m2" changed to "2nd class power plant".
  - 2.1.3 48 months as an assistant shift engineer reduced to 24 months; Maintenance Engineer changed to Assistant Engineer; power plant wording "exceeding 1000 m2" changed to "1st class power plant".
  - 2.1.4 60 months as an assistant engineer reduced to 24 months; power plant wording, "exceeding 1000 m2" changed to "1st class power plant".
  - 2.1.5 A new section will be added to accommodate pressure plants and supervisory rolls for individuals employed in the design, construction, installation, repair, maintenance or operation of pressure equipment in a capacity satisfactory to a provincial safety manager. Recommending ½ the normal operating requirements + 15 months in a pressure plant or 24 months in a supervisory capacity with the addition of a requirement to complete an approved second class power engineering course plus any prerequisite educational requirements as determined by a provincial safety manager.
- 2.2 2nd class Scope:
  - 2.2.1 The scope of the 2nd class remains unchanged.

#### 3 Third Class

- 3.1 Qualification requirements for 3rd class in months of qualifying time for different positions will be reduced to harmonize with Alberta, these changes will be done in regulations as follows:
  - 3.1.1 Change, "24 months as a power engineer in a position requiring a 4th class power engineer's certificate in a power plant that has a boiler capacity that exceeds 50 m2", to "12 months as a chief power engineer, shift engineer, assistant shift engineer or assistant engineer in a power plant that is required

by this regulations to employ in the chief power engineer, shift engineer, assistant shift engineer and assistant engineer positions, persons who hold at least a 4th class power engineer's certificate of qualification".

- 3.1.2 Maintenance engineer text deleted and covered by definition of assistant engineer.
- 3.2 3rd class Scope:
  - 3.2.1 "Chief engineer of a power plant that has a boiler capacity of 500 m2", changed to "chief engineer of any 3rd class plant.
  - 3.2.2 A power plant that exceeds 150 m2 of boiler capacity will be reduced to 100 m2 of boiler capacity but does not exceed 500 m2 of boiler capacity. BC to revert to pre-1999 regulations.
  - 3.2.3 The following text is covered under definitions of a 3rd class plant and will be deleted. "Chief engineer of any low pressure steam plant, fluid plant, low pressure thermal fluid plant or low temperature low pressure fluid plant and/or unfired plant.

#### 4 Fourth Class

- 4.1 Qualification requirements for 4th class in months of qualifying time for different positions will be reduced to harmonize with Alberta, these changes will be done in regulations as follows:
  - 4.1.1 All worker qualifying experience requirements under this section of the regulations reduced to 6 months from 12. and
  - 4.1.2 Must successfully complete a 4th class program that leads towards a 4th class certificate or hold an engineering degree acceptable to the provincial safety manager.
- 4.2 4th class Scope:
  - 4.2.1 A power plant that exceeds 75 m2 of boiler capacity reduced to 50 m2 of boiler capacity, 150 m2 of boiler capacity reduced to 100 m2. This changes the limits to be more restrictive but is consistent with TILMA objectives and reflects previous regulatory limits in BC.

# 5 Change "Fifth Class Power Engineer (Boiler Endorsement)" to "Fifth Class Power Engineer"

- 5.1 Qualification requirements for 5th class in months of qualifying time for different positions will be reduced to harmonize with Alberta, these changes will be done in regulations as follows:
  - 5.1.1 Change, "have experience for a period of not less than 8 months to 6 months", as a power engineer trainee in a 5th class plant, and add text, have successfully completed a 5th class power engineering course approved by a provincial safety manager.

- 5.1.2 Change, "have experience for a period of not less than 8 months to 6 months", in the design, construction, repair, operation or maintenance of equipment to which the regulations applies and successfully complete a 5th class power engineering course approved by a provincial safety manager.
- 5.1.3 Change "fifth class power engineer (boiler endorsement)", to "fifth class power engineer". The fifth class power engineer is a power engineer class recognized by Alberta and meeting the requirements of TILMA. The fifth class power engineer is further recognized in Saskatchewan, Manitoba and the Territories. The exam, (a national standardized examination approved by SOPEEC, the "Standardization of Power Engineers Examination Committee"), to be introduced in the province of BC, January 1, 2008.
- 5.2 5th class Scope:
  - 5.2.1 A power plant that exceeds 10 m2 of boiler capacity but does not exceed 75 m2 of boiler capacity reduced to 50 m2 of boiler capacity. This is a TILMA initiated change in line with the changes to 4th and 3rd class plants.
  - 5.2.2 The scope of operation for the fifth class power engineer is equivalent to the fifth class power engineer (boiler endorsement)

# 6 Change "Fifth Class Power Engineer (Refrigeration Endorsement)" to "Refrigeration Operator" (see also see transitional issues 11.2)

- 6.1 Change "fifth class power engineer (refrigeration endorsement)", to "refrigeration operator". The name change will be less confusing to industry and better represent this operator class. The examination program will remain the same. This name change will have a negligible effect on TILMA.
- 6.2 Refrigeration Operator Scope: The scope of operation for the refrigeration operator is equivalent to the fifth class power engineer (refrigeration endorsement)

#### 7 Greenhouse Boiler Operator

No examinations have ever been applied for and no certificates issued. This class code will be deleted from the regulations.

#### 8 Oil well Boiler Operator

The qualifying time to write an examination will increase from 30 days to 6 months to match the Alberta operator requirements. A recognized oil well boiler course is still required, and a certified oil well boiler operator will have a limit of 100 m2 boiler operating capacity. Higher operating limits will require a 4th class certificate. Also proposing that applicants must have operating experience that is acceptable to a Provincial Safety Manager to further align with TILMA.

#### 9 Ice Facility Operator

Not regulated in Alberta. (See transitional issues)

#### 10 Boiler & Refrigeration Safety Awareness Certificate of Qualification programs

Provincial program unique to BC, no mobility issues, however, it is proposed that the current examinations for these programs be eliminated.

#### **11** General Transitional issues for power engineer and operator certificates

- 11.1 Proposing that Alberta add a section to their regulations to allow a safety codes officer to gain qualifying time to write a 1st class after working in that position for 36 months.
- 11.2 In Alberta, certified refrigeration mechanics are required to perform any installation, repair or maintenance of refrigeration equipment. Alberta does not have any requirements with respect to the operation of refrigeration equipment. As refrigeration operation is not regulated in Alberta this currently poses no mobility issues with TILMA. However, we are proposing that Alberta revisit the regulation of safety in that area.
- 11.3 Suggest Alberta to consider mandatory completion of an approved 5th class course. The requirement of an approved course is a recommended change to the regulations.

#### **12 General Education requirements**

- 12.1 General education requirements for the 1st, 2nd, 3rd, and 4th class to harmonize with Alberta will be done by a policy document as follows:
  - 12.1.1 To pass a Power Engineers Certificate of Qualification examination, a Candidate must obtain at least 65% of the total marks allotted for each exam paper.
  - 12.1.2 A Power Engineers exam must consist of questions relating to the subjects of current reference syllabi and divided into Part A & B.
  - 12.1.3 A candidate may write any one or all papers of Part A and B except for Part B paper 4 for 1st class, paper 3 for 2nd class, paper 2 for 3rd class, at any scheduled examination after obtaining a 2nd, 3rd, 4th, class, PE's Certificate of Qualification respectively and fulfilling specific educational requirements of 12.1.4.

#### 12.1.4 A candidate must have either:

- 12.1.4.1 At least 50% standing in grade 12 for 1st, 11 for 2nd and 10 for 3rd class or equivalent in:
  - 12.1.4.1.1 Physics or Science,
  - 12.1.4.1.2 Pure Mathematics or Applied Mathematics, and
  - 12.1.4.1.3 English Language Arts, or
- 12.1.4.2 A pass in Part A of a 1st, 2nd, or 3rd class course in power engineering satisfactory to the Provincial Safety Manager.

#### 13 General Power Engineer Scope of operation

- 13.1 A 1st, 2nd, 3rd, or 4th class power engineer's certificate of qualification entitles the holder to be:
  - 13.1.1 A chief engineer of a plant with a corresponding or lower class,
  - 13.1.2 Shift engineer of a plant that is up to one class higher than the class of certificate, or
  - 13.1.3 A person in charge of any type and size of refrigeration plant.
- 13.2 Change" Chief engineer of ....a plant that has a boiler capacity..." to "Chief engineer of any 1st, 2nd, 3rd, or 4th class plant."
- 13.3 Change" Shift engineer of .....a plant that has a boiler capacity..." to "Shift engineer of any 1st, 2nd, 3rd, or 4th class plant."
- 13.4 Change, "The holder of any class of power engineer's certificate of qualification may perform the duties authorized for the holder of a power engineer's certificate of qualification of a lower classification.

#### 14 Other TILMA-Related Changes

In order to give affect to the changes noted above would require several ancillary changes to the PEBPVRSR. Most of those changes are "housecleaning" in nature and do not change the substance of the proposed changes above. Some of those changes are referred to in the table in Part 2 of this document as they coincide with modernization of the regulation. A sampling of those types of changes not listed in the Part 2 table include:

- Including "maintenance engineer" in the definition of "shift engineer" to facilitate the recognition of qualifying times for maintenance engineers (a position not encountered in the Alberta regulations so therefore not recognized there at present).
- Adding the words "or when the temperature increases to ambient temperature" to the definition of "expansible fluid" will harmonize the definition with Alberta.
- Adding the new certificate of qualification for "welding operator" to section 7 (1) will enable the harmonization of pressure welder testing methods and allow for seamless mutual recognition of welder's tests.

## Part 2 – Proposed Amendments to Modernize the PEBPVRSR

Pressure equipment represents some of the longest regulated equipment in the world. As such, throughout the long history of regulation there have been dozens of changes to "how" pressure equipment is regulated. In today's context, technological advancements happen at a rapid pace and the technology as a whole is rapidly evolving. Keeping up with those changes in an effective and efficient way requires a regulatory framework that is flexible and adaptable; forever mindful of "why" pressure equipment is regulated for safety reasons.

The proposed changes discussed below run the gamut from changes intended to provide operational flexibility to those designed to clarify responsibility for safety. Some proposed changes would require multiple amendments to the PEBPVRSR. However, this document focuses on "what" and "why".

Ultimately, when it comes to regulation changes, the Province will determine the "how" in consultation with the BC Safety Authority. The proposed changes are summarized below in table format for convenience.

## Proposed Changes

Section No.	Original Text	Suggested Revised Text	Comments
1 "boiler"	a liquid is capable of being pressurized	a liquid is capable of being pressurized or being heated	Add "or being heated". This is necessary to include low pressure fluid or thermal fluid boilers which cannot be pressurized but only heated. This definition creates inconsistencies with sections currently regulating on pressurized equipment as boilers.
1 "pressure piping"	an expansible fluid under pressure between 2 or more points;	an expansible fluid or fluid or thermal fluid with an operating temperature exceeding 121°C or a working pressure exceeding 1 100 kPa between 2 or more points;	Replace "under pressure" with "or fluid or thermal fluid with an operating temperature exceeding 121°C or a working pressure exceeding 1 100 kPa between".         Consider alternate wording; "expansible fluid" excludes high temperature thermal fluids below vapor point. This creates inconsistencies with further sections of this regulation and current practice in piping system design registration.
2(1) "greenhouse plant"	[whole definition: greenhouse plant]	[text deletion]	Delete definition of "greenhouse plant". This definition is no longer required as no certificates have ever been applied for or issued for a greenhouse plant. All references to "greenhouse plants" including operator's certificates are also proposed to be deleted throughout the regulation.
2(1) "heating plant"	[text addition]	<ul> <li>"heating plant" means</li> <li>(i) a boiler in which steam or other vapour may be generated at a pressure not exceeding 103 kPa,</li> <li>(ii) a boiler, other than a low temperature low pressure boiler, in which water or an aqueous solution may be heated to a pressure not exceeding 1100 kPa or a temperature not exceeding 121°C.</li> </ul>	Add new definition for "heating plant". For TILMA purposes, this simplifies the regulation by deleting the definition of all low pressure fluid boilers, low temperature low pressure fluid boilers and low pressure steam boilers and combining them into a single category. The exception is required to retain the special operating status of low temperature low pressure plants (mostly unique to the greenhouse industry). This is to avoid creating a number of fourth class plants which were formerly fifth class plants.
2(1) "fluid heating plant"	[text addition]	means a heating plant that heats a fluid without vaporization	This definition is required to differentiate between types of heating plants for the purposes of power engineer qualifications (TILMA) and exemptions.
2(1) "steam heating plant"	[text addition]	means a heating plant that generates steam or vapour	This definition is required to differentiate between types of heating plants for the purposes of power engineer qualifications (TILMA) and exemptions

3(2)(f)	a fluid plant used to heat a building that contains only 4 or fewer self contained residential units;	Add low pressure thermal fluid plants, refrigeration plants and pressure vessel plants other than toxic or flammable contents to this exemption.	Consideration is needed for extending this exclusion to low pressure thermal fluid plants, refrigeration plants and pressure vessel plants other than toxic or flammable contents. This would clarify that the exemption applies to the specified equipment in low density residential settings.
3(2)(m)	pressure piping and fittings external to the boiler proper in a low temperature low pressure fluid plant	piping and fittings external to the boiler proper in a low temperature pressure fluid plant	Delete "pressure" at the beginning of this definition. By definition this would not be pressure piping (Sec 1 of this regulation). Therefore the current exemption is inconsistent with the definition of pressure piping.
3(2)(s)-(t)	[text addition]	<ul> <li>(s) air or hydraulic brake systems subject to the <i>Motor Vehicle</i> Safety Regulations under the <i>Motor Vehicle Safety Act</i> (Canada);</li> <li>(t) air or hydraulic brake or steering systems for off road vehicles;</li> </ul>	Add these to the list of exemptions. They are designed to exempt compressors and other reciprocating equipment that, although pressurized, have never been registered designs and the brake systems on vehicles, principally mining trucks. The design of this type of equipment is generally not within the scope of the codes and standards adopted by the regulations. Based on Alberta regulations, this change would be in accordance with TILMA.
4	Each code or standard and portion of a code or standard as listed in the Schedule is adopted.	Add as issued and amended from time to time.	Provision is required to ensure the latest adopted codes are brought forward by regulation automatically.
6(g)	(g) a refrigeration plant with refrigerant groups AI, A2 or B1, as defined in CSA B52, not exceeding a total plant capacity of 200 kW prime mover nameplate rating;	(g) an indirect refrigeration plant, as defined in CSA B52, using refrigerant R-11 and all other refrigeration plants with refrigerant groups A1, A2 or B1, as defined in CSA B52, not exceeding a total plant capacity of 200 kW prime mover nameplate rating	Proposal would be to exempt refrigeration plants with R-11 refrigerant as these plants are being phased out and the refrigerant operates at less than 15 PSI
38(1)	<ul> <li>(1) A boiler safety awareness certificate of qualification entitles the holder to monitor a boiler in any of the following kinds of plants named in the certificate:</li> <li>(a) a power plant that has a boiler capacity that does not exceed 30 m2;</li> <li>(b) a low pressure steam plant that does not exceed 200 m2 boiler capacity;</li> <li>(c) a low pressure fluid plant or low pressure thermal fluid plant that does not exceed 500 m2 boiler capacity;</li> <li>(d) a low temperature low pressure fluid plant that does not exceed 2 000 m2 of boiler capacity;</li> </ul>	monitor a boiler in any boiler plant that has been registered as a general supervision or risk assessed status plant under this regulation.	Change this section to "A boiler safety awareness certificate of qualification entitles the holder to monitor a boiler in any boiler plant that has been registered as a general supervision or risk assessed status plant under this regulation." Subsections (a)-(e) may then be deleted as would be rendered redundant.

	(e) an unfired plant that does not exceed 1 000 m2 boiler capacity.		
54(4)	[text addition]	(4) This section does not apply to a power plant.	Add subsection 54(4).
			This clarifies that, for safety/risk reasons, power plants are the only plants that cannot be registered as special plants and eliminates ceilings (necessary after deleting Secs 55 & 56) for special plants, allowing for more flexibility for plants that could not previously register for special status.
55-56	[whole section: General supervision status plant registration and operation] [whole section: Risk assessed status plant registration and operation]	[text deletion]	Delete sections 55-56. Eliminating ceilings on special plants provides more flexibility and recognizes safety alternatives by plant owners satisfactory to the provincial safety manager. The current wording in section 54 (3) would be maintained and provides appropriate authority to the provincial safety manager to recognize safety alternatives. This will also approach the standards for staffing of heating plants and thermal fluid plants in Alberta in accordance with
60	The following classes of contractor's licence are established: (a) pressure retaining equipment: (i) class "A", boiler, pressure vessel and pressure piping; (ii) class "Au", pressure vessel and pressure piping; (iii) class "Ap", pressure piping; (iv) class "B", limited capacity boiler, pressure vessel and pressure piping; (b) class "REF", refrigeration; (c) class "SRV", safety valve and relief valve service; (d) class "MA" manufacturing shop.	The provincial safety manager may, for the purposes of this regulation, establish (a) classes of contractor's licence, (b) application requirements to obtain a contractor's licence, and (c) the scope of work permitted to be performed under different classes of contractor's licence.	TILMA. Removing the list here will enable the provincial safety manager to keep pace with industry needs as they arise (e.g., for welder testers as mentioned above).

74	Owner responsible for safety in a plant 74 (1) The owner of a plant must ensure that there is compliance with all of the following:	(1) The owner of a plant is responsible for safety in the plant and the safety of the plant.	Replace section 74. This streamlined version simplifies the section and places appropriate responsibility on those who gain an economic benefit from the work. Also, would allow the deletion of section 77.
74(2)	ensure that there is compliance with	<ul> <li>(2) In order to ensure safety of the plant the owner may apply to the provincial safety manager for either an interim certificate</li> <li>(a) (i) A provincial safety manager may, subject to subsections (b) and (c), issue an interim power engineer's certificate to a power engineer of any class.</li> <li>(ii) A provincial safety manager, may, subject to subsections (b) and (c), issue a fifth or fourth class interim power engineer's certificate to an individual with qualifications that are acceptable to a provincial safety manager.</li> <li>(iii) An interim certificate issued under subsection (i) or (ii) entitles the holder to perform duties for the limited period of time set out on the certificate.</li> <li>(b) (i) Subject to section 7 (2) and (3) of this regulation, the chief engineer of a plant, or, if there is no chief engineer, the owner of a plant, may apply for a category "A" interim power engineer certificate on behalf of a power engineer who holds a power engineer's certificate of qualification that is one class lower than that required for the relevant position and who has been employed in the plant or an equivalent plant for a period of at least 12 months if (a) the boiler capacity of the plant is increased, or</li> <li>(b) the power engineer employed in the plant needs more time, because of a reason acceptable to a provincial safety manager, to prepare for any required examinations.</li> <li>(ii) A category "A" interim power engineer's certificate is in force for not more than 12 months from the date of issue.</li> <li>(iii) Despite subsection (ii), on application by the owner or chief engineer of a plant, a category "A" interim power engineer's certificate is an examination during the time the interim certificate is in force, may be renewed by a provincial safety manager once only, for a period that does not exceed 12 months.</li> <li>(c) (i) The chief engineer of a plant, or, if there is no chief engineer, the owner of a plant, may apply for a category "B" interim power engineer's certifica</li></ul>	benefit from the work. Also, would allow the deletion of

		(iv) Despite subsection (iii), on application by the owner or chief engineer of a plant, a category "B" interim power engineer's certificate issued to a power engineer in that plant may be renewed by a provincial safety manager once only, for a period that does not exceed 30 days.	
74(3)	[text addition]	(3) The owner must ensure that the power engineer who is placed in immediate control of a plant, and who is responsible to the shift engineer for the safe operation of the plant, is qualified as an assistant shift engineer for the plant.	Add subsection (3) to Sec 74. This streamlined version simplifies the section and places appropriate responsibility on those who gain an economic benefit from the work. Also, would allow the deletion of sections 75, 76 & 79. Other changes reflect a streamlining and simplification of sections 27, 28 & 29 (Interim certificates). This is changed from specific reference to chemical recovery boilers in current section 76 to a general reference to control of any plant. This is made to work in conjunction with section 20(2) in that any power engineer with qualifications greater than required for the assistant shift engineer may fulfill this control function.
84(3)	<ul> <li>(3) Subsection (2) does not apply to pressure piping that is</li> <li>(a) NPS 3 or less, or</li> <li>(b) in a fluid plant.</li> </ul>	<ul> <li>(3) Subsection (2) does not apply to</li> <li>(a) pressure piping that is</li> <li>(i) NPS 3 or less, or</li> <li>(ii) in a fluid plant, or</li> <li>(b) a pressure retaining component that is an integral part of a rotating or reciprocating mechanical device, where the primary design considerations or stresses of the device are derived from the functional requirements of the device.</li> </ul>	This will exempt the specified equipment in (b) from design registration requirements as there are no additional safety benefits from registering the specified equipment.
86	Except in an emergency and as authorized under section 12 (2) of the Safety Standards General Regulation, a person must not repair a boiler or pressure vessel unless the person has notified a safety officer and received approval from the safety officer for the repair procedures to be used	[text deletion]	This section is redundant and should be deleted. Sec 12 of the SSGR stands on its own merits.

## **Conclusion and Next Steps**

This consultation document summarizes the overall changes that will impact the regulation of pressure equipment in BC. It is important to note that while this document provides directions for consideration, legislative details regarding implementation will ultimately be determined by the Province.

Currently, the BC Safety Authority is collecting information and inviting comment regarding the proposed changes. In order to facilitate timely discussions with involved parties, we ask that all comments regarding the content of this document be provided by no later than **November 30, 2007**. Comments can be sent to:

#### boiler-regulations@safetyauthority.ca

All comments will be reviewed by BC Safety Authority staff. Due to time constraints, only electronic submissions sent to the above address will be reviewed. Please ensure that your submission includes:

- The name of your organization/affiliation,
- Your name and position/affiliation with your organization,
- Your primary line of business (e.g., refrigeration, smelter, pulp and paper, etc.),
- Electronic contact information (i.e., your email address), and
- References to any specific part of this document.

The BC Safety Authority is also interested in your thoughts with respect to transitional issues that may arise for you or your organization. Should you wish to provide such comments, please do so under a separate heading entitled "Transition Issues."

We would like to take this opportunity to thank you for your time and attention to this important initiative. Your participation will help ensure that all points of view are considered and in the end, help reinforce safety in your industry.