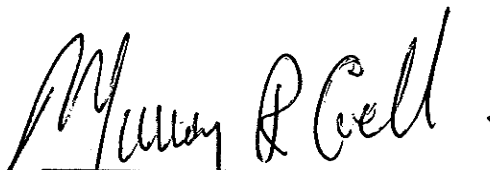


**REGULATION OF THE
MINISTER OF COMMUNITY, ABORIGINAL AND WOMEN'S SERVICES**

Safety Standards Act

I, Murray Coell, Minister of Community, Aboriginal and Women's Services, order that

- 1 Effective November 1, 2004, the Electrical Safety Regulation, B.C. Reg. 100/2004, is amended as set out in the attached Schedule 1,
- 2 Effective November 1, 2004, the Elevating Devices Safety Regulation, B.C. Reg. 101/2004, is amended as set out in the attached Schedule 2,
- 3 The Gas Safety Regulation, B.C. Reg. 103/2004, is amended
 - (a) effective November 1, 2004, as set out in sections 1, 3 and 4 of the attached Schedule 3, and
 - (b) effective March 1, 2005, as set out in section 2 of the attached Schedule 3.
- 4 Effective November 1, 2004, the Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation, B.C. Reg. 104/2004, is amended as set out in the attached Schedule 4.



Minister of Community, Aboriginal
and Women's Services

OCT 26 2004

(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section:- Safety Standards Act, S.B.C. 2003, c. 39, s. 88

Other (specify):- M58/2004; M59/2004; M61/2004; M62/2004

October 20, 2004

/2004/3

SCHEDULE 1

- 1** *Section 9 of the Electrical Safety Regulation, B.C. Reg. 100/2004, is repealed and the following substituted:*

Field safety representative certificates for applied technologists

- 9**
- (1) An individual may apply to a provincial safety manager for a certificate of qualification as a field safety representative in one of the classes of certificates referred to in section 7 if the individual
 - (a) holds qualifications in electrical engineering technology,
 - (b) is registered as an applied science technologist under the *Applied Science Technologists and Technicians Act*,
 - (c) completes a course in the application of electrical codes and standards required by a provincial safety manager, and
 - (d) passes an examination required by the provincial safety manager.
 - (2) An applied technologist who applies for a class A or class B certificate of qualification as a field safety representative must have
 - (a) 2 years of work experience, acceptable to a provincial safety manager, after receiving a class C certificate of qualification as a field safety representative, or
 - (b) 3 years of work experience, acceptable to a provincial safety manager, with electrical installations in which the voltage of installation is more than 150 volts to ground.
 - (3) An applied technologist who applies for a class C certificate of qualification as a field safety representative must have one year of work experience acceptable to a provincial safety manager.

SCHEDULE 2

- 1** *Section 1 of the Elevating Devices Safety Regulation, B.C. Reg. 101/2004, is amended in the definitions of “amusement ride” and “elevating device” by striking out “recreational rail” and substituting “recreational railway”.*

- 2** *Section 2 is amended*

- (a) by repealing the definition of “acceptance inspection” and substituting the following:*

“acceptance inspection” means an inspection of an elevating device that

- (a) is carried out before the elevating device is permitted to be put into service, and
- (b) is conducted for the purpose of determining whether the elevating device complies with the requirements of all applicable codes, regulations and adopted technical standards; , *and*

(b) in the definition of “recreational rail” by striking out “recreational rail” and substituting “recreational railway”.

3 *Section 6 is amended*

(a) in paragraph (a) by adding “or an amusement ride” after “passenger ropeway”,

(b) in paragraph (b) by adding “or amusement rides” after “passenger ropeways”,

(c) in paragraph (c) by adding “or amusement rides” after “passenger ropeways”,

(d) in paragraph (f) by adding “, other than recreational railways” after “amusement rides”, and

(e) in paragraph (m) by striking out “recreational rails” and substituting “recreational railways”.

4 *The title to Division 3 of Part 2 is repealed and the following substituted:*

Division 3 – Inspection Requirements .

5 *Section 12 is repealed and the following substituted:*

Acceptance inspection and test

12 (1) A licensed elevating device contractor or that person’s field safety representative must ensure that an elevating device undergoes an acceptance inspection by a safety officer when either of the following circumstances apply:

(a) the elevating device is newly installed and no operating permit has previously been issued in respect of the elevating device;

(b) the elevating device has undergone a major alteration.

(2) If an acceptance inspection is required under subsection (1), the licensed elevating device contractor or that person’s field safety representative must

(a) request a safety officer to conduct an acceptance inspection, and

(b) submit to the safety officer any information relevant to the acceptance inspection.

6 *Section 18 is amended*

(a) in subsection (1) (n) by striking out “recreational rail” and substituting “recreational railway”, and

(b) in subsection (2) (a) (ii) by striking out “0.1 or less (6×)” and substituting “0.1 (6°) or less”.

7 *Section 22 is repealed.*

8 *Section 23 is repealed and the following substituted:*

Testing of safeties and governors

- 23 (1) This section applies only to elevating devices for which the adopted code or standard applicable to that elevating device requires the performance of car and counterweight safety tests, governor overspeed tests and governor pull through tests.
- (2) The owner of an elevating device must
- (a) ensure that the tests referred to in subsection (1) are carried out
 - (i) at the intervals specified in the applicable code, or
 - (ii) if the applicable code does not specify intervals by which the tests must be carried out, at intervals not exceeding 3 years, and
 - (b) deliver to a provincial safety manager an affidavit stating the results of the tests conducted under paragraph (a).
- 9 *Section 24 is amended by striking out “the director” and substituting “a provincial safety manager”.*
- 10 *The following Division is added after section 26:*

Division 1.1 – Amusement Rides

Changes and alterations to amusement rides

- 26.1 (1) An owner who proposes to make a change to the design or specifications of an amusement ride must ensure that
- (a) the change is in compliance with the manufacturer’s specifications, and
 - (b) the change is in conformance with the Act and this regulation.
- (2) The following alterations must be considered to be a major alteration under the Act and a technical information package must be submitted to the provincial safety manager:
- (a) increasing the manufacturer’s maximum capacity or speed;
 - (b) changing the load bearing structure of an amusement ride in a manner that would reduce the original strength of the structure;
 - (c) changing the source of power for the main drive or control mechanism of an amusement ride, except with the manufacturer’s approval;
 - (d) changing the method of guiding the passenger carrying units of an amusement ride;
 - (e) changing the classification of an amusement ride;
 - (f) relocating an amusement ride that was designed as a park ride;
 - (g) changing an amusement ride from ground mounted to trailer mounted.
- 11 *Section 34 (3) is amended by striking out “special emergency service” and substituting “firefighters’ emergency operation”.*

12 Section 35 is amended by adding the following:

- (3) A swing stage, window washer, scaffolding or similar type equipment must not be located within 3 m (10 feet) of a personnel hoist unless guarded in accordance with the applicable safety code.
- (4) A personnel hoist must not be operated if
 - (a) the wind speed exceeds 60 km per hour (35 mph), not including gust wind speed, or
 - (b) operation is considered unsafe by an individual who is authorized to operate the personnel hoist under this regulation.
- (5) The personnel hoist operator must perform a daily routine safety check and must complete an inspection check list.
- (6) The personnel hoist contractor must perform a hoist extension examination and submit to the provincial safety manager a hoist extension affidavit for alternate hoist extensions, commencing with the first extension after the initial acceptance by a safety officer.

13 Section 36 is repealed.

14 The following section is added to Part 7:

Elevating device hoistway enclosures

- 39.1** (1) If fire resistive material construction is not required by the applicable building safety ordinance, code or enforcing authority having jurisdiction, hoistway enclosures may include panels of glass, provided that the panels
- (a) are made of laminated glass that conforms to the material requirements of the National Standard of Canada, Tempered or Laminated Safety Glass, CAN/CGSB-12.1-M90, or
 - (b) are of a design and construction method that uses an arrangement of glass, combined with other materials, that
 - (i) meets the requirements of subsection (3), and
 - (ii) provides a performance and level of safety equivalent to laminated glass that conforms to the requirements in paragraph (a).
- (2) A professional engineer must provide verification of the equivalency required by subsection (1) (b).
- (3) If a hoistway enclosure panel fails, regardless of the type of material used and whether or not fire resistive material construction is required, the failure must be such that objects projected from a source external to the hoistway enclosure, or fragments of the failed panel, will not enter the hoistway.

15 Section 43 is repealed and the following substituted:

Welding

- 43** (1) In this section:

“equivalent procedures” means welding procedures that have equivalent safety standards to welding procedures set out in a code or standard adopted by this regulation;

“professional engineer” means a professional engineer as defined in the *Engineers and Geoscientists Act*.

- (2) All welding procedures must comply with
 - (a) the procedures set out in an applicable code or standard adopted by this regulation, or
 - (b) if no code or standard adopted by this regulation is applicable, or no procedures are set out, equivalent procedures.
- (3) In a circumstance to which subsection (2) (b) applies, a person must
 - (a) before welding, obtain the written opinion of a professional engineer as to what would be an equivalent procedure, and
 - (b) after welding, obtain the written opinion of a professional engineer that the procedures used were equivalent procedures.

16 Section 45 is amended

(a) in subsection (1) by striking out “emergency service” and substituting “fire-fighters’ emergency operation”,

(b) by repealing subsection (1) (a) to (c) and substituting the following:

- (a) Phase I Emergency Recall Operation by Fire Alarm Initiating Devices (Phase I Automatic Emergency Recall Operation) must be installed in accordance with the safety code;
- (b) Phase I Automatic Emergency Recall Operation by Smoke Detector in Sprinklered Machine Room must be installed in accordance with the safety code;
- (c) Phase I Automatic Emergency Recall Operation to the Alternate Level must be installed in accordance with the safety code, municipal bylaw and the requirements of this regulation; , **and**

(c) in subsection (2) by striking out “Elevator Operation” and substituting “Elevator Emergency Operation”.

17 Section 47 is amending by adding the following:

- (3) Link chain that is used as a safety retainer or in a stress bearing application on an amusement ride must
 - (a) be certified by the chain manufacturer as to its load carrying capacity,
 - (b) not be constructed of twisted wire or stamped links, and
 - (c) not have cold shuts, quick links, shackles or connecting links added to the link chain, except fasteners that are used as end fasteners on the link chain.
- (4) Each fastener that is used with a link chain on an amusement ride must have a load carrying capacity that is at least equal to the link chain to which it is fastened.

18 *The following section is added:*

Hydraulic elevating devices

- 54** (1) In this section,
- “relief valve set pressure”** means set-to-open pressure, set-to-start-to-open pressure or the static pressure increasingly applied in the inlet of a relief valve installed in the hydraulic system of a hydraulic elevating device, and is the pressure
- (a) at which the relief valve is set to start to open and allows only drops of hydraulic fluid to pass, and
 - (b) that must be exceeded in order for the relief valve to pass hydraulic fluid back to the hydraulic fluid storage tank of the hydraulic system.
- (2) In respect of a hydraulic elevating device, the following requirements apply to relief valve systems:
- (a) the relief valve set pressure must be the set pressure that is required to meet the maximum flow capacity and maximum relieving pressure requirements in paragraph (b);
 - (b) the size of the relief valve and bypass must be sufficient to pass the maximum flow capacity rated for the hydraulic pump and at the same time raise the pressure above the working pressure by no more than 50% at that pump.
- (3) Two or more relief valves may be used for the purposes of subsection (2) and must be
- (a) designed with a means for sealing, and
 - (b) sealed after being set in accordance with subsection (2) (a).
- (4) When flexible hose is used, a line rupture valve or overspeed valve, as applicable, must be installed in every hydraulic elevating device and, in the event that the flexible hose or fitting fails, the valve must be adequate to
- (a) reduce and then stop the flow of hydraulic fluid in order to prevent a sudden drop in pressure, and
 - (b) immediately stop and sustain a hydraulic elevating device that is moving downward.

- 19** *Item 1 of Column 2 of the Schedule is amended by striking out “Exclusion of Section 11” and substituting “Exclusion of Section 8.11”.*

SCHEDULE 3

- 1** *Section 23 (b) of the Gas Safety Regulation, B.C. Reg. 103/2004, is repealed and the following substituted:*

- (b) regulated work in any premises other than a fully detached dwelling, if
 - (i) the meter is supplied with gas at a pressure of 14.0 kPa gauge or less, and

(ii) the total connected load for the meter is 120 kW or less.

- 2 *Sections 38 and 39 (2) and (5) (a) are amended by striking out “3 business days” and substituting “2 business days”.*
- 3 *Section 39 (5) (b) is amended by striking out “indicate” and substituting “in a manner that is clear and easily understood, indicate”.*
- 4 *Section 3.14.8 (d) of the Code as added by section 2 of the Schedule is repealed and the following substituted:*
 - (d) the walls of a screen or roof well shall
 - (i) be no higher than the height of the appliance when it is vented atmospherically, or
 - (ii) not exceed an angle of 45° from the top of the screen or roof well to the vent outlet of a power or fan assisted venting system; .

SCHEDULE 4

- 1 *Section 2 of the Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation, B.C. Reg. 104/2004, is amended in the definition of “plant” by adding “unfired plant,” after “oil well plant,”.*
- 2 *Section 15 (1) (b) is amended*
 - (a) *in subparagraph (i) by striking out “250” and substituting “150”,*
 - (b) *in subparagraph (iii) by adding “or as an assistant chief engineer” after “shift engineer”, and*
 - (c) *in subparagraph (v) by striking out “chief”.*
- 3 *Section 17 (1) (b) (v) is amended by striking out “chief”.*
- 4 *Section 19 (1) (b) (ii) is repealed and the following substituted:*
 - (ii) for a period of not less than 12 months as a power engineer trainee in
 - (A) a power plant that exceeds 10 m² of boiler capacity,
 - (B) a low pressure steam plant that exceeds 30 m² of boiler capacity,
 - (C) a low pressure fluid plant or low pressure thermal fluid plant that exceeds 150 m² of boiler capacity, or
 - (D) a low temperature low pressure fluid plant that exceeds 300 m² of boiler capacity, or .

5 *Section 21 is amended by striking out “boiler contractor” and substituting “boiler or refrigeration contractor” and by striking out “boiler plant:” and substituting “plant:”.*

6 *Section 22 (2) is amended by adding “, up to and including the burners,” after “gas line to a boiler”.*

7 *Section 23 (1) is amended*

(a) by repealing paragraph (a), and

(b) in paragraph (b) by striking out “a fluid plant,” and substituting “a fluid plant that has a boiler capacity that exceeds 150 m² of boiler capacity,”.

8 *Section 45 is repealed and the following substituted:*

Continuous supervision status plant operation

45 Unless a plant is registered under section 54 or is exempted under section 6, the person in charge of the plant must be present at all times in the plant boiler room, refrigeration machinery room, engine turbine room or in the immediate vicinity within the plant premises while the plant is in operation.

9 *Section 60 (d) is repealed and the following substituted:*

(d) class “MA” manufacturing shop.

10 *Section 65 (2) is amended by striking out “2 years” and substituting “3 years”.*

11 *Section 67 (1) is repealed and the following substituted:*

(1) The person in charge of a plant must hold a certificate of qualification appropriate to the work to be performed in the plant.

12 *Section 68 (1) is repealed and the following substituted:*

(1) If a power engineer has the written permission of a provincial safety manager, the power engineer may, at any one time, be the chief engineer of not more than

(a) 3 low pressure steam, low pressure fluid or low pressure thermal fluid plants, or

(b) 4 refrigeration plants.

13 *Section 82 (c) is repealed and the following substituted:*

(c) if required by a safety officer, it is inspected, investigated and tested during construction and after completion.

14 *The Schedule is amended*

(a) in section 3 by adding the following paragraphs:

(b) API 510 Pressure Vessel Inspection Code: Maintenance Inspection, Rating, Repair and Alteration;

(c) API 570 Piping Inspection Code: Inspection, Repair, Alteration and Rerating of In-Service Piping Systems. , **and**

(b) by repealing section 4 (e) and substituting the following:

(e) ASME Section XII – Rules for Construction and Continued Service of Transport Tanks; .