



Boiler & Pressure Vessel

Syllabus

for

Refrigeration Safety Awareness

Certificate of Qualification Examination

**Boiler & Pressure Vessel
Syllabus for the Refrigeration Safety Awareness Certificate Examination**

Prerequisites to obtain a Refrigeration Safety Awareness Certificate (RSA)

An applicant for a refrigeration safety awareness certificate of qualification must

- (a) provide proof acceptable to a provincial safety manager of instruction in safety procedures for the applicant's plant,
- (b) successfully complete a basic refrigeration plant safety program or other technical course approved by a provincial safety manager, and
- (c) have passed the refrigeration safety awareness certificate of qualification examination.

Scope of Refrigeration Awareness Certificate (RSA)

- A refrigeration safety awareness certificate of qualification entitles the holder to be in attendance to monitor the refrigeration plant named on the refrigeration safety awareness certificate of qualification in a general supervision or risk assessed status refrigeration plant with a total plant capacity of 1 000 kW or less prime mover nameplate rating.
- The holder of a refrigeration safety awareness certificate of qualification is not permitted to operate or perform any repairs to the refrigeration plant but is permitted to shut down the plant or initiate safety procedures when specifically trained and assigned to perform such tasks.

Subject Areas of study

Each of the four subsections is weighted at approximately 25%.

1. B.C. Refrigeration Safety Legislation:
 - 1.1 *Safety Standards Act* and applicable regulation;
 - 1.2 Responsibilities of a safety awareness certified person;
 - 1.3 Responsibilities of a plant safety committee;
 - 1.4 Reporting of accidents and incidents;
 - 1.5 CSA B52 general code knowledge; and
 - 1.6 Log books and records, why signed and dated, and their use.

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2. Refrigeration Systems:
 - 2.1 History of safety codes and legislation;
 - 2.2 Typical refrigeration system;
 - 2.3 Safety relief piping and valves;
 - 2.4 Location and use of the king valve;
 - 2.5 Location and use of emergency discharge valve;
 - 2.6 Lubricants in a refrigeration system, importance and monitoring;
 - 2.7 Basic knowledge of refrigerant types, use, properties and dangers;
 - 2.8 Indications of refrigerant leaks, effects of ozone depleting substances to our environment; and
 - 2.9 Safety controls, purpose and location.

3. Safety Equipment in a refrigeration plant:
 - 3.1 Types of accidents and accident prevention;
 - 3.2 Classes of fires and fire protection equipment; and
 - 3.3 Emergency breathing apparatus.

4. Safety Procedures:
 - 4.1 Safety alarms, shutdown devices and procedures;
 - 4.2 Emergency shutdowns;
 - 4.3 Evacuation procedures; and
 - 4.4 Safe work practices.

Note: *Provision of appropriate WCB & WHMIS training is the responsibility of the employer.*