

INCIDENT AND HAZARD REPORTING TO BCSA BOILERS, PRESSURE VESSELS, PIPING AND FITTINGS

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A. General Details

This information bulletin is being issued to clarify incident reporting requirements. It is issued with respect to sections 36 and 37 of the *Safety Standards Act*, section 34 of the Safety Standards General Regulation and section 66 of the Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation.

How to Report Incidents and Hazards to BC Safety Authority

For emergency assistance call 911 or your local police or fire department directly.

Incidents and hazards are to be reported to BC Safety Authority through our website reporting portal at <u>https://portal.safetyauthority.ca/report-to-bcsa</u> or go to our website at <u>www.safetyauthority.ca</u> and click "Report to BCSA". Alternatively, duty holders may call our customer service line at 1-866-566-7233.

Note: voicemail and email messages made to BC Safety Authority employees concerning incidents and hazards are not considered to have been reported to BC Safety Authority as required by regulation.

Definitions

Incident: A failure of a regulated product, work or operation that causes:

- a) damage to property, personal injury or death
- b) damage to safety features

Note:

- Property damage or injury focuses on the impact that the failed equipment may have had outside the boundaries of the product, work or operation.
- Damage to safety features relates to failures where the damage:
 - is limited to the failed product, work or operation and
 - o does not render the product or activity inoperative and
 - o impairs the safety feature's effectiveness.

Safety feature: An aspect of a product's design, installation, maintenance or operation that is intended to prevent people or property from being exposed to a hazard.

Hazard: A source of potential harm to persons or potential damage to property.

Duty holder: A person or company who is responsible for compliance because they either own regulated products, or perform regulated work.

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505 SIXTH STREET, SUITE 200, NEW WESTMINSTER, BRITISH COLUMBIA, CANADA V3L 0E1 Toll Free: 1-866-566-7233 Website: <u>www.safetyauthority.ca</u> Email: <u>contact@safetyauthority.ca</u>



Reporting of Incidents to BC Safety Authority

The following duty holders are required to report all incidents to BC Safety Authority:

- Person in charge of a regulated product or regulated work
- Owner of the regulated product
- Permit holder
- Person authorized to perform or performing regulated work
- Person authorized to operate or operating a regulated product
- An officer or employee of a utility
- Owner of a plant (as defined in the regulations)

Only one incident report per incident is required.

Duty to Preserve Incident Site for Investigation

A person must not remove, disturb or interfere with anything in, on or about the place where the incident occurred except as necessary to rescue a person, prevent injury or to protect property unless directed by a safety officer or safety manager.

Reporting of Hazards to BC Safety Authority

Hazards are required to be prevented or immediately corrected by duty holders that are responsible for the regulated product, work or operation. Hazards must be immediately reported to BC Safety Authority when:

- it is not known that the hazard is being corrected by the duty holder or
- the same or similar hazards have been repeatedly observed and are associated with the same duty holder.

When to Report Incidents and Hazards to BC Safety Authority

For emergency assistance call 911 or your local police or fire department directly.

Incidents:

Unless otherwise indicated, all incidents are to be reported within the following timeframes:

- Incidents resulting in a moderate, major or fatal injury immediately
- Incidents resulting in moderate, major or severe damage immediately
- All other incidents within 24 hours (or as soon as practicable).

Moderate injuries are those that, while serious, are considered unlikely have a significant effect to long-term quality of life. Examples include single limb fractures, concussions, disorientation.

Moderate damage is damage that results with controlled exposure to energy (ie. electrical, thermal, mechanical) or the limited/controlled release of substances intended to be contained.

Hazards:

All hazards as described in the 'reporting of hazards' section above are to be reported to BC Safety Authority **immediately**.

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What to Expect After Reporting an Incident or Hazard to BC Safety Authority

BC Safety Authority tracks and investigates incidents and hazards that are reported to inform awareness and prevention initiatives. Consequently, BCSA does not investigate all reported incidents and may not follow-up with a notification unless there is an intention to investigate.

Summaries of all reported incidents and completed investigations can be accessed via BC Safety Authority at http://www.safetyauthority.ca/safety-information/incident-data. BC Safety Authority protects the identity of persons who report or may be involved with incidents or hazards.

Unless otherwise indicated, duty holders are required to preserve the equipment, products and items involved in an incident. BC Safety Authority will contact duty holders within 24 hours of the next regular business day following the report of an incident if more information is required or an investigation is planned to occur.

B. Examples of Boiler, Pressure Vessel, Pressure Piping Incidents and Hazards

BPV incidents that are <u>required</u> to be reported:

- Tube leaks within a recovery boiler combustion chamber
- Pressure boundary failures (including the activation of pressure relief devices) that discharge hazardous contents into an occupied space or the environment
 - Weld failure
 - Material failure
 - Seal failure

Note: Hazardous substances are those that if released

- and a person came into contact, the person would likely sustain an injury.
- o and not contained, would likely damage the natural environment.
- Inoperative pressure relief devices discovered outside of planned maintenance
- Malfunctioning safety controls discovered outside of planned maintenance

BPV occurrences that are not reportable incidents (to BC Safety Authority)

- Piping leak of hot water outside of a combustion chamber
- Leak of non-hazardous substances at a seal or connection
- Defects discovered as part of planned maintenance
 - Damage/leaks acceptable to a maintenance program or plan
- Occurrences involving equipment that is not subject to the Safety Standards Act
 - Vessels that are vented to atmosphere or
 - Vessels that are operating at pressures less than 15psi and protected by a pressure relief devices set at or below 15psi

Examples of BPV Hazards that should be reported to BC Safety Authority

- Unrepairable or unserviceable equipment that is in use or available for use
- Pressure retaining components damaged or corroded beyond (or suspected of) design limits
- Regulated BPV work being completed by:
 - o unlicenced businesses (includes expired licences) or

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- o work being performed outside of the scope of licence
 - E.g. A class A contractor may install high-temperature/high pressure thermal fluid heaters, but a class Au contractor may not.
- persons not qualified for the work (includes persons without BC certificates of qualification)
- Unpermitted work or operations

Tony Scholl Provincial Safety Manager Boiler, Pressure Vessels, Pressure Piping

References:

Jeff Coleman, P.Eng. Provincial Safety Manager Incident Investigations

Safety Standards Act Electrical Safety Regulation Elevating Devices Safety Regulation Gas Safety Regulation Power Engineers, Boiler, Pressure Vessel & Refrigeration Safety Regulation Safety Standards General Regulation

For more information about British Columbia Safety Authority, please visit our website at: <u>www.safetyauthority.ca</u>

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