



TECHNICAL STANDARDS AND SAFETY ACT, 2000 ONTARIO REGULATION 220/01 (BOILERS AND PRESSURE VESSELS)

GUIDELINE FOR INCIDENT REPORTING CRITERIA FOR BOILERS AND PRESSURE VESSELS

Introduction

Did you know that as an owner or any other person involved with activities such as, but not limited to, installation, repair, alteration, maintenance, service, use or disposal of boilers and pressure vessels, you are required to report incidents – whether causing injury or death **and/or** property damage – to TSSA’s Director of Boilers and Pressure Vessels and Operating Engineers?

While most owners or persons involved with boilers, pressure vessels and fitting or piping systems report the more obvious incidents, involving explosions or ruptures, few remember to report incidents of property damage.

The reporting requirements of Ontario Regulation 220/01 (Boilers and Pressure Vessels) state: “Where an explosion or rupture of a boiler, pressure vessel, fitting or piping occurs, or where an accident arises out of its operation or use that causes injury or death to a person **or property damage**, the owner shall:

- (a) forthwith notify the director, in person or by telephone, of the occurrence and provide full details; and
- (b) within 48 hours after the explosion or rupture occurs, send the director a written report of the circumstances of the occurrence. O. Reg. 220/01, s. 8 (2).”

The Regulation under s.8 (4) further requires that, “where an explosion or rupture of a boiler, pressure vessel, fitting or piping occurs, no person shall, except for the purpose of saving life or relieving human suffering, interfere with, disturb, destroy, carry away or alter any wreckage, article or thing at the scene of or connected with the occurrence until permission to do so in writing is given by a inspector”.

This guideline is meant to provide further clarification on the circumstance under which an owner or persons involved with boilers, pressure vessels and fitting or piping systems must report an incident. In addition to defining types of incidents, such as a rupture or fluid release, owners or other persons can notify TSSA by contacting the Ministry of Environment’s Spills Action Centre toll-free at **1-800-268-6060**.

Reporting Criteria

The following are the circumstances under which an incident shall be reported by the owner or persons involved with boilers, pressure vessels and fitting or piping systems to TSSA as specified in the regulation.

1. Any incident involving equipment covered under Ontario Regulation 220/01 that causes injury or death shall be reported to TSSA.
2. Any incident involving equipment covered under Ontario Regulation 220/01 that causes property damage shall be reported to TSSA as described in the table below.

| Occurrence Type | Reporting Criteria |
|------------------------|---|
| Explosion or Rupture | Explosions or ruptures to equipment including boiler tubes, pipes, valves or other fittings – but excluding discharge from rupture discs. |
| Fire | Boilers, pressure vessels, piping or fittings that have been in a fire. |



Guideline for Incident Reporting Criteria

Boilers and Pressure Vessels

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| Fluid Release | Unexpected or uncontrolled release of fluid, not involving release through safety relief valves, and/or release of hazardous substances related to a regulated pressure boundary such as ammonia. |
| Pressure Boundary Failure of Boilers, Pressure Vessels, Piping or Fittings | <ol style="list-style-type: none"> 1. Equipment failure, including deformation, implosions, welding failure, mechanical damage, control equipment failure that causes overheating of a boiler or fired vessel, corroded and wasted area under required minimum thickness of the vessel, etc. 2. Failure due to vacuum operation or other sources of external pressure that require repairs to be inspected by authorized inspectors (TSSA or qualified insurance inspectors). 3. Any other occurrence involving equipment covered under Ontario Regulation 220/01, that are not covered under criteria 1 and 2 above, may be determined by the owner or any other person as a reportable incident under Ontario Regulation 220/01 shall be reported. |

Definitions (O.Reg 220/01):

“Boiler” means a fired vessel in which gas or vapour may be generated or a gas, vapour or liquid may be put under pressure by heating.

“Pressure Vessel” means any enclosed unfired vessel that contains gas, vapour or liquid under pressure.

“Piping” means a system of pipes that is used to contain a gas, vapour or liquid under pressure and includes any boiler, pressure vessel or fitting connected to such a system.

“Owner” includes a person for the time being in possession or control of a boiler, pressure vessel, fitting or piping.

“Fitting” means an appurtenance that is attached to or used in connection with a boiler, a pressure vessel or piping and includes such things as valves, gauges, and controlling devices and other pressure-retaining components.