

TECHNICAL STANDARDS AND SAFETY ACT



Fuels Safety Division	Ref. No.: FS-227-17
ADVISORY	Date: April 29, 2024

Subject: Incident Report Criteria for Hydrocarbon Fuels Industry
Distribution: Posted on TSSA website and sent to TSSA Fuels Advisory Councils, Fuels Engineers and Inspectors, OPCA, CPA, MGCS, MPHCA, OFM, One Call, CIPMA, NOTO, Boating Ontario, COHA

Introduction

Every year, many incidents involving hydrocarbons fit into the reporting requirements provided in the Ontario regulations. Reporting every situation to TSSA would however, provide little value to the public safety. There is confusion surrounding how to “notify forthwith an inspector” as required by the regulations. In order to assist our clients with these issues, TSSA has clarified the circumstances and procedures for reporting below.

Ontario regulations require that where it appears that:

- i. Carbon Monoxide poisoning
- ii. Asphyxiation
- iii. Explosion or fire, or
- iv. An accidental release, vent, leak or spill

has occurred because of the use, handling or storage of hydrocarbons covered under the *Technical Standards and Safety Act*, the certificate/ROT/license holder, operator, contractor or distributor shall notify forthwith an inspector of the occurrence by telephone, facsimile or any other form of electronic transmission and a registration / license holder shall have in place procedures for such a notification.

The regulations further require that no person shall interfere with or disturb any wreckage, article or thing at the scene of an occurrence that is connected with it (except in the interest of public safety) until such time as an inspector has given permission to do so.

Who to Call?

TSSA has an agreement in place with the Ministry of Environment and Climate Change - Spills Action Center (SAC) to receive notifications under the Act. All reporting of incidents involving hydrocarbon fuels or their utilization equipment is done through the SAC. They can be reached at 1-800-268-6060 or 1-416-325-3000, 24 hours a day, seven days a week. Reporting an incident to SAC meets the regulatory requirement of reporting incidents to TSSA. If there is an immediate need to disturb any article at the site and you wish to speak to a TSSA representative, you must inform the Spills Action Center operator that you want the TSSA Fuels Safety Program on-call person to contact you.

April 29, 2024

Carbon (CO) Monoxide Poisoning

Note: First responders will often send people to the hospital as a precaution. For an incident to be reportable, first confirm with the responder that there are symptoms of CO exposure.

When you attend a scene where CO exposure has been reported, you must make an assessment as to whether the exposure requires notification. The following provides the criteria as to when TSSA must be notified:

- If it is determined that work was performed on the equipment in the past six months by a technician, the incident must be reported to the Fuels Safety Program.
- If equipment failure resulting in CO production occurs in a rental occupancy where someone other than the occupant has responsibility for the maintenance of the equipment, the incident must be reported to the Fuels Safety Program.
- If an 'abnormal condition' which may represent a product defect or installation related error is found during an investigation of possible CO exposure, the condition must be reported to the Fuels Safety Program.
- If a CO-related injury requiring medical attention has occurred as a result of problems with the equipment, the incident must be reported to the Fuels Safety Program.

Evacuation of a Building Due to CO Release

A report of a CO detector alarm is not a sufficient reason to report a CO incident and reporting is only required where a hydrocarbon fuel appliance may have been involved (not solid fuel appliances, automobiles etc.).

Where a building has been ventilated at the scene of CO exposure, the following procedure may be applied to determine the nature of the CO problem.

Workers are cautioned that exposure to carbon monoxide may be harmful and consideration should be given to the wearing of self-contained breathing apparatus or supplied air-breathing systems.

- a. Remove all occupants from the building.
- b. Close all ventilation openings, doors and windows and any interior doors between the space in which the appliance is located and other parts of the building.
- c. Turn on all fuel fired appliances and check for spillage at the draft hood relief openings. Any spillage after the appliance has achieved steady state operation must be investigated for source. To check for building depressurization, repeat steps A and B above and
- d. Turn on all exhaust fans, range hoods, clothes dryers etc. If a solid fueled appliance was in operation at the time of the incident, operate it again. Operate all fuel fired appliances and test for spillage and CO.

Pipeline Strikes

Pipeline strikes shall be reported immediately through SAC where the strike has caused evacuation, injuries, or media attention. All other pipeline strikes must be reported to TSSA within two weeks of the occurrence, following a protocol acceptable to TSSA.

Explosions

Explosions must be reported where they have caused injury, damage to the equipment or a fire. Minor 'delayed ignitions' would not normally be considered to be reportable.

Liquid Petroleum Spills

Spills are product escapes that result from operating errors. Any spill of a petroleum product in excess of:

- 100 litres at sites restricted from public access (i.e. bulk facility, private fuel outlet, private residence etc.).
- 25 litres at sites with public access (i.e. retail service station, marina etc.) must be immediately reported to the SAC.

April 29, 2024

Spills of lesser quantities need not be reported to TSSA fuels safety, unless the spill would:

- Create a hazard to public health or safety.
- Contaminate any fresh water source or waterway.
- Interfere with the rights of any person, or
- Allow entry of product into a sewer system or underground stream or drainage system.

Leaks

Leaks are product escapes that result from equipment failures. All confirmed leaks, regardless of quantity released, must be immediately reported to the SAC.

Propane and Natural Gas

Accidental releases that have resulted in the following shall be reported immediately through SAC:

- Any unplanned ignition of propane including fire or explosion.
- Any time an operator requests the assistance of emergency services, whether internal (in house emergency teams) or external (fire, police, ERAP etc.).
- Any release resulting in media attention.
- Any injury to a person requiring medical treatment as a direct result of the release or
- All other accidental releases, abnormal venting and spills shall be reported to the [Spills Action Centre](#) within two weeks of the occurrence.

Discovery of a Petroleum Product that has escaped to the Environment or Inside a Building

The discovery of a petroleum product that has escaped to the environment or inside a building must be reported as noted in TSSA's Environmental Management Protocol for Operating Fuel Handling Sites (EMP) in Ontario. A copy of the EMP is available on TSSA's website, www.tssa.org.

Questions on these criteria should be directed to the [Spills Action Centre](#) or call 1-800-268-6060 or 416-325-3000.