

HAZARD ALERT

USE OF AUTOMATIC SHUTOFF NOZZLE FOR FUELING OF DIESEL EQUIPMENT

Hazard Summary

Two recent incidents at underground fueling stations using automatic shutoff nozzles resulted in diesel fuel spills:

- 1) A vehicle was overfilled, spilling a substantial amount of fuel on the concrete floor. The operator drove away without notifying any supervisors or arranging for cleanup. A supervisor found the spill when a personnel carrier was driven into the fueling station and parked in the spilled diesel fuel. The spilled fuel overflowed the fueling pad and ran down the access ramp.
- 2) A scooptram was overfilled, spilling diesel fuel on a hot exhaust manifold and onto the concrete pad. The hot exhaust manifold ignited the diesel fuel on the scooptram and the fuel on the concrete pad. A 100 pound fire extinguisher had to be used to extinguish the fire.

There were no injuries or major property/equipment damage in either incident. In both cases, however, there was a possibility for a vehicle fire and resulting potential for injuries to multiple personnel as well as high property, equipment, and production losses.

Under sections 4 and 5 of the Workplace Safety and Health Act, it is the duty of the employer to provide and maintain a workplace, necessary equipment, systems and tools that are safe and without risk to health. It is also the duty of the worker to take reasonable care to protect his safety and health and the safety and health of other persons who may be affected by his acts or omissions at work.

The fueling of vehicles underground must not be done with fueling nozzles that lock in the open position either through design or “rigged” by the operator. The nozzle must be manned while fueling the vehicle to prevent diesel fuel spills. In addition, the Operation of Mines Regulation, MR 228/94, sections 51(b)(i), 51(b)(iii), and 55(1)(a) require that underground fueling stations have a concrete floor and that noncombustible material used to clean up spills be disposed of in metal covered containers.

Cautionary note

In 1995 an “Alert” was issued to all mines in Manitoba concerning the dangers associated with the use of automatic shutoff nozzles for fueling vehicles underground. The shutoff nozzles were eliminated for a period of time. Hopefully it will be recognized that the diesel fuel spills that are inherent with the use of these nozzles are a serious fire hazard and therefore, a danger to the safety of all workers.

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