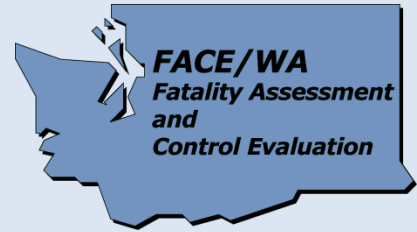


Truck Driver Dies after being Run Over by Propane Transport Rolling Backward at Bulk Plant



Investigation: # 11WA013
Release Date: May 21, 2013
SHARP Report: # 52-28-2013_summary

SUMMARY

In March of 2011, a 69-year-old propane transport driver died when his loaded cargo tank transport semi-trailer truck rolled backward and over him. The driver was employed by a farm supply cooperative which delivers bulk propane in cargo tank semi-trailer trucks, also known as propane transports.

On the day of the incident, the driver arrived to make a fuel delivery at a bulk plant facility. Upon hooking up the cargo tank hoses to the facility's fuel unloading bulkhead and starting to dispense fuel, he discovered that the transfer pump was leaking externally. This condition would prevent safe delivery of the fuel. The driver used his cell phone to contact his supervisor through his dispatcher at 6:21 p.m. to alert him of the situation. The supervisor told the driver he would need to take the transport to another city for repairs the following day and that he would make arrangements and then call him back with details. The supervisor attempted to call the driver numerous times, but could not make contact with him.

At 7:44 a.m. the next morning a representative of the bulk plant facility arrived at the yard where he found the driver lying deceased underneath the semi-tractor's right rear wheel. He contacted emergency services and a deputy sheriff and fire and rescue personnel arrived at the scene.

Upon examination of the incident scene by the first responders they noted that 1) the vehicle's engine was running and headlights on, 2) the brake for the cargo tank transport semitrailer was set, 3) the tractor's brake was not engaged, and 4) no wheel chocks were visible. Apparently, the driver had attempted to drive away, but was unable to because the trailer's brakes were still engaged by the air brake safety interlock system. When a metal hinged gate located on the trailer's undercarriage in front of the fuel loading and unloading connections is opened, an air valve is activated which engages the trailer's brakes. In order for the vehicle to be driven this gate must be closed. (This system is designed to prevent a driver from driving away while hoses are connected to the fuel loading/unloading bulkhead.)

To close the brake interlock gate the driver exited the cab and walked around to the trailer's right side. He did not engage the parking brake (handbrake) in the cab. When he closed the safety interlock gate on the trailer, the brakes which had been holding the vehicle were released, thereby allowing it to roll backward down the dirt driveway. He ran alongside the trailer to open the gate again, so as to stop the truck. He succeeded in opening the gate, which engaged the brakes, but as he did so he either slipped or was struck by a structural member of the semitrailer and fell down and was run over by a wheel on the semi-tractor.

RECOMMENDATIONS

To prevent similar occurrences in the future, the Washington State Fatality Assessment and Control Evaluation (FACE) investigation team recommends employers of propane transport truck drivers follow these guidelines during fuel loading and unloading operations at bulk plants:

- **Create, implement, and enforce written policies to ensure that propane transports will not be allowed to roll away when the driver is outside the cab. These policies should include procedures requiring drivers to 1) set the vehicle's parking brake before leaving the cab; 2) use wheel chocks; 3) never attempt to stop a rolling vehicle from outside the cab; and 4) perform a vehicle pre-departure inspection.**
- **Train drivers to recognize the hazard of vehicle rollaway due to improper vehicle securement when parked and to use safe work practices to prevent unintended vehicle movement.**

Additionally, vehicle designers and manufacturers should:

- **Consider creating safety systems to either alert or prevent the vehicle operator from releasing the trailer parking brake at the brake interlock gate without first manually setting the parking brake from the cab. Alternatively, an alarm could be created to sound-off when the driver's door is opened and the parking brake has not been manually engaged.**

To access the full version of this investigation report along with the detailed recommendations and discussions section, go to www.lni.wa.gov and enter **52-28-2013** into the search box.