

CALLENCE OF CLASS AND OF CLASS AND OPERATORS OF CLASS AND OPERATORS OF TRAINING CLASS C Operators OF Annual UST System Inspections OF Record Keeping OF Spills: Cleanup & Reporting OF Safety OF Tanks: Double-Walled w/ Continuous Electronic Monitoring OF Tanks: Double-Walled w/ Manual Monitoring OF Tanks: Single-Walled OF Daily Inventory & Statistical Inventory Analysis OF Automatic Tank Gauges (ATGS) OF Piping: Double-Walled Systems
Piping: Single-Walled Systems OF Piping: Pressurized Pumping Systems OF Piping: Suction Pumping

DISPENSERS

In Maine, two authorities regulate fuel dispensers: the State Fire Marshal for safety issues and the Department of Agriculture for meter accuracy. Although the DEP has no specific regulatory authority over the dispensers themselves, the liquid-handling components inside and outside of dispensers are a frequent source of weeps, leaks, or spills that have the potential to impact the environment. The purpose of this *TankSmart* module is to familiarize you with some dispenser components and provide some basic guidance on how to respond to a weep or leak from a dispenser.

It is part of the Class A/B operator's job to see to it that discharges from fuel dispensers are not occurring. Weeps, leaks, and spills can come from broken, worn out, or improperly maintained dispensing equipment. It is your responsibility to ensure that your dispensing equipment, including, but not limited to, hoses, breakaway valves, and nozzles, is visually inspected on a daily basis to ensure that it is working properly and leak free. It is your job to check the inside of dispensers for weeps and leaks on a monthly basis.

> **NOTE:** the Petroleum Equipment Institute (PEI) publishes a **Recommended Practice titled Recommended Practices for** Inspection and Maintenance of Motor Fuel Dispensing Equipment (RP500) that includes detailed instructions and checklists for conducting daily, monthly, and annual fuel-dispenser inspections. As an industry recommended practice, all UST owners and operators should follow the procedures described in this document. For more information on this document go to: *www.pei.org/rp500* or contact the **Petroleum Equipment Institute at** 918-494-9696.



The DEP does regulate the piping beneath dispensers. Below-grade piping located beneath dispensers installed after March 2004 must be set within a liquid-tight container called a dispenser sump. Dispenser sumps installed after March 2004 must be equipped with a sensor that continuously monitors for leaks. Module 23 Page 1

The purpose of this module is to familiarize you with some dispenser components and provide some basic guidance on how to respond to a weep or leak from a dispenser.



Inside view of a typical fuel dispenser used with a suction piping system. (See the TankSmart Suction Pumping Systems module.)

WHAT MUST YOU DO IF YOU HAVE A DISPENSER WITH SUMPS AND CONTINUOUS ELECTRONIC MONITORING?

If you have a dispenser sump with continuous electronic monitoring, **you must notify the DEP every time the monitoring system ALARMS because of liquid in the sumps**. As soon as you hear an alarm, take the following steps:

• Determine which dispenser sensor is the source of the alarm. Your alarm console should include a listing of sensor locations. Open the dispenser cabinet where the sensor is located to determine the cause of the alarm. Is there water or fuel in the sump? Is fuel leaking from a fitting or component inside the dispenser?

You must notify the DEP every time the monitoring system ALARMS because of liquid in the sumps.



Inside view of a typical fuel dispenser used with a pressurized piping system.

- If you see any signs of leakage or liquid in the dispenser sump, close the emergency shutoff valve for the appropriate product if the piping is pressurized, or shut down the leaking pump if it is a suction system.
- Call the DEP to report evidence of a leak at 207-287-2651.
- Call your service technician.
- Have your service technician remove all fluids from the dispenser sumps. Fuel that accumulates in dispenser sumps is a significant fire hazard.

WHAT MUST YOU DO IF YOU HAVE A DISPENSER WITHOUT SUMPS AND/OR CONTINUOUS ELECTRONIC MONITORING?

- Look inside your dispensers at least monthly. Is fuel leaking inside the dispenser? If there is a dispenser sump, is there fuel or water in the sump?
- If you see any signs of leakage inside the dispenser or liquid in the dispenser sump, close the emergency shutoff valve for the appropriate product if the piping is pressurized, or shut down the leaking pump if it is a suction system.

Fuel that accumulates in dispenser sumps is a significant fire hazard.

- To report evidence of a leak, call the DEP at 207-287-2651, or call the 24-hour Spill Hotline at 1-800-482-0777.
- Call your service technician.
- Have your service technician remove all fluids from the dispenser sumps, if they are present. Fuel that accumulates in dispenser sumps is a significant fire hazard.

WHAT ABOUT EMERGENCY SHUTOFF VALVES?

Emergency shutoff valves (also called crash valves, impact valves, or fire valves) are required for pressurized pumping systems. The valves are located at the base of the dispenser to prevent fuel releases by closing automatically should a vehicle crash into the dispenser or in case there is a fire inside the dispenser. There is a separate emergency shutoff valve for each grade of fuel that enters the dispenser. Emergency shutoff valves must be tested annually as part of your annual inspection.



Crash valves can be manually tripped if you need to close them. If there is a leak inside a dispenser, tripping the appropriate crash valve should stop the flow of fuel into the dispenser. If you do not know how to manually trip your emergency shutoff valves, ask your service technician to show you how.

Emergency shutoff valves are installed at the base of dispensers that have pressurized piping to prevent releases in the event a vehicle hits the dispenser or there is a fire at the dispenser. Dispenser sumps are installed to contain any leaks or drips from components inside the dispenser.



If a dispenser has no containment sump, leakage from any of the dispenser components goes directly into the ground. If the leakage goes undetected, serious contamination problems can result.