

SAFETY

We don't get particularly concerned for our safety when we fuel our vehicles because fuel-related accidents are infrequent. But there are many hazards present at motor-vehicle fueling facilities, and accidents can and do happen. The two biggest safety concerns at these facilities are fire and vehicle traffic. Other safety concerns include customer inattention, chemical hazards, improper electrical work, and excavation around USTs. All classes of UST operators should know how to minimize the risk of an emergency and know how to respond if one occurs.

Accidents and leaks can occur when personnel who are not properly trained or lack the proper equipment attempt UST maintenance and repair activities. Work on UST systems is often performed in an environment where there is vehicular traffic; flammable, combustible, and toxic fuels and vapors; electrical hazards; and other potential threats to health and safety. People working around UST systems are responsible for their own safety as well as the safety of anyone else in the work area and must take appropriate precautions. Only properly trained and equipped individuals should be doing this work.

As a Class A/B operator, it is your responsibility to ensure that only trained and qualified individuals are doing inspection, maintenance, or repair work on your UST systems. You are also responsible for providing the appropriate safety training and equipment to Class C UST operators and any other on-site employees.

The *Petroleum Equipment Institute's Recommended Practices for Inspection and Maintenance of UST Systems*, RP 900-08, is an excellent resource for learning about the safety issues usually present at UST facilities. To obtain a copy and learn more about petroleum and UST safety issues, go to: www.pei.org/RP900, or call 918-494-9696.

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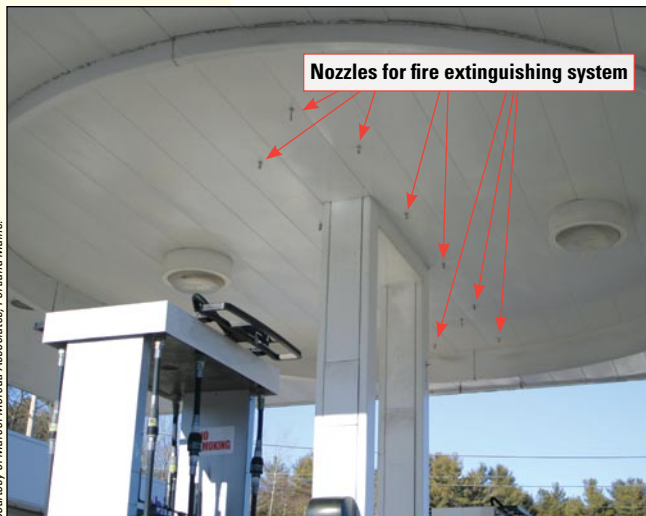


Though rare, fuel-related fires can and do happen.



Accidents are often caused by drivers who are distracted and inattentive as they maneuver their vehicles around the site.

WHAT YOU SHOULD KNOW ABOUT PREVENTING FIRE HAZARDS



Courtesy of Marcel Moreau Associates, Portland Maine.

Because your facility receives, stores, and dispenses flammable and/or combustible liquids, you are responsible for:

- ▶ Ensuring that there are no ignition sources anywhere near flammable vapors.
- ▶ Ensuring that all of the fire-suppression systems (e.g., portable fire extinguishers, automatic fire-extinguishing systems typically installed within canopies above dispensers) present at the facility are periodically serviced so they will operate properly when they are needed.

Most retail gas stations in Maine are equipped with automatic fire-extinguishing systems in the canopy. Though they largely go unnoticed, these systems play a critical role in putting out fires that may occur in the dispenser area.

- ▶ Ensuring that your fuel-delivery person monitors all product

deliveries to prevent overfilling the tank and causing a spill. (See the *TankSmart* Overfill Prevention module that applies to your facility.)

- ▶ Knowing what to do if a vehicle accident, fuel spill, or fire occurs. **You and your employees must know where the emergency pump shut-off switch is located and how and when to use it.** The “emergency stop” or “all stop” button on your cash register or point-of-sale system is NOT the same as the emergency pump shut-off switch. These buttons only stop the flow of fuel from the dispenser. They do not stop the pump motor nor do they shut off the electrical supply to the dispenser. Contact your pump service technician if you do not know where your emergency pump shut-off switch is located.



Courtesy of Marcel Moreau Associates, Portland Maine.

Activating the emergency fuel shut-off switch is most often the first thing to do in a serious fueling emergency. Activating the switch stops all fuel flow by shutting down all pump motors and cuts off the electricity to all fueling components so that electrical sparks cannot be generated.

- ▶ Ensuring that proper safety signage is posted. (For language to use on safety signage, see the National Fire Protection Association Code 30A, *Motor Fuel Dispensing Facilities and Repair Garages.*)

Ensure that all of the fire-suppression systems present at the facility are periodically serviced so they will operate properly when they are needed.

- ▶ Knowing what to do if there is a spill. **To prevent fires and protect the environment, all spills must be cleaned up immediately.** (See the *TankSmart* Spills: Cleanup & Reporting module.)
- ▶ Visually checking your dispensing equipment, including hoses, breakaway valves, and nozzles on a regular basis to ensure that they are working properly, are in good condition, and are not leaking. (See the *TankSmart* Dispensers module.)
- ▶ Ensuring that self-serve customers and fueling attendants follow proper fueling procedures, including:
 - Turning off the vehicle ignition
 - Filling only containers approved for petroleum and placing containers on the ground when filling them
 - Staying outside the vehicle and near the nozzle until the fueling is complete and the nozzle is hung back on the dispenser
 - Not smoking near the fuel dispensers
 - Discharging static electricity before touching any nozzle that is inserted in a vehicle



Courtesy of Marcel Moreau Associates, Portland Maine.

To prevent fires ignited by static electricity, gasoline should only be dispensed into approved containers that are sitting on the ground.

The State Fire Marshal's Office regulates fuel dispensers, fire-suppression systems, aboveground storage tanks, transportation of flammable liquids, and other areas related to fire safety.

For more information on FIRE SAFETY, go to the Fire Marshal's website at www.maine.gov/dps/fmo/index.htm or Call: 207-626-3870.

One of the more serious and common hazards at fueling facilities is people being struck by vehicles, especially around the fuel dispensers.

WHAT YOU SHOULD KNOW ABOUT AVOIDING VEHICLE HAZARDS

One of the more serious and common hazards at fueling facilities is people being struck by vehicles, especially around the fuel dispensers. These accidents are often caused by drivers who are distracted and inattentive as they maneuver their vehicles around the site and fail to notice personnel conducting inspections or doing maintenance work.

Use vehicles or other equipment such as barriers, safety cones, or barrier tape to isolate work areas. Workers should wear high-visibility safety vests. Keep tools or equipment inside the barrier. Do not remove any safety equipment until all of the work is done.

ELECTRICAL HAZARDS



Improper electrical work can produce sparks that can ignite fuel vapors, present electrocution hazards, and even result in explosion hazards inside a building when vapors travel through improperly sealed electrical conduits. Wiring USTs is not a job for amateurs.

Electrical work involving UST systems must be done according to special codes designed to minimize fire and explosion hazards from electrical sparks. Improperly installed or worn electrical equipment can create fire, explosion, or electrical shock hazards. A licensed electrician who is qualified to do work in locations where flammable vapors may be present must oversee all electrical work.

CHEMICAL HAZARDS

Petroleum fuels are complex mixtures of chemicals that can produce a wide variety of harmful effects when they are inhaled or come in contact with skin. Anyone working in the vicinity of a fuel-storage system should read and understand the relevant Material Safety Data Sheets and receive appropriate first-aid training.

BEFORE YOU DIG...



UST facilities are complex installations with buried tanks, piping runs, and electrical wiring. A certified tank installer must oversee any excavation, backfilling, or paving at a fueling facility if it is within 10 feet of the following:

- A dispenser island
- Piping runs
- Vent pipes
- The tank pad

No excavation or other activities that can ignite gasoline vapors are allowed within 20 feet of a gasoline dispenser unless the electrical power supply has been turned off and all fueling activity has stopped.

UST facilities are complex installations with buried tanks, piping runs, and electrical wiring. Consult a tank installer who is knowledgeable about your facility before undertaking any excavation work.