

## Keep Your Feet on the Ground

Refilling and refueling vehicles, gas-powered equipment or containers is common in the construction industry. It's important for employees to be aware of the possible risks and to follow safety procedures for proper grounding, especially during the cold season.

When you pump gasoline, a charge of electricity builds up on the fuel as it flows through the dispensing hose. As the fuel reaches the gas tank or container, it can take a few moments for the charge to disperse. There is a risk that the charge can be sparked and cause the fuel to ignite, and this risk increases during colder and dryer months.

Grounding is a key factor in preventing the increase of static electricity as it provides a path for the electric current to safely discharge. If both the gas and the vehicle or container is grounded, the risk of sparking the fuel is minimal. However, studies have shown that portable fuel containers and plastic truck liners are common elements in static-caused fires because they may not be grounded.

Even a gas can sitting in the back of a pickup truck can accumulate a static charge from the friction of sliding on a truck bed or from the airflow around the can, as the truck is moving. Removing the can from the truck and sitting it on the ground before refueling will ground it.

Always remember to turn off your engine before you refuel. Stay near the vehicle's fueling point until finished to let the pump shut off automatically. Leave the nozzle in the tank for a few seconds giving the fumes time to disperse and the gas time to settle. This will prevent leakage from the tank; and avoid a spill by not overfilling the gas tank.

Do not enter the vehicle while you are fueling, static electricity can generate when you slide back across the seat and a spark may occur when you reach for the nozzle. If you *must* re-enter while fueling, touch an outside metal part of the vehicle away from the filling point before touching the gas nozzle to discharge the static. Keep cell phones and other electronic devices turned off as they may release an electrical discharge, which can ignite vapors. Also, never smoke; use lighters, or light matches while fueling.

Only use approved gasoline containers, and always remove the container from the vehicle and place it on the ground while refueling. Touch the gas can with the dispensing nozzle before removing the can lid and keep the nozzle in contact with the can inlet when filling (to dissipate the static buildup). Be aware of this hazard when fueling a vehicle or gas container and take all required safety measures to ensure proper grounding to prevent static-related fires.