

Electric shock while dispensing diesel from tank

A worker was refuelling a trailer tanker from an above ground bulk diesel tank, when he noticed small flashes of light coming from inside the filter bowl. He decided to touch the bowl and received a small electric shock. The worker stopped dispensing the diesel and could hear "popping and ticking" noises coming from the filter bowl. In an attempt to earth the refuelling operation, the worker placed a screw driver between the filter bowl and the adjacent wall, and a noticeable arc of electricity occurred.



Static electricity can become a huge threat in the workplace, especially when working on or around fuelling operations. If there is a discharge of static electricity while fuel is being dispensed, there is a possibility of an explosion or fire. Ultra-low-sulphur diesel (ULSD) poses a greater static ignition hazard than earlier diesel formulations. That means an increased risk of fire or explosion if your fuel supply tank, transfer pump, transfer hose, nozzle and other components aren't properly grounded (earthed) and bonded.

You need to ensure that:

- **Any fueling system is properly grounded (earthed) through an electrically conductive connection from the tank to earth, to allow static and electrical charge dissipation. If you are unsure about how well your system is earthed or have questions about bonding, contact your fuel supplier to request a check of your system.**
- **Workers do not fill containers with fuel in the boot of a car, in the tray, or on the tailgate of a utility truck, unless containers are bolted directly to the metal tray or frame of the truck.**
- **Your site identifies hazards that can create static electricity, particularly around refuelling operations. Fuel passing through a hose creates static electricity, so this becomes especially important at the dispensing hose and nozzle. This risk becomes even greater when you are removing the hose nozzle from the tank that is being filled up.**

Let's work together to keep ourselves and our workers safe.

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