

Refueling

Refueling of vehicles, equipment or machinery is a common task that may be hazardous if not carried out properly.

Everyone working near a refueling site must know:

- the emergency procedures
- spill response steps
- how to use the fuel tank emergency shut-off
- the reporting protocols.



In addition, the procedures listed here minimize pollution of surface or ground waters. Understanding the procedures are an essential part of preventing fire/ explosion hazards and keeping our environmental footprint as minimal as possible.

Pause for Safety

- Hazards**
- Fire
 - Explosion
 - Spills / Ground contamination
 - Slips / Falls

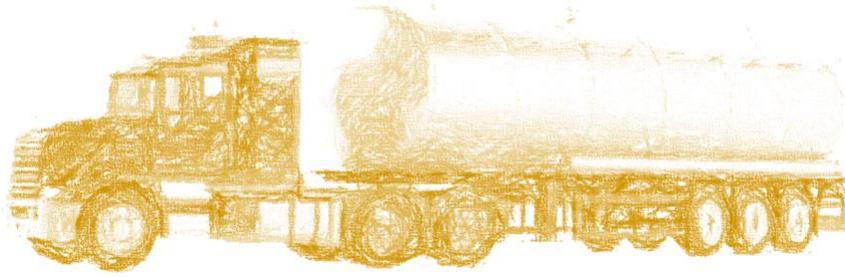
PPE



Additional PPE

Protective face shield

- Controls**
- Fire extinguisher
 - Spill Kit or containment material available
 - Rags
 - Safety Data Sheets
 - Shovel



Strategies and Procedures

Refueling a vehicle or mobile equipment

1. Approach the refueling location slowly

Park parallel to the fuel pump.

- Ensure sufficient space is left between vehicle and dispenser.
- Position the vehicle to have its fuel tank adjacent to the pump.
- If using a mobile fuel truck, position fuel truck as close to equipment as possible to avoid stretching the hose.

Apply brakes.

Turn off the vehicle.

- Allow engine to cool if the fuel tank is near engine heat.

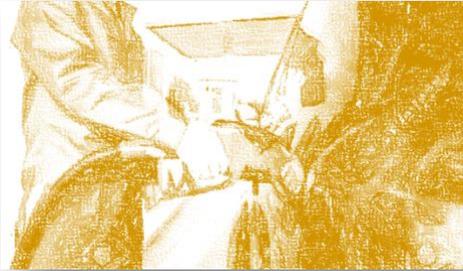
Disable or turn off any auxiliary sources of ignition such as hot box heater, or equipment with pilot lights.

Watch for uneven walking surfaces, proper house cleaning around pumps and if sliPPeRy remove this hazard or sand/salt the area;

When using the card lock system:

- follow the instruction on the screen.
- ensure the pump meter is returned to zero before pumping.

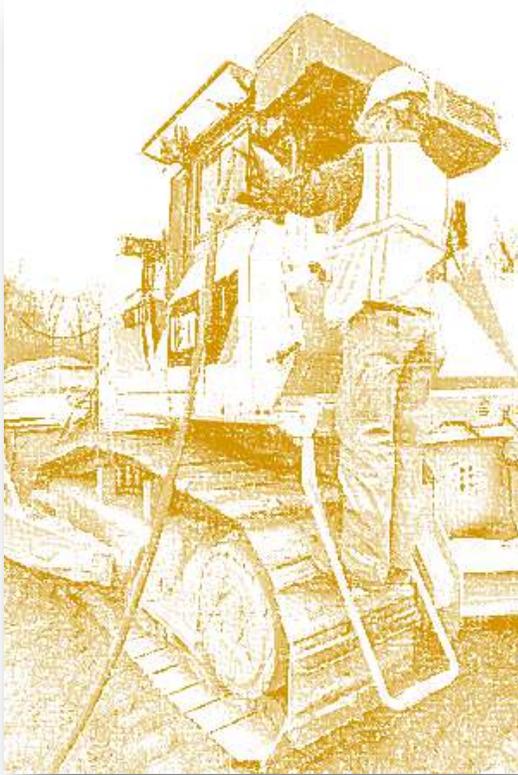
Place the nozzle of the hose in the fuel tank of the vehicle.



Start the pump.

Fill the tank by depressing the lever on the nozzle.

- Never leave the vehicle or equipment unattended.
- No smoking or open flame or other sources of ignition in the vicinity.
- Do not use or have cell phones within the refueling location.
- Stay close to the nozzle.
- Do not use any device to hold the nozzle open while fueling.
- Do not over-fill or top off your fuel tank.

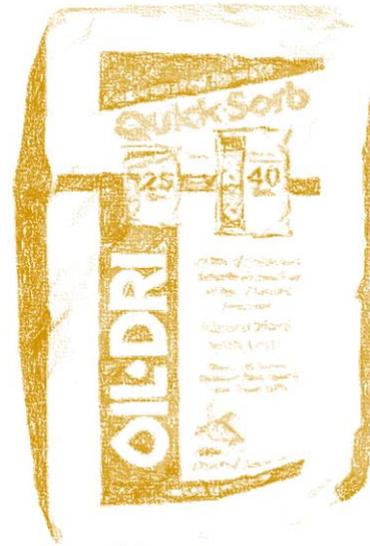


Record the fuel used in your log book, fuel convoy sheet or obtain the print out from the card lock system.

Spillage

Immediately contain any spills.

- If necessary, close the main fuel shut-off switch.
- Use *Oil Dri* on any small spills.
- Absorbent pads are to be used on larger spills.
- Wash off fuel spilled on hands or exposed skin ASAP.
- All spills are to be reported to the office.



When the fuel tank is filled:

1. Shut off the pump.

Place the nozzle back on the mount.

Be in the know

- Proper housekeeping around the refueling location will prevent numerous incidents or lessen dangerous situations.
- Static electricity-related incidents at "refueling" outlets are extremely unusual, but the potential is there. A build up static electricity can be caused by re-entering your vehicle during refueling;
- Avoid prolonged breathing of fuel vapors.
- Never siphon fuel by mouth nor put fuel in your mouth.



Fuel handling



Gasoline vapors are highly combustible.

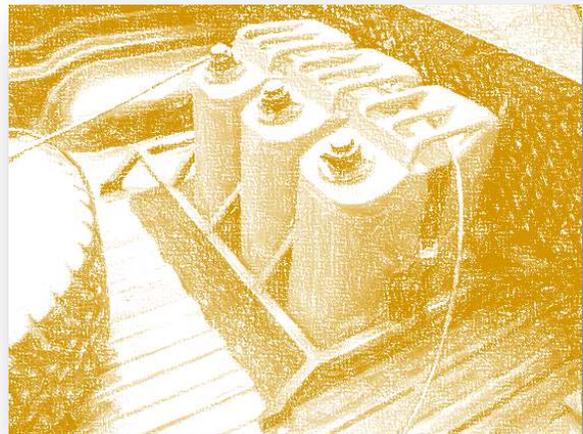
- Hot exhaust system parts, sparks from faulty spark plug wires, or static electricity from engine drive belts could ignite gasoline vapors;
- Allow engines to cool prior to refueling small equipment where the gas tank is near the engine heat.

If gasoline is spilled on clothing

- Wet the area with water.
- Slowly remove the clothing to prevent static sparks.

Containers

- Store fuel in CSA approved containers.
 - The fuel ingredients can damage other types of containers, causing a spill.
- Fill portable fuel containers while they are sitting on the ground.
 - Never fill a steel fuel container in a steel truck box because there is no ground for static to dissipate.
- Do not use any device to hold open the fuel pump handle trigger.
- Never top-off fuel tanks or portable containers
 - Allow room for expansion of the fuel.
- Store fuel containers in cool, ventilated areas.
- Always properly secure the container to the transport vehicle.
- All containers must be labeled with TDG or WHMIS labels or tags.



Delivering and Dispensing Fuel

- Delivery of fuel to any site needs to be approved by site supervisor.
- Transferring fuel from highway tank to an on-site certified tank must be done by a competent individual who has the required training.
- All dispensing or transferring of fuel will be attended (outside the vehicle) for the duration of the operation.
- Before any dispensing of fuel, the operator must ensure he/she knows how much fuel the tank or container can handle before being full.
- The transferring and dispensing of fuel will be done with proper equipment and hoses.



- Ensure the site-appropriate spill containment is readily available.
- Verify that there is a proper connection between the fuel fill hose and the fill pipe of the tanker, refueling tank or equipment being filled.
- Verify all valves are either open or closed, depending on the system used.
- Never assume the emergency shut-off for the tank will work.
- Check for leaks when dispensing fuel.
- Contact personal when required before and after dispensing.

