



# Safe Fueling of Vehicles, Equipment, and Containers with Liquid Fuels (Gasoline and Diesel)

Landscaping crews often need to add fuel to their vehicles and equipment. Gasoline and diesel fuels are volatile, have low flashpoints and, if not handled properly, can result in injury or even loss of life. In addition, liquid fuels release vapors that are flammable and can reach ignition sources that are not near the fuel tank or container. Employers should ensure that workers are trained in safe fueling procedures.

## **Safety and Environmental Requirements**

- When using a pump, always identify the emergency shutoff prior to operation.
- Keep all ignition sources away from the fuel. This includes cell phones, personal electronic devices, matches and lighters.
- For stationary fuel tanks, the employer must ensure the tank is bonded to the ground by driving a metal grounding rod at least two feet into the ground and making sure there is a connection between the rod and the tank, preferably by a copper wire.
   This will reduce the risk of static build up in the tank.
- When fuel is pumped, static electricity is generated the employer must ensure that static electricity be dissipated by grounding the pump from the container and bonding the receiving container to the pumping container.
- The employer and/or employee are required to report all petroleum spills to the relevant environmental authority in your area.

# **Health Requirements**

- Petroleum products in liquid or vapor form can act as a carcinogen or poison or as a asphyxiant, anesthetic or irritant. Due to the adverse reactions of petroleum on the body, it is important that your employer provides you with appropriate personal protective equipment (PPE) and that you wear the PPE.
- Do not inhale petroleum vapors.
- Keep liquid petroleum off the skin and out of eyes.
  - If petroleum gets on your skin, wash that area immediately and replace your clothing, if necessary.
  - If petroleum gets in your eyes, flush with water and seek medical attention.
  - If petroleum gets on your clothes, change immediately.

#### **Fueling Vehicles/Equipment/Containers**

- Do not smoke when fueling vehicles, equipment and containers.
- Identify the location of the emergency shutoff.
- Turn off the vehicle.
- Turn off cell phones and other devices and leave in the cab with the doors closed.
- Make sure you put on your PPE. Wear PPE, such as gloves, long sleeve garments, and eye protection to protect the skin and eyes.





- Discharge static electricity before fueling by touching the metal of the vehicle to the metal of the pump.
- Insert the nozzle fully into the vehicle; maintain contact between the metal nozzle and the tank to prevent static electricity.
- Maintain positive control of the nozzle; never prop the handle open for unattended pumping.
- Fill the tank to 95 percent capacity, leaving 5 percent unfilled to allow for expansion of the fuel in warmer temperatures.
- Use only approved gasoline containers in good condition.
- If fueling an approved container, place it on the ground. Never fuel a container that is
  in the storage area of a truck or still strapped to a truck. Containers should always
  be on the ground.

## Fire Safety

Fire requires three things to keep burning: fuel, heat, and oxygen. By removing any of these elements, the fire will extinguish. Control fuel by shutting off pumps and/or closing valves. Control heat, if you are trained to do so, with water in the form of stream, spray or fog. Control oxygen by smothering or diluting the air with non-oxygen gases such as carbon dioxide.

- If a fire starts, leave the area immediately and move to a safe distance.
- Notify any relevant personnel (for example, gas station attendants, fellow employees, and/or supervisors).
- Notify emergency personnel (911 in United States).

Under the Occupational Safety and Health Act, <a href="mailto:employers are responsible">employers are responsible</a> for providing a safe and healthy workplace and <a href="workers have rights">workers have rights</a>. OSHA can help answer questions or concerns from employers and workers. OSHA's <a href="On-site Consultation">On-site Consultation</a> <a href="Program">Program</a> offers free and confidential advice to small and medium-sized businesses, with priority given to high-hazard worksites. For more information, contact your <a href="mailto:regional or area OSHA office">regional or area OSHA office</a>, call 1-800-321-OSHA (6742), or visit <a href="www.osha.gov">www.osha.gov</a>.

Through the OSHA and National Association of Landscape Professionals Alliance, NALP developed this card for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor.