

INDUSTRY WIDE LABOR-MANAGEMENT SAFETY COMMITTEE

SAFETY BULLETIN #13

RECOMMENDED GUIDELINES WHEN USING COMBUSTIBLE & FLAMMABLE FUELS AND ASSOCIATED EQUIPMENT

This Safety Bulletin applies to the storing, transporting, use, handling, and refueling of combustible and flammable fuels (herein referred to as fuels), such as gasoline, diesel, butane, propane, and equipment that may contain fuels, such as generators, heaters, power washers, and saws. All required licenses and/or permits should be obtained from the Authority Having Jurisdiction (AHJ).

Smoking or vaping is prohibited near fuel storage, dispensing, and transfer areas.

Storage

- Refer to the Safety Data Sheet (SDS), your supervisor, and the AHJ for proper use and storage.
- Store liquid fuels in an approved container of not more than five gallons capacity.
- Flammable liquids shall not be stored in areas used for exits, stairways, or normally used for the safe passage of people.
- Containers must be labeled properly, including the type of fuel.
- Conspicuous and legible signs prohibiting smoking shall be posted at storage areas.
- Do not use damaged or leaking containers.
- All fuels are to be placed at a minimum of twenty-five feet (25') away from heat sources.
- Keep containers closed when not in use.
- Fuels may be stored indoors if placed in appropriate flammable liquid safety cabinets. Cabinets should be provided with a conspicuous label in red letters on a contrasting background that reads: **FLAMMABLE—KEEP FIRE AWAY**. The combined total quantity of liquids in a cabinet shall not exceed 120 gallons of Category 1, 2, 3, and 4 flammable liquids. Of this total, not more than 60 gallons shall be of Category 1, 2, and 3 flammable liquids. No more than three storage cabinets may be present in a single storage area.

- Propane tanks and other pressure vessels are to be secured and stored outdoors away from vehicle traffic.

Transporting Fuels and/or Refueling Equipment

Refueling trucks should have all locally required permits and be in compliance with all applicable federal, state, and local laws and regulations. Refueling equipment should be operated only by authorized personnel.

- While in transport, all refueling equipment must be shut off and properly secured.
- Ensure portable fuel containers are upright and secure.
- Know the location of vehicle fire extinguishers and ensure they are properly maintained and in a fully charged and operable condition.

Use, Handling, and Refueling

- Use applicable Personal Protective Equipment (refer to the label on the container).
- The appropriate fire extinguishers shall be available (2A-10BC minimum rating).
- Refuel in approved areas only.
- Bonding/grounding cable should be used during refueling to prevent static buildup.
- Do not refuel generators or other equipment while in operation unless approved by the AHJ.
- Do not fill gas cans in a vehicle/truck bed. When filling a metal or plastic safety gasoline container, place it on the ground. Touch the container lid with the metal nozzle to discharge any static electricity before removing the lid. Keep the metal nozzle of the fuel hose in constant contact with the side of the gas can or filler neck while pumping. Do not overfill the container. Leave enough space to allow for fume expansion.
- If dispensing gas from a gas can, do so on a hard surface like concrete or asphalt to prevent possible absorption into the soil from drips or spills. Use a funnel or spout to avoid splashing and spilling.

Working Indoors with Fueled Equipment

- When working indoors, be aware of all the designated fire, emergency, and regular exits. If exits are not clearly marked and/or clear of hazards, notify your supervisor.
- Appropriate class and size fire extinguishers shall be available.
- When indoors, batteries for “Picture Vehicles” (except newer vehicles with computerized systems), including boats and other motor crafts, shall be disconnected. The fuel level shall not exceed one-quarter of the tank or five gallons of fuel (whichever is less) and fuel tank openings should be closed and/or sealed.
- Follow manufacturer’s instructions when using propane heaters indoors or outdoors. Keep heaters away from flammable sources. For indoor use, propane heaters must be specifically built to be used indoors and approved and authorized by the employer.
- No indoor fueling of vehicles, boats, or other motor craft.
- Catering trucks are not allowed indoors.

Preventing Carbon Monoxide Poisoning

Carbon Monoxide (CO) is a by-product of equipment that uses fuels. CO is colorless, odorless, and non-irritating but potentially fatal if it accumulates. CO can rapidly accumulate when using gasoline-powered tools indoors such as high-pressure washers, concrete cutting saws, power trowels, mobile elevated work platforms, floor buffers, welders, pumps, compressors, and generators.

- Indoor use of fueled equipment, including vehicles, must be approved by your employer and/or the AHJ.
- Do not use fuels and/or fueled equipment indoors unless the work area is well ventilated, and the equipment is kept away from flammable sources.
- CO monitors may be used to measure levels to ensure they do not exceed Permissible Exposure Limits (PELs).
- Approved exhaust purifier devices shall be used if required to maintain the concentrations of dangerous gases or fumes below the maximum acceptable concentrations.

- Substitute gas-powered equipment with electric tools or tools with engines that are separate from the tool and can be located outside and away from air intakes.
- If you are experiencing, or observe others experiencing any of the following symptoms, you should immediately turn off the equipment, evacuate to an area with fresh air, notify your supervisor, and seek first aid care:
 - Nausea and vomiting
 - Headache
 - Weakness
 - Dizziness
 - Blurred vision
 - Changes in personality
 - Confusion
 - Loss of consciousness