



SECTION 2

CHAPTER 3

SHOP AND YARD SAFETY

Purpose

This chapter includes general safety requirements for shop and yard operations.

Scope

This applies to all Company yards.

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Marking Safety Zones

Purpose This document outlines the requirements for marking safety zones in the yards/buildings.

Marking passageways Aisles and doorways must:

- be clearly designated and permanently marked
- provide safe clearance for equipment
- be kept clear at all times to allow unhindered passage

Marking exits Exits and emergency evacuation routes must be:

- clearly marked
- kept clear at all times to allow unhindered passage
- Interior doors that are not exits must be clearly marked “Not an Exit”

Marking loading zones Loading zones must be:

- clearly marked
- kept free of unauthorized personnel
- kept clear at all times to allow safe use of equipment

Loading and Unloading Safely

Purpose This document describes the requirements for wearing personal protective equipment, handling materials safely, and using equipment.

Personal protective equipment While working in the yard, employees **shall** wear safety glasses. Where PPE is required by signage, employees shall wear:

- gloves
- coveralls or suitable clothing
- steel-toed boots
- hard hats

Additional personal protective equipment may be required depending on the material being handled. See the MSDS sheets for chemicals to determine whether additional PPE is required.

Handling materials safely When handling materials:

- always use proper PPE
- use proper lifting technique
- use the proper equipment

Using equipment Use the proper equipment to handle awkward, bulky, or heavy loads.



General Safety and Housekeeping

Shop Safety Rules

- When checking radiator coolant, turn pressure cap slightly to release pressure before removing cap completely.
- When raising a vehicle, chock wheels. Do not extend jack beyond safe limits. Be sure the vehicle hand brake or emergency brake is set.
- When working under a vehicle, after raising vehicle to work height, jack stands shall be used.
- Tires mounted on multi-piece rims shall be replaced with single piece rims immediately. Always inflate tires in a safety cage, (unless mounted on a vehicle) use a clip-on air chuck and stand aside.
- Always keep guards in place when operating **ANY** tool, piece of equipment or machinery.
- Use safety glasses and a face shield when grinding, using a drill press, chipping or performing any other task that may generate flying debris.
- Always wear approved welding hood when arc welding. When acetylene welding wear approved goggles. Wear proper eye protection when in the vicinity.
- Cutting goggles that seal around the eyes must be worn when operating cutting torches.
- Keep a fire extinguisher in close proximity when welding or cutting.
- **Any welding or cutting on any closed vessel, (frac tank, tank trailer, etc.) shall have prior Line of Business VP approval.**
- Do not use any flammable fluids, including cleaning fluids, in the vicinity of open flames or high heat sources.
- Obey “No Smoking” signs. Smoke in outdoor designated areas only.
- Do not use air under pressure for cleaning your clothes or body.
- All compressed gas cylinders will be maintained and in an upright position and secured in place.
- Check all electrical equipment for proper connections, insulation and grounding.
- When using a extension or drop light under a vehicle, protect the lamp from breakage with a lamp guard.
- Do not attempt electrical repairs except on 12 or 24 volt systems.
- Report any defective electrical equipment immediately. Follow lock out/tag out procedures.
- Use tools for the purpose they were designed. Use the right tool for the job.
- Keep chisels sharp and mushroomed heads dressed.
- Keep punches straight with square faces, properly suited for the work being done.
- Hammering on hardened surfaces with a ball peen hammer is dangerous. Use a soft-faced mallet whenever possible.



Shop Safety

Rules Continued

- Discard open end wrenches with spread jaws.
- Keep tools in clean condition and in a place where they will not fall and injure someone.
- When using a torch, point flames away from yourself and others. Shut off when not in use.
- Keep all flammable materials and fluids in their proper containers.
- Keep exit doors clear, do not block them.
- If a fire should occur in your immediate area, sound the alarm first and then fight the fire only in its insipient stage.
- All premises must be kept in a clean and orderly condition at all times.
- All electrically operated tools must be equipped with proper ground wire.
- Use chock blocks on every truck or vehicle brought into the shop.
- Tools rests must be adjusted to within 1/8 inch of the stone/brush on bench grinders. Safety glasses and full face shields are required when in use.
- When compressed gas cylinders are transported or stored, ensure cylinder caps are in place. Cylinders shall be upright and secured. Store oxygen cylinders separate from fuel-gas cylinders or combustible materials a minimum distance of 20 feet or by a non-combustible barrier at least 5 feet high having a fire-resistance rating of at least one-half hour. OSHA 1910.253 (b) (4) (iii)
- Only personnel trained in the operation of a forklift are authorized to operate a forklift.
- Maintain and inspect forklifts each month as required by company procedures.
- Passengers are prohibited on forklifts and there shall be NO riding or personnel lifting on the forks. Seatbelts must be worn.



Battery Safety

Every automotive battery cell contains a highly explosive mixture of oxygen and hydrogen gas. If an external flame or spark detonates gas within the case, a geyser of dilute sulfuric acid (electrolyte) is expelled, with the battery case, in some instances, acting like shrapnel.

- Batteries must be stored or charged away from hot work areas.
- Always remove the negative battery cable first when disabling a vehicles electrical system or removing a battery. Always connect the positive battery cable first when reconnecting or installing a battery.
- Do not rest or lay a metal tool or piece of equipment on a battery case where it could contact both posts and cause a spark.
- Never connect or disconnect a live battery charger to a battery. Always turn the charger off before connecting or disconnecting to the battery.
- Never pour water into concentrated sulfuric acid because it generates a violent reaction.
- Safety glasses or goggles must always be worn when working with batteries. This includes testing, charging, connecting/disconnecting or jump starting.
- When carrying batteries keep them level.
- DO NOT smoke around batteries that are in storage or while being charged.
- Eyes exposed to battery acid must be flushed with clean water for a minimum of 15 minutes. Do not apply eye drops or other medications not approved by a medical physician.
- Skin exposed to battery acid must be thoroughly washed with clean water. It is recommended that acid spilled on the skin be neutralized with baking soda.