

CENTRAL ARIZONA PROJECT



FORKLIFT SAFETY PROGRAM

REVISED MARCH 5, 2025

1.0 GENERAL REQUIREMENTS/SCOPE

Powered industrial trucks (PITs) are commonly used by CAWCD employees. They are used in the performance of a variety of material-handling tasks, including moving, raising, or lowering palletized objects. If not used properly, PITs present numerous opportunities for injuries and property damage.

This program was prepared in accordance with 29 CFR 1910.178, the Occupational Safety and Health Administration's Powered Industrial Trucks Standard; American National Standards Institute's standard B56.1-1969; and the U.S. Department of the Interior-Bureau of Reclamation (BOR) Safety and Health requirements. This program applies to all PIT operations at CAWCD facilities, including contractor operations.

2.0 RESPONSIBILITIES

2.1 Managers & Supervisors: Managers and supervisors are responsible for the following:

- Ensuring employees on their crews that operate PITs receive the required training prior to such operation.
- Ensuring employees that operate PITs complete a forklift evaluation every three years.
- Ensuring employees inspect PITs at the beginning of each work shift and complete the inspection booklet on the PIT.
- Ensuring proper maintenance of PITs and that any defective equipment is removed from service until repaired.

2.2 EHS/CLD Department: These departments are responsible for providing training and evaluations to all PIT operators and ensuring that such training is properly documented and recorded.

3.0 INSPECTION & MAINTENANCE

3.1 PITs shall be inspected before each work shift and inspections shall be documented. If any repairs are necessary and/or anything is found that could prevent safe operation, the PIT shall be tagged and removed from service. All repairs shall be done by a qualified service technician.

3.2 All PITs shall be kept in good, clean working order. Any excess oil or grease shall be cleaned. Mufflers and other exhausts shall be kept clear. All propane tanks shall be connected properly and free from damage.

- 3.3 PITs must not be altered to function and operate outside the scope intended by the manufacturer. Maintenance and repairs must use only manufacturer approved parts.
- 3.4 Any attachments used on PITs must be compatible with the unit and with the manufacturer's instructions.
- 3.5 All PITs shall have labels or markings indicating rated capacity and other important data. All nameplates and markings shall be maintained in legible condition.

4.0 OPERATIONS

- 4.1 The workplace shall be kept clean and organized to create a safe working environment. Lighting shall be adequate for operation and all ramps and grades shall be sufficient for the chosen PIT operation.
- 4.2 When operating, all PIT operators must:
 - Use seatbelts.
 - Only use the PIT for its intended use.
 - Follow all speed limits and traffic controls.
 - Use only compatible and approved attachments.
 - Have an approved fire extinguisher on board.
- 4.3 If a forklift is left unattended – meaning the operator is more than 25' away from the lift, or the lift is not within his/her view – the operator must:
 - Fully lower any load engaging means (i.e., lower the forks)
 - Tip forks downward to prevent possible trips
 - Place the forklift in neutral.
 - Turn the power off
 - Set the emergency brake
- 4.4 When operating powered industrial trucks, the following is required:
 - Powered industrial trucks may only be operated by certified employees.
 - Employees must never walk underneath an elevated load.
 - All loads must be handled in accordance with the manufacturer's height and weight limits.
 - Loads should be carried close to the ground; never transport a load elevated.
 - Materials must be stacked in a safe vertical way, minimizing the potential for a load to fall into aiseways.
 - When material staging is required inside of trailers, the trailer vehicle must be immobilized and secured against accidental movement. (ie wheel chocks)

- Employees must operate the PIT with all body parts inside of the cab; under no circumstances should the operator drive with hands, legs, etc. outside of the cab.
- The PIT operator assumes full responsibility for safety when pedestrians are in proximity of the equipment.
- The operator must travel in reverse when transporting a load down an incline.
- A PIT must not be utilized to raise, lower, or carry employees unless a fork mounted, approved platform that complies with manufacturer and other safety requirements is used.
- If attachments are utilized the operator must have additional training on the limitations and safe operating procedures of the attachment.
- When not in use or unattended, powered industrial trucks must be de-energized (turned off), and immobilized, to ensure accidental movement does not occur. (See 4.3)
- The PIT operator must sound the horn where visibility may be impeded, when in proximity to pedestrians and when turning corners.
- Good housekeeping practices must be followed for warehouse floors. Hazards such as wet floors, objects, debris, and damaged flooring must be eliminated.

5.0 BATTERIES

Battery charging areas must always have an approved fire extinguisher available. Additionally, an eye wash station must be accessible.. Smoking is prohibited in areas for battery charging and precautions shall be taken to prevent any open flames, sparks, or electric arcs.

- Battery acid is corrosive! Wear goggles or a face shield with safety glasses, and gloves when charging the battery.
- Batteries being charged produce flammable hydrogen gas. Be sure you charge in a well-ventilated area and keep all ignition sources at least 25 feet away.
- Know the location and operation of the closest eye wash station.
- Neutralize any acid spill immediately and report it to the Environmental Department.
- Batteries can be heavy and difficult to move. Do not attempt to change a battery unless you have been trained and authorized to do so and have the necessary equipment.

6.0 REFUELING

Handling of fuel shall be in accordance with NFPA regulations. During any refueling operations smoking is prohibited. PITs shall not be operating during refueling. Any spills must be cleaned immediately.

6.1 Propane Refueling:

- Do not attempt to refill cylinders.

- Park the vehicle in a safe location away from ignition sources.
- Propane is a super cold liquid as it is stored. It will cause immediate frost bite. Wear safety glasses and gloves when refueling.
- Close the fuel valve but let the truck run until it is out of fuel.
- Turn off the vehicle.
- Replace the cylinder and open the fuel valve.
- Return the empty cylinder to the designated storage area.

6.2 Gasoline and diesel refueling:

- Do not attempt to refuel the vehicle unless you are trained and authorized to do so.
- Park the vehicle in a safe location away from ignition sources and turn the vehicle off.
- Wear safety glasses while refueling.
- Be sure that you are using the correct fuel.
- Do not overfill the vehicle. Any spilled fuel must be allowed to evaporate or will be wiped up before restarting the engine.

7.0 TRAINING

7.1 All operators of PITs must be properly trained, evaluated, and authorized before operating a PIT. Training will consist of classroom instruction as well as hands-on evaluation. Initial training and evaluation will be conducted upon hire, or upon assignment to operate a PIT. Retraining is not required unless there are changes in the workplace environment that affect PIT operations; there are changes in the PIT's; there is a failure to follow safe operating practices; or an accident or near miss has occurred.

7.2 While retraining is not normally required, a re-evaluation (hands-on evaluation) must occur every three years. Evaluations shall be conducted on the PIT the employee intends to operate, or on a PIT that is similar in operation and capacity.

7.3 All PIT operator training and evaluation will be conducted by a member of the EHS team who has the necessary knowledge and experience to provide such training. This will also ensure consistency in the training provided.

7.4 PIT training must cover all the required content found in 29 CFR 1910.178(I), including the following:

7.4.1 Truck-related topics:

- Operating instructions, warnings, and precautions for the types of truck the operator will be authorized to operate.

- Truck controls and instrumentation: where they are located, what they do, and how they work.
- Engine or motor operation.
- Steering and maneuvering.
- Visibility (including restrictions due to loading).
- Fork and attachment adaptation, operation, and use limitations.
- Vehicle capacity and stability.
- Any vehicle inspection and maintenance that the operator will be required to perform.
- Refueling and/or charging and recharging of batteries.
- Operating limitations.
- Any other operating instructions, warnings or precautions listed in the operator's manual for the types of vehicles that the employee is being trained to operate.

7.4.2 Workplace-related topics:

- Surface conditions where the vehicle will be operated.
- Composition of loads to be carried and how load stability can be maintained.
- Load manipulation, stacking and un-stacking.
- Pedestrian traffic in areas where the vehicle will be operated.
- Narrow aisles and other restricted places where the vehicle will be operated.
- Hazardous (classified) locations where the vehicle will be operated.
- Ramps and other sloped surfaces that could affect the vehicle's stability.
- Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.
- Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.