



Powered Industrial Trucks (Forklifts)

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CITY OF APPLETON POLICY		SECTION:	Safety
ISSUE DATE:	July 2001	LAST UPDATE:	May 2013
POLICY SOURCE:	Human Resources Department		
POLICY AUDIENCE:	Employees who drive a forklift		

I. **PURPOSE**

The purpose of this policy is to protect the health and safety of all City employees required to operate powered industrial trucks (PIT) also known as forklifts and comply with the Occupational Safety and Health Administration (OSHA) and Department of Safety and Professional Services (DSPS).

II. **POLICY**

Federal and State Law, and City policy requires that employees who operate a forklift be properly trained prior to operating a forklift and that such operation be in compliance with the requirements established by the OSHA and the DSPS. Violations of this policy will be subject to disciplinary action, up to and including discharge.

III. **DISCUSSION**

The policy defines how the City will administer and comply with OSHA and DSPS standards.

IV. **DEFINITIONS**

A. The following terms are associated with the design, type and use of forklifts.

1. **Backrest:** Supports the load when tipped back and adds stability.
2. **Carriage:** The part of the mast where the forks and backrest are mounted.
3. **Identification Plate:** Contains information about the truck's design and capacity including information about the truck's engine, load capacity, serial number, weight and the truck's type designation. The identification plate may also contain additional information specific to that type of truck.
4. **Load Center:** The distance from the heels of the forks to the load's center of gravity.

5. ~~Mast: The mechanism on the truck that raises and lowers the load. The mast is made up of a set of tracks that house bearings and chains.~~
6. ~~Material Handling: Any activity that involves picking up and moving materials, parts and/or finished products.~~
7. ~~Powered Industrial Truck (PIT—also called Forklift): An industrial vehicle used to carry, push, pull, lift or stack material that is powered by an electric motor or an internal combustion engine. Included are vehicles that are commonly referred to as forklift trucks, rider trucks, motorized or powered hand trucks, pallet trucks and tugs. Not included are compressed airs or nonflammable compressed gas operated industrial trucks, farm vehicles or vehicles intended primarily for earth moving or over the road hauling.~~
8. ~~Rated Capacity: The maximum weights that the truck is designed to lift as determined by the manufacturer. To lift the maximum rated capacity, the load must be as close as possible to the drive wheels. The rated capacity of a truck can be found on the Identification Plate on the vehicle and/or in the manufacturer's operator manual.~~
9. ~~Side Stability: Refers to the truck's ability to resist tipping sideways under various loaded and unloaded conditions.~~
10. ~~Certified Instructor—One who has been specifically certified that he/she meets all the current training requirements mandated by law.~~

~~V. PROCEDURES~~

- A. ~~TRAINING—Must be conducted prior to initial use and then at least once every three years thereafter. Please refer to Exhibit I for specific information relating to training requirements.~~
- B. ~~EQUIPMENT INSPECTIONS & MAINTENANCE—Please see Exhibit II for specifics.~~
- C. ~~RULES RELATING TO DRIVING THE FORKLIFT: All City employees who drive a forklift shall observe the following rules:~~
 1. ~~If a seat belt is provided, it must be worn at all times.~~
 2. ~~Remain at least three truck lengths behind another forklift.~~
 3. ~~Increase this distance on wet or slippery floor conditions, or on any other less than ideal (unsafe) surface conditions or when going down an incline.~~
 4. ~~A safe distance, as demonstrated by the instructor, shall be maintained from the edge of any elevated dock or platform.~~

5. — ~~Other trucks traveling in the same direction shall not be passed at intersections, blind spots or other dangerous locations.~~
6. — ~~Improper driving and horseplay shall not be permitted.~~
7. — ~~If the load being carried obstructs the forward view, the driver shall be required to travel with the load trailing.~~
8. — ~~Grades shall be ascended or descended slowly.~~
9. — ~~When ascending or descending grades in excess of 10%, loaded trucks shall be driven with the load up grade.~~
10. — ~~Unloaded forklifts shall be operated on all grades with the load engaging means downward.~~
11. — ~~Under all travel conditions, the truck shall be operated at a speed that will permit it to be brought to a stop in a safe manner.~~
12. — ~~Operating on ramps or inclines:
 - a. — ~~Approach ramp straight on, not at an angle.~~
 - b. — ~~Keep speed low.~~
 - c. — ~~When operating with a loaded truck on a ramp, the load should be up grade.~~
 - d. — ~~On a rider truck without a load, travel so the forks are down grade.~~
 - e. — ~~Do not park on a ramp or incline. If you must stop temporarily, the wheels must be blocked.~~~~
13. — ~~Setting down the load:
 - a. — ~~Stop completely.~~
 - b. — ~~Always check overhead clearance before lifting or traveling with a load.~~
 - c. — ~~Lower the mast or load to clear any objects.~~
 - d. — ~~Check stability and condition of any materials or surface that the load is going to be placed onto.~~
 - e. — ~~Position the truck before raising the load into position.~~~~

f. — Never elevate or lower the forks while moving, turning or maneuvering the truck into position.

14. — Picking up the load:

a. — Check the load for stability.

b. — Approach the load slowly and straight on; not at an angle.

c. — Check that the forks or other attachments are adjusted properly.

d. — Keep the mast vertical and drive forward until the forks are into the load all the way so the load is resting against the carriage.

e. — Lift the load only high enough to clear the surface (about 4") then tilt the mast back.

f. — Check behind and to both sides before moving.

15. — Loading/Unloading Trailers:

a. — Make sure brakes are set and wheel chocks are in place under the rear wheels.

b. — Use jack stands if appropriate.

c. — Inspect or install the dock plate. Secure in place and check load capacity.

d. — Check flooring for breaks and weaknesses before driving into the trailer.

e. — Where vehicle restraint/warning light systems are used, visually observe safe engagement.

f. — Check for a smooth surface between the trailer and the dock.

g. — Keep your speed low.

h. — When loading, distribute the weight evenly.

i. — Put heavier loads on the bottom.

D. — RESPONSIBILITY FOR COMPLIANCE:

1. — Supervisor or Department Safety Coordinator

- a. ~~Ensure that all employees who operate a powered industrial truck receive the appropriate training on each type of lift truck they are expected to operate.~~
- b. ~~Provide observations and feedback to operators to ensure safe equipment operation.~~
- c. ~~Ensure that the vehicles are properly inspected and maintained in a safe operating condition. (See Exhibit II).~~

~~2. Employee responsibility:~~

- a. ~~Operate all forklifts in a safe manner.~~
- b. ~~Inspect forklifts before using and complete the inspection form (Exhibit III & IV).~~
- c. ~~Follow all the rules relating to safely driving the forklift.~~
- d. ~~Report all equipment defect/or maintenance needs to the safety coordinator or supervisor immediately.~~
- e. ~~Do not operate a forklift without prior training and refresher training every three years.~~

~~3. Certified Trainer responsibilities~~

- a. ~~Work with supervisors and department safety coordinator on coordinating classroom and hands-on training for employees who drive forklifts.~~
- b. ~~Upon completion of initial as well as refresher training, provide the evaluation and certification form. (Exhibits V & VI)~~
- c. ~~Provide a sign in sheet to Human Resources listing class participants and their pass or fail status.~~
- d. ~~Notify supervisors if employees are absent from class.~~
- e. ~~Provide training before initial use and once every three years thereafter.~~

~~4. Human Resources Generalist~~

- a. ~~Develop specific policy and procedure pertaining to the operation and maintenance of forklifts.~~

- ~~b. Maintain record of sign-in sheets and provide computerized record of class participants to instructors.~~
- ~~c. Periodically review the effectiveness of the program and update the policy as needed.~~

TRAINING REQUIREMENTS

- 1.— ~~All operator training and evaluation shall be conducted by either outside sources or City personnel who have received prior training and have been certified to train powered industrial truck operators and evaluate their competence.~~
 - a.— ~~The City has several certified trainers located in Public Works, Utilities, Valley Transit and Parks, Recreation and Facilities Management.~~
 - b.— ~~The trainer will follow an evaluation/performance checklist (Exhibit IV) and upon successful completion of the training course a "Certification of Training and/or Refresher Training" (Exhibit IV) will be given to the employee with a copy being sent to the H.R. Generalist.~~
- 2.— ~~An evaluation of each operator's performance shall be conducted at least once every three years.~~
- 3.— ~~Training shall consist of a combination of formal instruction, (lecture, discussion, videotape program, written material) and practical hands-on training.~~
- 4.— ~~Program content should include:~~
 - a.— ~~Operating instructions and precautions for the type of truck the operator will be authorized to operate and any other precautions listed in the operations manual.~~
 - b.— ~~Similarities and differences between forklifts and automobiles.~~
 - c.— ~~Truck controls and instrumentation.~~
 - d.— ~~Engine or motor operation.~~
 - e.— ~~Steering and maneuvering.~~
 - f.— ~~Visibility (including restrictions due to loading).~~
 - g.— ~~Fork and attachment adaptation, operation and use limitations.~~
 - h.— ~~Vehicle capacity.~~
 - i.— ~~Vehicle stability.~~
 - j.— ~~Any vehicle inspection and maintenance the operator will be required to perform.~~

- ~~k.—Refueling and/or charging and recharging of batteries.~~
 - ~~l.—Operating limitations.~~
 - ~~m.—Surface conditions where the vehicle will be operated.~~
 - ~~n.—Composition of loads to be carried and load stability.~~
 - ~~o.—Load manipulation, stacking and unstacking.~~
 - ~~p.—Pedestrian traffic in areas where the vehicle will be operated.~~
 - ~~q.—Narrow aisles and other restricted places where the vehicle will be operated.~~
 - ~~r.—Hazardous locations where the vehicle will be operated.~~
 - ~~s.—Ramps and other sloped surfaces that could affect the vehicle’s stability.~~
 - ~~t.—Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a build-up of carbon monoxide or diesel exhaust.~~
 - ~~u.—Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.~~
- ~~5.—Refresher training will be provided by either a certified outside source or a City Certified Trainer when:~~
- ~~a.—The operator has been observed to operate the vehicle in an unsafe manner.~~
 - ~~b.—The operator has been involved in an accident or near miss incident.~~
 - ~~c.—The operator is assigned to drive a different type of truck.~~
 - ~~d.—The operator has received an evaluation that reveals that the operator is NOT operating the truck safely.~~
 - ~~e.—The operator shall not continue to operate a truck until he/she has passed a refresher course.~~

EQUIPMENT INSPECTION AND MAINTENANCE

1. ~~1. The operator shall conduct an examination of the forklift before the vehicle is placed into service. When forklifts are used on a round-the-clock basis, each forklift shall be inspected after each shift. The results of these inspections will be documented on a Forklift Inspection Checklist (See Exhibit IV).~~
2. ~~2. The operator shall immediately notify his/her supervisor if the forklift is found to be in need of repair and/or unsafe.~~
3. ~~3. If a forklift cannot be operated in a safe manner without repairs, the forklift will be taken out of service until the repairs have been made.~~
4. ~~4. Only authorized personnel must make the repairs.~~
5. ~~5. When the temperature of any part of any forklift is found to be in excess of its normal operating temperature, the vehicle must be removed from service and not returned to service until the cause for the overheating has been eliminated.~~
6. ~~6. Any vehicle that emits hazardous sparks, flames or smoke from the exhaust system shall be removed from service and not returned until the cause for the hazardous emissions has been corrected.~~
7. ~~7. Forklifts are to be kept in a clean condition and free of excess lint, oil, and grease. Only noncombustible agents should be used for cleaning forklifts. Cleaning forklifts with low flash point solvents (below 100 degrees Fahrenheit) is not permitted.~~
8. ~~8. Precautions regarding toxicity, ventilation, personal protective equipment and fire hazards are to be followed as stated on the warning label and/or the Material Safety Data Sheet (MSDS) for that particular cleaning agent.~~
9. ~~9. All parts used in any forklift requiring replacement shall be replaced only with parts equal in safety to those parts originally provided by the manufacturer.~~

**~~GAS OR FORKLIFT LPG POWERED TRUCK
INSPECTION GUIDE~~**

- ~~**Fluid Levels:** Check the oil, coolant and fuel levels. If levels are low, fill before continuing inspection. In addition, check under the forklift for visible signs of leaks.~~
- ~~**Fuel Tank:** Inspect the tank for cracks, broken welds and other damage.~~
- ~~**Gauges and Indicators:** Check all gauges and indicators for normal readings.~~
- ~~**Brakes:** To test the brakes, push down on the brake pedal. The pedal should travel freely before meeting any resistance. Then press the pedal again and hold it for ten seconds. The brake pedal should hold solid and not feel mushy. Next, travel forward and press down brake pedal. The forklift should come to a complete stop without any hesitation or jerky movements. Make sure the parking brake is working properly.~~
- ~~**Steering:** Turn the steering wheel both ways and make sure it turns completely. The wheel should not feel loose or hesitate and the pump should not squeal.~~
- ~~**Mast:** Check for broken or cracked weld points and any obvious damage such as dents. Make sure the roller tracks are greased and the chains travel freely.~~
- ~~**Overhead Guard:** Inspect the overhead guard for any visible damage including damage to welds and bolts.~~
- ~~**Tires:** Look for excessive wear, splitting and/or missing tire material. Make sure the rubber isn't separated from the rim. Check the wheel nuts for tightness.~~
- ~~**Forks:** Check to make sure the forks are not damaged and the pins are in place.~~
- ~~**Carriage Operation:** Lift the carriage to its maximum height. The carriage should go up smoothly and completely. Tilt the mast to full forward and return it to normal position. Then lower the carriage all the way down. Listen for unusual, grinding or metal on metal sounds that may indicate a problem.~~
- ~~**Hydraulic Controls:** Check the hydraulic fluid levels and tilt cylinders for damage, leaks or loose fittings. Inspect the mounting hardware on the cylinders to make sure the hardware is secure.~~
- ~~**Horn and Lights:** Sound the horn and turn on all the lights.~~
- ~~**Backup Alarm (if equipped):** Check to make sure the alarm is audible.~~

- ~~Mirrors (if equipped):~~ Check to see if the mirrors are damaged or missing.

EXHIBIT IV

Forklift Operator Evaluation Form

Instructions: Use this checklist during the field session to evaluate operator proficiency. It can also be used for periodic evaluation to ensure that operators are continuing to operate forklifts properly.

Operator Name		Evaluator Name				
Date of Evaluation	Equipment Operated					
OPERATOR BEHAVIORS		Good	Fair	Poor	N/A	Comments
Preuse Inspection						
1	Follow the Operator's Daily Checklist.					
2	Look for damage.					
3	Document all findings on the checklist.					
Picking Up A Load						
1	Square up on the center of the load.					
2	Stop with the fork tips about 1 foot from the load.					
3	Clear personnel from the area near the load.					
4	Level the forks; then slowly drive forward until the load contacts the carriage.					
5	Lift the load carefully and smoothly until it is clear.					
6	Tilt the mast back slightly to stabilize the load.					
7	Look over both shoulders.					
8	After out and stopped, lower the load to travel height.					
Traveling						
1	Do not raise or lower the load and forks while traveling.					
2	Maintain a safe speed.					
3	Observe all traffic rules, warning signs, floor load limits and overhead clearances.					
4	Keep arms and legs inside the forklift.					
5	Follow other vehicles at a safe distance.					
6	Slow down when cornering.					
7	Use the horn to alert others.					
8	Travel with the load facing uphill while on a ramp or incline.					
9	Stop smoothly.					

OPERATOR BEHAVIORS		Good	Fair	Poor	N/A	Comments
Putting Down A Load						
1	Make sure there is sufficient clearance for the load.					
2	Clear personnel for the area near the load.					
3	Square up to the location; then stop about 1 foot away.					
4	Raise the load to placement level.					
5	Move slowly forward.					
6	If the load is on a pallet, lower it into position and lower the forks further.					
7	Look over both shoulders before backing out.					
8	Back straight out until the forks have cleared.					
9	Lower the forks to traveling position.					
Parking						
1	Fully lower the forks.					
2	Neutralize the controls.					
3	Set the brakes.					
4	Turn off the power.					
5	If parked on an incline, block the wheels.					
6	Park only in authorized areas.					
Fueling And Battery Recharging						
1	Turn the engine off.					
2	Keep a fire extinguisher nearby.					
3	Use the proper Personal Protective Equipment (PPE).					
4	Follow safe fueling and battery recharging procedures.					
5	Clean up spills immediately.					
FINAL EVALUATION						
<input type="checkbox"/>	Based on my evaluation, the operator has successfully completed the evaluation and is qualified to operate the following equipment:					
<input type="checkbox"/>	Based on my evaluation, the operator has not demonstrated competence in operating the following equipment:					
Equipment Type						
Evaluator Signature				Operator Signature		