



# Medford Area Public School District

# Forklift Safety Program

**Program Coordinator:** Dave Makovsky, Director of Buildings & Grounds

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# Medford Area Public School District

## Forklift Safety Program

**Check Your Understanding.** Do you need a Forklift Safety Program? If you use forklifts in your organization the answer is YES. Department of Labor statistics show that employers lose nearly 20,000 work days each year from employee injuries sustained on or around forklifts. Even more alarming is the fact that 100 lose their lives each year in forklift-related accidents. One way to help prevent forklift accidents is to train all operators on the hazards associated with forklifts and evaluate each operator's performance on a regular basis. For assistance in developing your program, email [losscontrol@emcins.com](mailto:losscontrol@emcins.com).

Additional information can be found in the powered industrial forklift standard [29CFR 1910.178](#) which applies to all industrial forklifts powered by electrical motors or internal combustion engines.

### ***Revision History***

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Revision 1 – July 2017

### ***Purpose***

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The Medford Area Public School District is committed to providing a safe and healthy work environment and to protecting our employees from injury or death caused by uncontrolled hazards in the workplace. The Forklift Safety Program has been established to reduce the risk of physical injury or property damage in areas where powered forklifts and other powered material handling equipment is in operation.

### ***Scope***

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The Forklift Safety Program applies to all employees (permanent, temporary and contractors) who operate forklifts and other powered material handling equipment at our facilities.

### ***Program Responsibilities***

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**Management.** The Medford Area Public School District is responsible for providing safe equipment and the resources necessary to implement this program, and for ensuring that this program is being followed by the Program Administrator.

**Program Administrator.** The Program Administrator is responsible for developing and implementing our Forklift Safety Program, including:

- Annually reviewing and updating this written plan
- Providing appropriate training on the safe operation of all powered forklift equipment used within the facilities
- Documenting all training and evaluations
- Observing forklift operations and reporting unsafe practices to the appropriate supervisor
- Reviewing copies of inspection checklists

**Supervisors.** Supervisors are responsible for:

- Ensuring that employees who are found to have insufficient skills or understanding of safe forklift operations receive retraining before continuing to operate any forklift
- Ensuring employees comply with all safe work practices described in this program
- Observing forklift operations in their department and correcting any unsafe practices
- Providing feedback of this program to the Program Administrator

**Forklift Operators.** Operators are responsible for the following:

- Only operating the forklifts for which they have been specifically trained and authorized
- Operating all forklifts in a safe manner, consistent with the forklift safe work practices
- Conducting forklift inspections at the beginning of each work shift and documenting the inspection on the appropriate inspection forms
- Reporting all equipment malfunctions and/or maintenance needs to their supervisors immediately
- Wearing a seatbelt at all times while operating a forklift
- Notifying their supervisors if they begin taking a medication that affects their ability to operate a forklift

**Check Your Understanding.** EMC provides several resources that can be used for employee forklift safety training, including online training modules, streaming safety videos and safety "toolbox" talks. For more information, visit <http://www.emcins.com> or email [losscontrol@emcins.com](mailto:losscontrol@emcins.com).

### ***Pre-Qualification***

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All forklift operator candidates must meet the following basic requirements prior to starting initial or refresher training:

- No uncorrectable vision problems that would impair the safe operation of the forklifts
- No uncorrectable hearing loss that would impair the safe operation of the forklifts
- No physical limitations that would impair the safe operation of the forklifts
- No neurological disorders that affect balance or consciousness
- No use of medication that affects perception, vision or balance

### ***Initial Employee Training***

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Operator training occurs before an employee is permitted to operate any forklift or other powered material handling equipment in our facilities. All operational training will be conducted under close supervision. Training will consist of a combination of formal instruction (e.g., lecture, discussion, DVD), practical training (demonstrations performed by the trainer and exercises performed by the trainee), and an evaluation of the operator's performance in the workplace.

Only knowledgeable and experienced forklift operators that are authorized by the Medford Area Public School District are permitted to conduct training and evaluations. The Program Administrator has authorized the following people to provide forklift training.

- Dave Makovsky, Program Administrator
- Scott Amacher, CESA #10

All training and evaluations are documented and will include the name of the trainee, name of the trainer and the date of training. All training will be recorded using the form in **Appendix A**.

### ***Training Program Content***

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Training for forklift operators is extensive, and covers both general forklift topics and workplace-specific topics, including:

General forklift topics:

- An overview of the Medford Area Public School District's Written Forklift Safety Program
- Operating instructions, warnings and precautions for the types of forklifts the operator will be authorized to operate
- Differences between forklifts and automobiles
- Forklift controls and instrumentation

- 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
- Vehicle inspection and maintenance
- Refueling and/or charging of batteries
- Seatbelt use

Workplace-specific topics:

- Surface conditions where the vehicle will be operated
- Load stability, manipulation, stacking and unstacking
- Pedestrian traffic areas
- Narrow aisles and other restricted places
- Hazardous 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 a buildup of carbon monoxide or diesel exhaust could Exist
- Any other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation

## ***Refresher Training***

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Refresher training will be conducted to ensure that all operators have the knowledge and skills needed to operate forklifts safely. Refresher training will be conducted for individual operators when:

- The operator has received an evaluation that reveals he/she is not operating the forklift safely
- The operator has been observed operating the vehicle in an unsafe manner
- The operator has been involved in an accident or near-miss incident
- The operator is assigned to drive a different type of forklift
- A condition in the workplace has changed which could affect the safe operation of the forklift

Refresher training will be evaluated by the Program Administrator to gauge the effectiveness of the training.

## ***Operator Evaluation***

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Each forklift operator's performance is evaluated every three years. This evaluation includes a discussion with the operator regarding his/her experience with the forklift, an observation of the employee operating the forklift, and written documentation that the evaluation was performed. All evaluations will be documented on the form located in **Appendix B**. Individuals that do not pass the evaluation will be immediately removed from forklift operations until they successfully pass refresher training.

## ***Forklift Safe Work Practices***

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The following procedures will be followed at all times.

### **Equipment Inspection.**

- Each shift the forklift operator will inspect their forklift before operation. If any inspection item is determined to be damaged, broken or inoperable, the operator will notify their supervisor and authorized mechanic. If possible, the

forklift will be immediately repaired. If immediate repair is not possible, a determination will be made as to whether the forklift can be used safely until repairs can be made.

- Employees may not operate an unsafe forklift at any time.
- Forklifts will be kept in clean condition, free of dirt, excess oil and grease.

**Check Your Understanding.** EMC provides forms that can be used for pre-shift forklift inspections. These can be downloaded by clicking the links below.

- [Gas/LP/Diesel Forklift Inspection Report](#)
- [Electric Forklift Inspection Report](#)

### Repairs and Maintenance.

- Only the Medford Area Public School District's authorized mechanic will perform repairs and maintenance on forklifts and other powered material handling equipment.
- The authorized mechanic will complete a maintenance log that identifies repair needs and corrective actions taken for each forklift. This log is kept at the same location as the forklift is housed (in the head custodian's office).
- If a forklift cannot be safely operated, it must be taken out of service until the repairs have been made. Forklifts that have been taken out of service will be visually marked with an out of service sign (see **Appendix D**) and the ignition keys will be secured in the same location as the forklift is housed (in the head custodian's office)
- After repairs have been completed, the forklift must be given a performance test before being returned into service to ensure that the equipment is safe to operate.

### Changing and Charging Batteries.

- Equipment is provided at battery-charging areas to safely flush and neutralize spilled battery acid and electrolytes.
- Smoking is prohibited in all battery-charging areas.
- Eyewash equipment is available and maintained in all charging areas.
- Precautions will be taken to prevent open flames, sparks and electric arcs in charging areas.
- Employees who change and service batteries and handle corrosive liquids must wear PPE including:
  - Long sleeve shirt and full length pants
  - Face shield
  - Safety glasses or goggles
  - Chemical apron
  - Chemical gloves
- The following steps must be taken when charging forklift batteries.
  1. Set emergency brake
  2. Remove the battery cover
  3. Check for plugged vent caps
  4. Turn off battery charger then connect it to the battery
  5. Avoid touching battery terminals with any metal object as this could cause a spark
  6. Once batteries are charged turn off the battery charger
  7. Disconnect the battery charger from the battery and replace the battery cover

### LP Gas Cylinder Changing.

- Forklift LP cylinders will only be changed in the designated area located in the middle school storage shed, where the lift is stored.
- All full and empty cylinders will be kept in the appropriately labeled cylinder cage when not on a forklift.
- Smoking is prohibited in all cylinder changing areas.
- Eyewash equipment is available and maintained in all changing areas.
- Precautions are taken to prevent open flames, sparks and electric arcs in changing areas.
- Employees who change cylinders must wear appropriate PPE including:
  - Long sleeve shirt and full length pants
  - Face shield

- Safety glasses or goggles
- Gloves
- The following steps must be taken when changing all forklift LP cylinders.
  1. Set emergency brake and leave engine running
  2. Close tank valve and use up remaining fuel in the fuel lines
  3. Turn off ignition
  4. Disconnect the hose from the tank and remove the tank
  5. Inspect new tank for leaks and damage (Do not use if there is a leak or dents in the tank)
  6. Install the new tank and connect the hose
  7. Open the tank valve and restart the engine

### **General Safe Work Practices.**

- Only authorized, trained personnel are permitted to operate forklifts.
- Horseplay is prohibited.
- Operators must drive with both hands on the steering wheel. Do not drive with wet or greasy hands.
- No person is permitted to ride as a passenger on a forklift or on the load being carried.
- A forklift may not be used to elevate a platform or pallet with persons on it, except work platforms specifically designed for this purpose. Work platforms must have standard guardrails, and must be securely fastened to the forks.
- No person is allowed to stand or walk under elevated forks.
- Operators should avoid making jerky starts, quick turns or sudden stops.
- Operators may not use reverse as a brake.
- Operators must slow down on wet and slippery surfaces and at cross aisles or locations where vision is obstructed.
- Operators entering a building or nearing a blind corner must make their approach at a reduced speed, sound their horn and proceed carefully.
- Operators must give pedestrians the right-of-way at all times.
- Operators may not drive toward any person who is in front of a fixed object or wall.
- Operators may not overtake and pass another forklift traveling in the same direction.
- Operators must not put their fingers, arms or legs between the uprights of the mast, or beyond the contour of the forklift.
- Forks should always be placed under the load as far as possible. Do not lift a load with one fork.
- No load should be moved unless it is absolutely safe and secure.
- Spotters must be used when handling long lengths of bar stock, pipe or other materials.
- Compressed gas cylinders may be moved only in special pallets designed for this purpose.
- When unloading trucks or trailers, the brakes on the vehicle must be set (locked) and the wheels chocked.
- Forklifts must be safely parked when not in use. The controls must be neutralized, power shut off, brakes set, key removed, and the forks must be in a down position, flat on the surface, and not obstructing any walkways or aisles.
- A forklift will not be left on an incline unless it is safely parked and the wheels chocked.
- Only stable and safely arranged loads may be handled.
- Only loads within the rated capacity of the forklift may be lifted or moved.

### **Traveling.**

- Facility speed limits must be observed at all times.
- Three forklift lengths (or two seconds) must be maintained between forklifts in operation.
- The forklift must be kept under control at all times.
- When vision is obscured, the operator must slow down and sound the horn.
- If the load blocks the operator's view, the forklift must be driven in the direction that provides the best visibility.
- Forklifts must cross railroad tracks at a diagonal.
- Forklifts must be parked 8 feet or further from the center line of railroad tracks.

- The forklift must be driven with the load upgrade when driving on ascending or descending grades greater than 10%.
- Dock boards and bridge plates must be properly secured before they are driven over.
- When the forklift is not carrying a load, the operator must travel with the forks as low as possible (maximum of 3 inches on paved surfaces). When carrying a load, it should be carried as low as possible (consistent with safe operation, 2 to 6 inches above the surface.)
- The forks may not be operated while the forklift is traveling.

### ***Periodic Program Review***

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The Forklift Safety Program and procedures are reviewed annually. The review is documented on the form located in Appendix C.



## Appendix B – Forklift Operator’s Evaluation

Forklift Operator's Name \_\_\_\_\_

Forklift Model/# \_\_\_\_\_

Location \_\_\_\_\_

Date \_\_\_\_\_

Evaluator's Name \_\_\_\_\_

Pre-Starting	Acceptable	Not Acceptable
Conducts pre-shift inspections per operating manual and uses form/checklist		
Looks for damage and reports problems		
Elevators	Acceptable	Not Acceptable
Does not exceed elevator capacity - centers forklift - drives in load first - allows no other passengers.		
Elevating Personnel	Acceptable	Not Acceptable
Only elevates personnel using approved work platform		
Properly secures work platform to forklift		
Does not travel with personnel in platform - Checks raising and lowering of mast and platform before raising personnel		
Ensures that forklift has twice the capacity of the platform weight and load (Including personnel)		
Barricades area		
Stays at forklift controls while personnel are elevated		
Traveling	Acceptable	Not Acceptable
Wears safety belt or harness and required PPE		
Keeps body within operator compartment		
Operates forklift in accordance with operating manual instructions		
Looks in direction of travel before and while moving		
Uses forklift lighting in dark areas		
Carries forks/load 3" to 6" above ground		
Smooth starts, stops and direction changes		
Sounds horn at blind corners - slows or stops as necessary		
Turns wide to see down travel path		
Travels right of center allowing room for step out		
Uses extreme caution when meeting pedestrians		
Leaves three or more lengths for stopping when behind another vehicle		
Stays well away from drop-offs		
Load Handling	Acceptable	Not Acceptable
Never handles loads in excess of forklift capacity or load tiers above LBR height		
Uses attachments according to manufacturer's instructions		
Approaches load properly		
Does not raise or lower forks while traveling		
Does not turn with forks elevated		
Keeps mast vertical (load level) when high stacking		
Enters and exits pallets properly (forks level and properly spaced)		
Travels in reverse when load partially obstructs visibility		
Travels with loads 6" - 12" above the ground and tilted back to stabilize the load (if the load represents a hazard of sliding off the forks during forward braking, e.g., metal on metal, then additional back tilt may be necessary)		
Handles long loads with forks spread wide and uses spotters		
Aligns loads properly in racks or stacks		

<b>Pedestrian Issues</b>	<b>Acceptable</b>	<b>Not Acceptable</b>
Slows, honks and yields to pedestrians at corners and step outs		
Allows no pedestrians near operating forklift particularly in trailers or railcars		
Watches for pedestrians in tail swing area		
Honks before passing pedestrians		
Allows no pedestrians beneath load or to ride on forklift, forks or pallet		
<b>Trailer and Railcar Loading</b>	<b>Acceptable</b>	<b>Not Acceptable</b>
Trailer/railcar properly chocked - Jack stand used when needed		
Slides axles to rear		
Inspects floor		
Checks dockboard capacity - installs correctly		
Takes steps to prevent tractor-trailer pull-away		
Uses lighting aids		
Looks into trailer/railcar before entering with EACH load		
<b>Ramps/Inclines</b>	<b>Acceptable</b>	<b>Not Acceptable</b>
Travels with load upgrade and takes precautions for visibility		
Travels empty with counterweight upgrade		
NEVER turns on ramps or inclines		
<b>Parking</b>	<b>Acceptable</b>	<b>Not Acceptable</b>
Lowers forks, sets brake, neutralizes transmission controls, chocks wheels on slope and shuts off LPG when parking for extended periods of time		
Parks in location not blocking firefighting equipment, electrical panels, doorways, stairways, ladders, emergency exits or railroad tracks		
Shuts off engine if moving more than 25 feet from forklift or moving out of sight of forklift		
<b>LPG/CNG</b>	<b>Acceptable</b>	<b>Not Acceptable</b>
Turns off forklift		
Allows no open flames or ignition sources in refueling area		
Wears required PPE		
LPG: Removes tank and stands bottle vertically to refuel		
If authorized, fills in accordance with regulations		
Uses outage valve to determine fill level and does not overfill		
Seeks assistance replacing bottle on forklift and uses locator pin and hole to properly index bottle		
Cleans up spills		
<b>Battery Charging</b>	<b>Acceptable</b>	<b>Not Acceptable</b>
Turns off forklift		
Allows no open flames or ignition sources in refueling area		
Wears required PPE		
Opens battery lid - does not remove caps		
Does not plug running charger to battery		
<b>Battery Changing</b>	<b>Acceptable</b>	<b>Not Acceptable</b>
Turns off forklift		
Allows no open flames or ignition sources in refueling area		
Wears required PPE		
Locates forklift properly, uses changing device in accordance with manufacturer's instructions, and securely reinstalls battery and retention device		
<b>Additional Observations and Comments</b>		

## ***Appendix C - Annual Evaluation Report***

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Date of Evaluation:	Evaluated By (list all present):
Written Program Reviewed: Yes No	
Comments on Written Program:	
The following specific procedures have been reviewed:	
The following specific procedures were modified:	
The following specific procedures were added:	
A review of the accident reports and injury and illness reports were made:      Yes      No	
The following additional expense(s) resulted from failure to properly operate a forklift or other powered material handling equipment:	
Comments:	

**CAUTION**

**OUT OF  
SERVICE  
DO NOT USE**



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