



CALIFORNIA STATE
UNIVERSITY
E A S T B A Y

Forklift Safety Program Rev 1

This Forklift Safety Program is hereby approved:

Signature _____ **Date** _____

POWERED INDUSTRIAL TRUCKS

Forklift Safety Program

1.0 PURPOSE

To provide safe practices for the operation, maintenance, and inspection of forklifts.

2.0 SCOPE

This program applies to all CSUEB employees. Contractors or outside personnel shall ensure their employees operate the equipment in compliance with safe work practices and standards, and are properly trained and certified. Contractors failing to adhere to applicable safe work practices and standards will be asked to terminate their work until their program is brought into compliance.

3.0 RESPONSIBILITIES

3.1 Environmental Health & Safety (EHS)

- 3.1.1 Establish, maintain, and update the Program.
- 3.1.2 Coordinate forklift training and re/certification.
- 3.1.3 Maintain training documentations.

3.2 Facilities Management

- 3.2.1 Service and/or repair equipment in a timely manner.
- 3.2.2 Contact outside vendor for repair as needed.
- 3.2.3 Ensure equipment is not put back in service until necessary repairs have been made and is in safe operating condition.
- 3.2.4 Maintain maintenance records for each forklift. Records shall be kept for the life of the equipment.

3.3 Managers, Supervisors and Department with Assigned Forklift

- 3.3.1 Implement and administer this Program as it applies to the department.
- 3.3.2 Ensure employees in the department follow all rules and procedures pertaining to this Program.
- 3.3.3 Do not allow anyone to operate the equipment without proper training and a *current* certification from CSUEB.
- 3.3.4 Do not authorize non-CSUEB employees to operate CSUEB powered industrial equipment.
- 3.3.5 Maintain forklift pre-operation inspection checklists. Checklists should be kept for at least one year or until noted issues have been corrected, whichever is longer.
- 3.3.6 Submit Work Request with Facilities Management for servicing and repair.
- 3.3.7 Do not allow anyone to operate malfunctioned equipment. If there is a condition affecting the equipment's safety or operation, ensure a red or out-of service tag is placed on the equipment's steering wheel. Ensure

equipment is not placed back in service until the safety concern has been addressed.

3.3.8 Report all forklift incidents/accidents to EHS immediately.

3.4 Employees

- 3.4.1 Do not operate the forklift without proper training and a current certification from CSUEB.
- 3.4.2 Perform pre-operation inspection of forklift prior to operation and turn in Pre-Operation Inspection checklist to designated location. Place red or “out-of-service” tag on forklift’s steering wheel if there is any condition affecting the safety or operation of the equipment. Do not operate equipment or remove “out-of-service” tag until the safety concern has been corrected.
- 3.4.3 Report any deficiencies or issues with the equipment immediately to the appropriate personnel for repair/servicing. Do not tamper with the equipment.
- 3.4.4 Do not use malfunctioned equipment.
- 3.4.5 Maintain good housekeeping and do not abuse the equipment.
- 3.4.6 Comply with departmental instructions and procedures for checking equipment in/out.
- 3.4.7 Follow all rules and procedures pertaining to this Program.
- 3.4.8 Report all forklift incidents/accidents to their Supervisor immediately.

4.0 TRAINING

- 4.1 Employees must satisfactory complete training and be certified by CSUEB or CSUEB designated trainer before being authorized to operate the forklift.
 - 4.1.1 Employees who received forklift operator training through a prior employer must complete initial training.
 - 4.1.2 Employees who were trained or certified on a different type of forklift than the type they are assigned to use are required to complete training on the “new” equipment. The training only needs to include the practical and operator’s performance evaluation, unless the trainer or EHS determines that the lecture portion also needs to be included.
 - 4.1.3 Operator training, evaluation and certification shall be conducted by designated personnel who have the knowledge, training and experience to train powered industrial truck operators and evaluate their proficiency. This requirement can be met by attending a forklift train-the-trainer course.
- 4.2 Training will be provided by Shipping/Receiving and coordinated through EHS. A department can request training for an employee by contacting EHS.
- 4.3 Initial and refresher training will be provided as outlined in Appendix A. Training will consist of classroom lecture, demonstrations by the trainer, trainee hands-on equipment operation or practices, and trainer evaluation of the trainee’s performance. Upon successful completion of training, employees will be certified by the trainer and be issued a certification card.

- 4.4 Shipping/Receiving will provide EHS copies of the sign-in sheets, written quizzes, equipment hands-on evaluation checklists, and certification cards upon completion of training. EHS will update the certification records.
- 4.5 Operators must be recertified at least once every three years.

5.0 OPERATION

5.1 Pre-Operation Inspection

- 5.1.1 Employee shall inspect forklift and complete the Pre-Operation Inspection checklist (see Appendix B) prior to operating equipment. The checklist shall be turned into designated location.
- 5.1.2 Attention shall be given to proper functioning of the tires, horn, lights, controls, brakes, steering mechanism, cooling system, and the lift system.
- 5.1.3 Any safety defects shall be noted on the inspection checklist and immediately reported for repair. Place a red or out-of-service tag on the forklift's steering wheel. The tag shall not be removed and the equipment shall not be placed in service until the safety issue has been corrected.
- 5.1.4 Inspection checklists shall be kept/ maintained by the department with the assigned forklift(s). Inspection checklists will be kept for at least 1 year or until the noted issues have been corrected, whichever is longer.

5.2 Carrying Loads

- 5.2.1 Do not exceed the equipment's rated load capacity.
- 5.2.2 Loads should be safely arranged, stable, and centered. Forks should be spread as wide apart as possible and locked in place. Loads of excessive width, length or height shall be balanced, braced, and secured as to prevent tipping/falling.
- 5.2.3 When carrying a load downgrade travel with the load trailing, and the load first when traveling upgrade. Tilt forks slightly upward.

5.3 Operating Procedures

- 5.3.1 Only authorized and currently certified personnel may operate the forklift. Trainee may operate the forklift only under the direct supervision of a designated trainer, and where such operation does not endanger the trainee or other personnel.
- 5.3.2 Before operating forklift, inspect the equipment thoroughly using the Forklift Pre-Operation Inspection checklist.
- 5.3.3 Equipment shall not be operated with a leak in the fuel system.
- 5.3.4 Operator must wear seatbelt at all times.
- 5.3.5 Passengers are not permitted, unless the forklift has an extra seat that allows the passenger to buckle-up while riding.
- 5.3.6 Lounging, meddling, or horseplay on or around the forklift is not permitted.
- 5.3.7 Do not allow anyone to stand or walk on/underneath the forks.
- 5.3.8 Do not elevate anyone with the forklift.
- 5.3.9 Do not drive up to anyone standing in front of a fixed object such that the person could be caught between the equipment and object.
- 5.3.10 Keep all parts of body within the confine of the equipment.

- 5.3.11 The overhead guard and load backrest must be in place for protection against falling objects.
- 5.3.12 Operate the forklift with care and only for the purpose intended. Before starting or backing, look and be sure others are clear.
- 5.3.13 Do not operate the equipment on floors or surfaces that will not safely support the weight of the equipment.
- 5.3.14 Never operate the forklift without being in the driver's seat.
- 5.3.15 When leaving the equipment unattended, fully lower the forks/load, engage parking brake, turn off engine, remove the key, and turn off propane tank.
- 5.3.16 When parking on an incline, the wheels must be blocked/ chocked. Do not block walkway, roadway, or emergency access area.

5.4 Traveling

- 5.4.1 When traveling with or without a load, the forks shall be retracted back and raised as high as necessary to clear the road surface, but no higher than 6 inches from the ground.
- 5.4.2 Follow all traffic regulations. Do not exceed the posted maximum speed limit (10 mph for intercampus roads) and yield to pedestrians at all times.
- 5.4.3 Adjust speed according to conditions of the road. Keep the forklift under control at all times to safely stop in an emergency.
- 5.4.4 Look in the direction of travel and keep a clear view of the path of travel.
- 5.4.5 Avoid running over loose objects in the roadway.
- 5.4.6 Maintain a safe distance, approximately three truck lengths, from the vehicle ahead.
- 5.4.7 Sound the horn when approaching workers, intersecting, aisles, blind corners, or swinging doors.
- 5.4.8 Slow down and sound horn at cross aisles and other locations where vision is obstructed. If load being carried obstructs forward view, the driver shall travel with the load trailing.
- 5.4.9 Do not pass another vehicle traveling in the same direction particularly at intersections, blind spots, or other dangerous locations.
- 5.4.10 Avoid quick starts and sudden stops and turns.
- 5.4.11 Never turn sideways on an incline. This can cause the equipment to tip over.

5.5 Changing Propane Cylinder

- 5.5.1 Empty propane cylinders are exchanged on campus by a contracted vendor on an as needed basis. Employees are not permitted to transport the cylinders in a vehicle or to fill/refuel the cylinders.
- 5.5.2 Cylinders not in use shall be chained/secured and properly stored.
- 5.5.3 Propane cylinder shall be replaced per the manufacturer's instructions and shall only be handled by trained and authorized employees.
- 5.5.4 Maintenance and replacement of the cylinders will be done by the department with the assigned forklift(s).

5.6 Checking Forklift in/out

- 5.6.1 Employees must be authorized to operate the forklift and be currently certified by CSUEB.
- 5.6.2 Employees shall comply with all procedures established by this Program and the department with custody of the forklift.
- 5.6.3 Shipping/Receiving's forklift checking procedures:
 - 1. Employees must receive authorization from Shipping/Receiving staff.
 - 2. Employees must sign-in the Forklift Usage Log and note date and time equipment is checked out.
 - 3. Complete Pre-Operation Inspection checklist prior to operating equipment and note any deficiencies observed. Turn in completed inspection checklist to designated location in the Shipping/Receiving office.
 - 4. Verbally report any deficiencies noticed (physical and/or mechanical) during the inspection to a Shipping/Receiving staff.
 - 5. Return equipment to designated area at end of task and note on Forklift Usage Log date/time equipment is returned.

6.0 MAINTENANCE

- 6.1 Repair should only be made by authorized personnel.
- 6.2 If there is a condition affecting the safety or operation of the vehicle, the operator shall place an out of service or “do not operate” tag on the forklift’s steering wheel to warn other personnel from operating the equipment. The tag shall not be removed and the equipment shall not be put back in service until the repair has been made.
- 6.3 Work Request will be submitted with Facilities Management for servicing or repair. Facilities Management will contact an outside vendor to complete the repair, if needed.
- 6.4 Unless power is necessary for testing and repair, power sources shall be disconnected and stored energy shall be discharged before working on the primary electrical system.
- 6.5 All replacement parts shall be equivalent in safety to the originals.
- 6.6 The equipment shall not be altered or modified, unless approved by the manufacturer.
- 6.7 Repairs to the fuel and ignition system which involve fire hazards shall only be done in locations safe for such repairs.
- 6.8 Employees shall not work underneath elevated portion of the equipment, unless the equipment is properly supported to prevent falling or movement.

7.0 EQUIPMENT LIST

| Department | Forklift Make/Model | Type |
|-------------------------------|----------------------------|-------------|
| Art | Komatsu FG25C11 | LP |
| Facilities Management-Concord | TCM FG25 | LP |
| Shipping/Receiving | Daewoo G305-3 | LP |
| Shipping/Receiving | Hamech G20T-16 | P |

Appendix A

Powered Industrial Trucks

Operator Training, Evaluation and Certification

In accordance with Title 8, General Industry Safety Orders, Section 3668, Powered Industrial Truck Operator Training, the requirements for initial training, refresher training, evaluation and certification are outlined below. The types of powered industrial trucks utilized on Hayward and Contra Costa campus are: forklifts, aerial lifts and scissors lifts.

Initial Training

1. Topics related to the Truck
 - a. Operating instructions, warnings, and precautions for the type(s) of truck the operator will be authorized to operate.
 - b. Differences between the truck and an automobile.
 - c. Truck controls and instrumentation:
 - Where they are located?
 - What they do?
 - How they work?
 - 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 that the operator will be required to perform.
 - k. Refueling and/or charging and recharging of batteries.
 - l. Operating limitations.
 - m. Any other operating instructions, warnings, or precautions listed in the operator's manual for the type(s) of vehicle that the employee is being trained to operate.

2. Topics related to the Workplace
 - a. Surface condition where the vehicle will be operated
 - b. Composition of loads to be carried and load stability.
 - c. Load manipulation, stacking, and restacking.
 - d. Pedestrian traffic in areas where the vehicle will be operated.
 - e. Narrow aisles and other restricted places where the vehicle will be operated.
 - f. Hazardous locations where the vehicle will be operated.
 - g. Ramps and other sloped surfaces that could affect the vehicle's stability.
 - h. Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a build-up of carbon monoxide or diesel exhaust.
 - i. Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.

Refresher Training and Evaluation

1. It is required to provide refresher training to the operator 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 has received an evaluation that reveals that the operator is not operating the truck safely.
 - d. The operator is assigned to drive a different type of truck.
 - e. A condition in the workplace changes in a manner that could affect safe operation of the truck.

2. An evaluation of each powered industrial truck operator's performance is required to be conducted at least once every three years.
 - a. The initial training topics do not have to be duplicated for the evaluation of the operator if:
 - The training was appropriate to the truck and working conditions encountered.
 - The operator has been evaluated and found competent to operate the truck safely.

Certification

The trainer shall certify that each operator has been trained and evaluated as described above. The written certification will include the operator's name, date of training, date of the evaluation, and identity of person(s) performing the training or evaluation.

Appendix B

FORKLIFT PRE-OPERATION INSPECTION CHECKLIST

Operator _____

Date _____

Vehicle # _____

Hour Meter Reading _____

Operator: Perform pre-operation inspection at start of task or prior to operating equipment.

Note general vehicle condition. Clear away all collected debris. Check for mechanical damage and loose or leaking components.

Before starting engine check the following:

| Visual Inspection | Status | Remarks | Date Corrected |
|--|--------|----------------|----------------|
| | OK | Service Needed | |
| Warning decals, capacity plate, etc are legible | _____ | _____ | _____ |
| Forks/locking pins, carriage, mast (physical damages) | _____ | _____ | _____ |
| Lift system (hydraulic lines, chains, etc) | _____ | _____ | _____ |
| Wheels, Tires & Lug Nuts (condition/pressure) | _____ | _____ | _____ |
| Engine (check oil level and for leaks) | _____ | _____ | _____ |
| Transmission (check oil level and for leaks) | _____ | _____ | _____ |
| Engine belts (check for adjustment/w ear) | _____ | _____ | _____ |
| Air cleaner | _____ | _____ | _____ |
| Radiator (check coolant level) | _____ | _____ | _____ |
| Hydraulic tank (check oil level & for leaks) | _____ | _____ | _____ |
| Fuel tank (secured, fuel level, connections, hoses, leaks) | _____ | _____ | _____ |
| Overhead guard (no damage) | _____ | _____ | _____ |
| Seat belt | _____ | _____ | _____ |
| Other (loose, damaged or missing parts) | _____ | _____ | _____ |

After starting engine check the following:

| Operational Inspection | Status | Remarks | Date Corrected |
|--|--------|----------------|----------------|
| | OK | Service Needed | |
| Engine (does it sound normal) | _____ | _____ | _____ |
| Instruments (check for normal readings) | _____ | _____ | _____ |
| Exhaust system (check for leaks & excessive smoke) | _____ | _____ | _____ |
| Wipers, lights & signals | _____ | _____ | _____ |
| Horn & back-up alarm | _____ | _____ | _____ |
| Lift system (lift, tilt, side shift) | _____ | _____ | _____ |
| Transmission & clutch (direction & speed range) | _____ | _____ | _____ |
| Brakes | _____ | _____ | _____ |
| Steering | _____ | _____ | _____ |

Note anything abnormal or in need of repair: _____

Equipment must be tagged out if there is any condition affecting the equipment's safety or operation.

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