
	St. Clair Ethanol Safe Work Practice	
FORKLIFT SAFE WORK PRACTICE		SWP 19000-041
<i>Issue Date: February 2018</i>	<i>Next Review Date: February 2023</i>	<i>Area: SCEP</i>
<i>Document Owner: Site Director</i>		
<i>Document Contact: EHS Team Lead</i>		

Table of Contents

- 1.0 Scope and Purpose** 2
- 2.0 Roles and Responsibilities** 2
 - 2.1 Environmental Health and Safety..... 2
 - 2.2 Discipline Managers (Operations, Maintenance, Technical, etc.)..... 2
 - 2.3 Shift Supervisors..... 2
 - 2.4 Employees 3
- 3.0 Hazard Assessment** 4
- 4.0 Control Measures**..... 4
 - 4.1 Safety Inspection 4
 - 4.2 Competent Person..... 4
 - 4.3 Forklift Operation (General)..... 5
 - 4.4 Traveling 5
 - 4.5 Control of Load 6
 - 4.6 Pedestrians 6
 - 4.7 Facility Design (to be considered when modifying existing or building new structures)..... 6
 - 4.8 Lift Truck Selection Criteria 7
 - 4.9 Fuel/Refueling (Liquid Propane Gas Cylinders) 7
- 5.0 Training** 7
- 6.0 Record Keeping** 8
- 7.0 Review/Revision** 8
- 8.0 Relevant Documents**..... 8
- 9.0 Reference Documentation** 8

1.0 Scope and Purpose

To create a well-designed powered-lift-truck safety program to cover all legal requirements as outlined by the Ministry of Labour and OHS Regulation 851- *Industrial Establishments* to ensure compliance.

The term "powered lift truck" can itself be defined as "a mobile, power-propelled, self-loading truck equipped with a load carriage and attachments for lifting, transporting and stacking material", as defined by the MOL Guideline for safe operation of powered lift trucks. For SCEP the term "powered lift truck" applies to forklifts.

2.0 Roles and Responsibilities

2.1 Environmental Health and Safety

- Assist with identification of work location and/or specific work activities for which the forklift program applies.
- Provide recommendations to site leadership related to forklift operation hazards and controls.
- Ensure forklift associated training meets legal requirements

2.2 Discipline Managers (Operations, Maintenance, Technical, etc.)

- Identify relevant hazard areas and/or work activities where this program applies
- Ensure that all employees are aware of hazards associated with relevant work activities and are utilizing appropriate control measures.
- Take appropriate steps to minimize the risk of hazards, including, but not limited to, identification and implementation of control measures where feasible (elimination (where practicable), engineering controls, and administrative control measures) related to work activities.
- Take appropriate steps to fix reported forklift inspection deficiencies
- Support compliance with forklift program requirements related to the work activities.
- Support follow-up and response to any worker concerns related to forklift safety or other workplace hazards.
- Support worker schedules to allow for forklift certification and any associated training.

2.3 Shift Supervisors

- Conduct hazard assessment in order to identify hazard areas and/or work activities and employees who have the potential to be exposed.
- Enforce compliance with forklift program requirements related to the work activities.
- Ensure workers have proper training, forklift operators are 'competent' by the definition outlined in this program.
- Contact EHS for requests related to forklift safety concerns when appropriate.
- Contact operations manager regarding relevant forklift inspection deficiencies, required maintenance or repairs.

2.4 Employees

- Comply with forklift program.
- Attend and complete relevant forklift associated training as required, and ensure training remains valid.
- Conduct pre-use inspections prior to operating a forklift.
- Report forklift concerns, unsafe conditions, noted maintenance or repairs to Supervisor.

Work Practice Instruction

3.0 Hazard Assessment

The following hazards have been identified as potential ways in which the operator of the forklift, or those who work around a forklift could be harmed or injured on site. Equipment in use, tasks being performed, and workplace environment are all factors that have been considered.

- Forklift not in proper working condition/ Mechanical failure
- Person/object/equipment struck by fork lift, or load
- Maximum load of forklift is exceeded
- Forklift operated by person without adequate training
- Load not adequately secured to forklift
- Forklift loses stability
- Operational error
- Facility design impacting forklift operation
- Person/object/equipment injured during refueling process
- Lack of safeguards to protect workers on foot
- Improper warnings to others about lift truck in use nearby
- Poor communication during shared tasks, or in shared spaces

4.0 Control Measures

4.1 Safety Inspection

A pre-use inspection is to be carried out by the operator of the forklift using the SCEP Forklift inspection sheet, prior to first use of the forklift during a shift. Circle checks are required at each change of operator, or if the forklift has been unattended for an extended period of time. Any defects should be reported to the operator's shift supervisor or lead hand.

4.2 Competent Person

Competent forklift operators must know not only how to operate the particular class of truck to which they have been assigned but also be aware of hazards associated with the work they have been asked to do; they must be able to operate the truck in a manner that protects both their own safety and the safety of others in the their workplace.

A “competent” operator should understand:

- The sections of the OSHA and regulations applicable to the work
- The hazards associated with the work, including the principles of operation and features of the lift truck, workplace conditions and environment, and activities that pose actual or potential danger to health and safety in the workplace

- The manufacturer's specifications as they relate to the safe operation and load handling for the class or type of truck that is to be operated
- The workplace-specific procedures and practices that have been established for ensuring worker safety

A "competent" operator should be able to perform, with the truck to be operated and under typical workplace conditions, the following procedures in a manner consistent with established competence standards:

- Pre-operational check
- Start-up and shut-down
- General operation: stopping, starting, turning, driving forward and in reverse, parking, operating around personnel
- Load handling: selection and security of loads, pick-up and placement, personnel lifting, stacking and restocking
- Loading and unloading: transport vehicles, structures, elevators; and operational maintenance, refueling.

4.3 Forklift Operation (General)

- Before starting the forklift, the operator must fasten the seatbelt, ensure the controls are in a neutral position, and apply the parking brake
- A lift truck left unattended must be immobilized and secured against accidental movement and forks, buckets or other attachments must be in the lowered position or firmly supported
- If an operator does not have a clear view, a signaler equipped with a high visibility vest who has been instructed in a code of signals for managing traffic in the workplace must be used (as outlined in SCEP's Hand Signal Guideline)
- Where a lift truck is required to enter or exit a vehicle to load or unload, that vehicle must be immobilized and secured against accidental movement
- A lift truck must not be used to support, raise or lower a worker
- Barriers, warning signs, designated walkways or other safeguards must be provided where pedestrians are exposed to the risk of collision
- Speed limiter must be active to reduce travelling at excessive speed
- Operator must utilize installed mirrors throughout the site (where possible) to help eliminate blind corners
- Do not load the forklift in a way that restricts the driver's viewing area
- Operators shall only handle loads within the capacity of the forklift/lift truck
- A safe distance must be maintained from the edge of ramps, platforms or elevated work surfaces

4.4 Traveling

- Follow all site traffic rules(speed limits, one ways, stop signs)
- If required to cross rail tracks, cross on an angle
- Reduce speed and sound horn when traveling across slippery surfaces
- If view is obstructed, travel with the load trailing as long as new hazards can be controlled
- Starting, stopping, turning should be done in a smooth manner, to minimize load shifting
- Follow pedestrian safeguards (listed below)

- Loads must be transported in a way where they will not tip, fall or collapse
- When traveling with a load, ensure its low and tilted back where possible where the load engaging means can be applied

4.5 Control of Load

- No part of a load must pass over any worker or pedestrian
- No load may exceed the maximum rated load and loads must be handled in accordance with the height and weight restrictions on the vehicle's load chart
- When a load is in the raised position, the controls must be attended by an operator
- Loads must be carried as close to the ground or floor as the situation permits
- Loads that may tip or fall and endanger a worker must be secured
- Loads must be handled, placed, stored in a way where they will not fall, tip, collapse or endanger the safety of a person

4.6 Pedestrians

Operators of the forklift are to safeguard pedestrians at all times, as operators understand the capabilities and limitations of the forklift they are operating. Pedestrian safeguards include:

- Yield right of way to pedestrians at all times
- Operators are required to shut off the forklift if a pedestrian approaches. This does not apply to workers who are actively working/assisting the forklift operator.
- Operators looking in the direction they are going to travel prior to movement to ensure path is clear
- Never drive up to a person standing in front of an object to create a potential for pinch/crush injury
- Reduce speed when nearing manddoors, entryways, and other common pedestrian travel paths
- Pedestrians should not be near elevated loads, or walk under any elevated portion of the truck/load.

4.7 Facility Design (to be considered when modifying existing or building new structures)

- Overhead and side clearances are adequate to permit the safe operation of the lift truck
- Adequate ventilation and storage of lift truck fuel (propane cylinders)
- Ensure doorways/entryways are wide enough to allow a forklift easy, unobstructed access
- Workplace surfaces, transition of surfaces, ground sloping etc.
- Impact of general workplace conditions (lighting, noise, dust, chemicals, etc.)

4.8 Lift Truck Selection Criteria

When procuring a lift truck, the following elements should be considered:

- Fire hazard designation
- Carrying capacity, reach capabilities, speed of travel
- Features of the lift truck selected to do a job are suitable for the types of loads to be handled
- Terrain over which loads will be carried
- Atmospheric conditions in the workplace and the design of the workplace
- Exhaust emissions

When procuring a lift truck the following elements are mandatory:

- a suitable screen, guard, grill or other structure to protect the operator from falling or intruding materials
- warning devices and lights that are appropriate for the work environment and
- a seat belt or other restraining device that is likely to contribute to the safety of the operator

4.9 Fuel/Refueling (Liquid Propane Gas Cylinders)

- The cylinder valve should be turned off while the engine is running allowing the fuel lines to be exhausted of LP gas. Ignition is then to be turned off
- The truck shall be vacated while the cylinder is being changed
- Quick disconnect coupling is to be removed prior to the empty cylinder being unclamped and removed
- Position the full cylinder on the locating pin and clamp in place then quick disconnect coupling are to be reconnected
- The cylinder should be inspected prior to being positioned on the forklift, as well as after it has been positioned and secured to the forklift for leakage

5.0 Training

Forklift training is provided by a third party training provider that meets the CSA Standard *B335-04 - Industrial Lift Truck Operator Training*. Training will be provided to any worker who may be required to operate a forklift on site. Recertification takes places every 3 years.

Training topics are in accordance with Appendix III- Training Objectives outlined by the MOL – Guideline for the Safe Operation and Maintenance of Powered Lift Trucks:

https://www.labour.gov.on.ca/english/hs/pubs/liftrucks/gl_lift_app3a.php

SCEP employees also will receive Propane-Safe Handling training via LMS every 3 years.

Contractors are responsible to ensure that their workers have up to date training if their workers are required to operate a forklift while onsite.

6.0 Record Keeping

A permanent record of the load-handling capacity examination is to be kept for at least one year or a longer period to ensure that at least the two most recent reports or records are kept.

Forklift Inspection records (daily/pre-use inspection) will be kept for a period of 1 year.
 Training records are kept for the duration the training is valid (3 years).

7.0 Review/Revision

A review of this document will occur following a regulatory change or at a minimum of every 5 years utilizing the “**EH&S SOP Review and Sign-Off Sheet**” \\file128\stclair\Operations\Employee Resource Centre\Procedures\SOP's & OGS's. The Document Control Administrator will notify the Environment Health and Safety Team Lead - who will steward the review and will engage the Operation Coordinator to support the review from an operations and maintenance perspective.

Other events which trigger review (MOC, Incident Findings) include processes which will initiate review.

8.0 Relevant Documents

- SCEP Employee Orientation
- SCEP- Contractor Orientation
- Forklift Inspection Form
- SCEP Hand Signal Guideline
- SCEP Propane Safe Handling

9.0 Reference Documentation

- MOL – Guideline for the Safe Operation and Maintenance of Powered Lift Trucks
- CSA Standard B335-04 - Industrial Lift Trucks
- Occupational Health & Safety Act - O.Reg 851

REVISIONS			
No.	Date (mm/dd/yyyy)	Author	Description
0	02/20/2018	J. Eldridge	Created – 8/30/2017