Southern Company Operations

Engineering and Construction Services

Environmental, Health, and Safety Standards

SH-S-2C-11

Forklift Operations

	Rev. 1**	
Date	11/15/2016	
Revised By	Bill Batts, manager-Construction Safety and Health	
Reviewed By Project Safety Leadership Team		
Approved By		
Project Planning and Services	Bill Boyd	
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1.0 PURPOSE AND SCOPE

1.1 Purpose

This standard provides the requirements for inspection, operation, and operator qualifications for forklifts on Engineering and Construction Services (E&CS) projects.

1.2 Scope

This standard applies to all workers assigned to an E&CS project and contractors whose contract document includes this standard by attachment, inclusion, or reference.

2.0 DEFINITIONS AND REFERENCES

2.1 Definitions

competent person

2.2 References

- Frequently Asked Questions (FAQ), SH-S-2C-11, Forklift Operations.
- 29 CFR 1926, Subpart CC, Cranes and Derricks in Construction
- 29 CFR 1910.178(1), Powered Industrial Trucks
- 29 CFR 1926.602(c), Lifting and Hauling Equipment
- E&CS procedures:
 - SH-2C-01, Qualifying Equipment Operators
 - SH-2C-02, Mobile Equipment Near Energized Electric Lines
 - <u>SH-2C-03, Cranes and Derricks</u>
- Forms:
 - <u>2C-01.1, Equipment Operator Authorization</u>
 - <u>2C-11.1, Forklift Inspection Record</u>

3.0 **RESPONSIBILITY**

3.1 Construction Site Manager

The E&CS construction site manager is responsible for implementing and ensuring compliance with this standard for construction activities that fall under his or her scope.

3.2 Startup Manager

The E&CS startup manager is responsible for implementing and ensuring compliance with this standard for startup activities that fall under his or her scope.

3.3 Contractors

Contractors working on E&CS projects are responsible for complying with the requirements established by this standard, including designating a competent person to manage the contractor's forklift program.

3.4 Qualified Inspector

A qualified inspector is responsible for inspecting a forklift prior to its initial use at the site or facility.

3.5 Forklift Operator

The forklift operator is responsible for complying with the requirements established by this standard, including the following:

- Inspecting the forklift at the beginning of each shift and completing a daily forklift inspection form.
- Observing applicable traffic regulations.

4.0 STANDARD

4.1 Requirements

Each contractor shall designate a competent person to manage its forklift program in accordance with all applicable regulatory requirements and the requirements of this standard.

When a forklift is configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load, it shall be considered a crane and shall comply with 29 CFR 1926, Subpart CC, Cranes and Derricks in Construction, as well as procedure SH-2C-03, Cranes and Derricks.

4.2 Inspection

A qualified inspector shall inspect a forklift prior to its initial use at the site or facility. All forklifts in use shall meet the applicable requirements of design, construction, stability, inspection, testing, maintenance, and operation as defined in ANSI Standard B56.1 2009 Safety Standard for Low Lift and High Lift Trucks. Forklift operators shall inspect the forklift at the beginning of each shift and complete a daily forklift inspection form equivalent to the one referenced in this standard. See form 2C-11.1, Forklift Inspection Record.

4.3 Operator Training and Licensing

- Operator training and licensing shall follow the requirements in SH-2C-01, Qualifying Equipment Operators.
- Training program content shall comply with 29 CFR 1910.178(a), Powered Industrial Trucks.
- Each operator's performance shall be evaluated at least every 3 years. Refresher training shall be conducted if the operator demonstrates unsafe operation.

4.4 Operation

The following requirements shall be adhered to:

- Operate forklifts according to manufacturer's instructions.
- Passengers are not permitted on forklifts.
- Do not modify or alter a forklift without written authorization from the manufacturer.
- When you must leave a forklift unattended, place the lift carriage in its lowest position, set the brake, turnoff the engine, and if on an incline, chock the wheels.
- Maintain minimum safe working distances from overhead live electric lines or cables as defined in SH-2C-02, Mobile Equipment Near Energized Electric Lines.
- Ensure forklifts that will be operated on roadways with automobile traffic are equipped with turn signals and brake lights. Observe applicable traffic regulations, including authorized plant speed limits.
- Slow down and sound the horn where vision is obstructed. If the load being carried obstructs the forward view, travel with the load trailing.
- Give pedestrians the right of way.
- During refueling, stop the engine. Have a fire extinguisher available.
- Slow down at intersections, corners, ramps, and other danger points.
- Use seat belts while operating forklifts equipped with a rollover protection structure (ROPS) or a fall object protection structure (FOPS).
- Place forks under the load as far as possible; carefully tilt the mast backward to stabilize the load.
- Do not stand on or pass under the elevated portion of any forklift, whether loaded or empty. Ensure personnel stand clear of loads in transit and avoid standing directly in front of loads being set.
- When ascending or descending grades in excess of 10 percent, drive loaded forklifts with the load upgrade.
- When traveling with a load, travel no faster than a person can walk.

- Properly secure all loads to prevent their accidental release including, but not limited to, binding loose objects, using pallets, using four-sided containers or skip pans, and securing the load to the mast.
- Do not rig material from the bottom of the forks or mast (no free rigging).
- For any lifting under the forks, use a properly designed lifting device approved for use by the manufacturer of the forklift or fork truck.

4.5 Forks

Effective January 1, 2017, all material handling equipment equipped with forks shall be equipped so that the operator can adjust the forks remotely from the cab, either hydraulically or electrically. Independently adjusting forks are preferred. Manually adjusted forks shall not be allowed.

4.6 Telescopic Boom Telehandlers

Telehandlers shall be designed so a person cannot enter the area between the front and rear tires.

4.7 Operator Sight Lines and Safety Aids

- Operator sight lines from the cab shall be provided for in one or a combination of the following manners:
 - Equipment design Equipment shall be configured in a manner that the operator has unobstructed sight lines when the boom or mast is in the carry position and when setting or picking up loads at or near the ground. The mounting point of the boom or mast to the structure is an exception.
 - Operational or safety aids:
 - A camera system with display mounted in the cab that provides coverage for the areas where the operator's sight lines may be impeded.
 - The display must be active when the unit is in operation. Multiple cameras may be used, if needed. When multiple cameras are displayed on a single display unit, the use of a split screen is preferred.
 - Unless otherwise designed by the manufacturer, the camera systems (camera, display, and associated hardware) are intended to be a safety device only and not an operational aid.
 - A mirror system that provides coverage of areas where the operator's visibility may be impeded when the boom or mast is in the carry position and when setting or picking up loads at or near the ground.

- A proximity warning system that provides an audible alarm when a predetermined distance from the unit has been encroached upon. The alarm activation distance will be determined by the operational specifications of the system but shall be no less than 5 ft.
- Spotters Spotters may be used to provide warning to the operator as follows:
 - Contractors shall provide a written plan for the use of spotters for review and approval by the E&CS construction site manager or his or her designee.
 - Operators and spotters shall have documented training on the plan.
 - Operational requirements for the use of spotters shall be noted on the task specific JSA.
 - When used, spotters shall position themselves in the operator's sight line at all times.
 - Spotters shall have no other function or duties or participate in activities that may distract them from their assigned duties while equipment is in motion.
 - If the operator loses sight of the spotter, the operator shall stop immediately.
 - Spotters will be required at all times when used to provide coverage for impeded operator sight lines, otherwise, spotters shall be used when operating in areas of high traffic (pedestrian or equipment), close quarters or proximity to vital plant equipment.
- Contractors shall certify, in writing, these requirements are met for operator sight lines and safety aids.

4.8 Attachments

If attachments are needed, such as fork extensions or an approved lifting attachment for below-the-forks lift, use manufacturer-supplied attachments unless an exception has been approved by the E&CS site manager.

The following attachment guidelines shall be adhered to:

- Only use attachments that are engineered and approved by the manufacturer.
- Do not perform modifications and additions that affect capacity and safe operation without the manufacturer's prior written approval. If modified, then change capacity, operation, and maintenance instruction plates, tags, or decals accordingly. This restriction applies to the practice of directly attaching rigging equipment such as slings and shackles onto the forks of forklifts for below-the-forks lifts.

- Use attachments only for their designed and intended purpose.
- Use manufacturer-supplied fork extensions whenever possible. Any exception shall be approved by the E&CS site manager.
- When using equipment such as a skid steer with a fork attachment, the requirements of 4.5, Forks, shall be followed.

4.9 Environmental Concerns

The contractor shall maintain hydraulic lines to prevent leakage. If a spill occurs, the contractor shall follow the regulations of the site or facility, or governing authority.

5.0 KEY CONTACT

For questions about the content and implementation of this standard, contact the manager–E&CS Construction Safety and Health.

6.0 QUALITY RECORDS

None.

7.0 ATTACHMENTS

Attachment A, Historical Summary of Changes.

Attachment A – Historical Summary of Changes

Rev. 0 09/13/2016 Approved by Bruce Long and Bill Boyd Reviewed by Project Safety Leadership Team Revised by Bill Batts

Remarks:

Issued. This standard supersedes E&CS procedure SH-2C-11, Forklift Operations.

Rev. 1 11/15/2016 Approved by Bruce Long and Bill Boyd Reviewed by Project Safety Leadership Team Revised by Bill Batts

Remarks:

Added SH-2C-01 and link to 2.2, References. Eliminated Forklift Operator Authorization (formerly form 2C-11.1; renumbered Forklift Inspection Record as form 2C-11.1. Moved third-level headings 4.1.1 through 4.1.4 to second-level headings to improve organization and flow. Rewrote 4.3 to reference SH-2C-01. Added 4.5, Forks; 4.6, Telescopic Boom Telehandlers; 4.7, Operator Sight Lines and Safety Aids. Added bullet on skid steers (4.8). Updated attachment A, Historical Summary of Changes.

11/21/2016

Added text and link for Frequently Asked Questions document.

Approved by Bill Batts