
HEALTH AND SAFETY PROCEDURE 331 – FORKLIFTS AND AERIAL LIFTS

1.0 PURPOSE

- 1.1 Establish the minimum requirements for operation of Forklifts and Aerial Lifts at the Westlake Plaquemine Facility.
- 1.2 The requirements of this procedure are in line with the Westlake Life Critical Rules, “Elevated Work” and “Material Handling Equipment”.

2.0 SCOPE

- 2.1 This procedure applies to all Westlake employees and contract employees working at the Plaquemine Facility.
- 2.2 This procedure establishes requirements for the procurement, operation, inspection and maintenance of Powered Industrial Trucks (PITs) (Forklifts) and Mobile Elevated Work Platforms (Manlifts) to ensure safe normal usage. This procedure specifically covers the following:
 - 2.2.1 Rough Terrain Forklifts
 - 2.2.2 Variable Reach Forklifts
 - 2.2.3 Warehouse Forklifts
 - 2.2.4 Aerial Lifts
 - 2.2.5 Scissor Lifts
- 2.3 This procedure does not cover Mobile Cranes and Derricks. Refer to HSP 330 Cranes, Derricks, and Rigging.

3.0 DEFINITIONS

- 3.1 **Certification-** A instructor lead training and field evaluation conducted by a competent trainer. A certification card is provided as proof of successful completion of training.
- 3.2 **Competent Trainer-** A person who has the knowledge, training, and experience to train Powered Industrial Truck, Scissor Lift and Aerial Lift operators and evaluate competency.
- 3.3 **Recertification** – a Competent Trainer utilizing a checklist or assessment form, shall observe the employee operating the equipment. Upon receiving a passing grade based on safe operation, he/she would then be “certified” to operate the equipment. This occurs every 3 years at a minimum.
- 3.4 **Mobile Equipment** – For the purpose of this policy, Mobile Equipment can be defined as:
 - 3.4.1 **Aerial Lift** – a piece of Mobile equipment used for safely lifting and transporting personnel, typically vertical, which includes mobile

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scaffolding, scissor lifts, “JLG” and extended boom personnel lifts.

3.4.2 **Pallet Jack** – a type of powered industrial truck designed to move pallets and loads just above the level of the floor. Pallet Jacks may be powered or mechanical.

3.4.3 **Powered Industrial Trucks (PITs) (Forklifts)**- A motorized lifting device normally equipped with long ridged steel bars/forks that can be raised and lowered to typically move palletized material. PITs include: forklifts, fork trucks, straight mast, Telehandler/Extendable Boom Forklifts, extended boom and all terrain fork trucks.

3.4.4 **Scissor Lift** – a piece of Mobile equipment that does not rotate around an axis but only lifts personnel via a mobile platform vertically.

3.4.5 **Straight Mast Forklift**- A forklift that consists of an upright vertical assembly on the front of the truck which is used to raise and lower loads.

3.4.6 **Telehandler/Extendable Boom Forklift**- A specialized multi-use all-terrain forklift with a telescopically extensible boom normally equipped with rigid steel forks and accompanying hazards beyond traditional forklifts. It has features of a rough terrain crane such as all-wheel drive & steer, a single telescopic boom that can extend forwards and upwards from the vehicle, and is often equipped with outriggers.

3.5 **Operator**- Any individual which is trained and holds current Certification to operate a forklift.

3.6 **Process Area** – Area employed in production in which an action, operation, or treatment embracing chemical, industrial, manufacturing, or processing factors / methods is carried out utilizing substances that may contain or could lead to a potential flammable and/or combustible hazard(s).

4.0 ROLES AND RESPONSIBILITIES

4.1 **Management** is responsible for:

4.1.1 Evaluating mobile equipment needs for the facility, preparing detailed purchase / rental specifications and providing sufficient equipment to support the needs of the organization.

4.1.2 Assuring the equipment is operated and maintained in a safe manner and in accordance with equipment manufacturer’s recommendations.

4.1.3 Assuring that equipment operators are properly trained and qualified to operate specific machines.

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- 4.1.4 Ensuring that no modifications or additions are made to equipment without the manufacturer's written approval.
- 4.1.5 Ensuring that all traffic lanes, roads and work surfaces are in a good and safe condition and all traffic signals / signs are standardized, in place and maintained.
- 4.1.6 Ensuring that all accident investigations, significant incidents, property damage reports, and general information regarding industrial trucks & equipment is communicated sitewide.
- 4.2 Safety Department** is responsible for:
 - 4.2.1 Scheduling and maintaining Certification trainings.
 - 4.2.2 Ensure procedure is in compliance with latest regulatory requirements.
 - 4.2.3 Periodically perform audits to assess the performance with compliance of this procedure and correct issues.
- 4.3 Supervisors of Equipment Operators** are responsible for:
 - 4.3.1 Understanding and enforcing the provisions of this procedure.
 - 4.3.2 Conferring with direct reports as to the hazards of specific jobs and the mobile / motorized equipment to be used.
 - 4.3.3 Assuring that only trained, authorized and physically fit personnel operate and maintain mobile / motorized equipment.
 - 4.3.4 Maintaining completed Inspection Checklists.
- 4.4 Equipment Operators** are responsible for:
 - 4.4.1 Complying with this procedure and operating equipment safely.
 - 4.4.2 Maintaining Certification and Recertification to operate equipment.
 - 4.4.3 Operating only equipment for which he / she has been trained.
 - 4.4.4 Remaining alert and not operating equipment if mentally or physically impaired. Consulting with the supervisor if taking either over-the-counter or prescription medication.
 - 4.4.5 Surveying the work areas for hazards and erecting barricades as necessary.
 - 4.4.6 Obeying all traffic rules including speed limits, signals and warning signs, including but not limited to classified areas.
 - 4.4.7 Reading and being familiar with the manual for the equipment being operated and operating the equipment as intended by the manufacturer.
 - 4.4.8 Never operate equipment that is unsafe and in need of repair.

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- 4.4.9 Notifying supervision of any significant incidents, property damage or near misses with regards to mobile / motorized equipment.
- 4.4.10 Performing required daily inspections per this procedure and tagging the equipment with “DANGER - DO NOT OPERATE” tag if equipment needs repair.

4.5 Purchasing / Procurement is responsible for:

- 4.5.1 Purchasing / renting / leasing equipment and parts per the specifications provided. Substitutions or changes from the specification are only allowed with the approval of the Facility Manager and/or Maintenance Manager.

5.0 PROCEDURE

5.1 General

- 5.1.1 At a minimum, Mobile Equipment must meet the 1910 and 1926 OSHA Standards, where applicable, for the design, maintenance, use and operations of the equipment.
- 5.1.2 Mobile Equipment operations must, at a minimum, follow HSP 203 Hot Work, HSP Safe Work Permit, and HSP 308 Operation of Vehicles and Machinery.
- 5.1.3 A survey must be conducted to assess the equipment types to be used and operated within the facility.
- 5.1.4 At a minimum, utilize only equipment that meets classified location requirements or completely follow HSP 203 Hot Work.
- 5.1.5 Mobile Equipment (IE: Forklifts, Telehandlers, All Terrain Forklifts, Warehouse Forklifts) operators must utilize a seatbelt / safety belt at all times.

5.2 Inspections

- 5.2.1 Equipment Operators shall perform a documented inspection for PITs, Scissor Lifts and Aerial Lifts prior to each shift. (See **Appendix A & B** for “Pre-Shift Inspection Checklist”.)
- 5.2.2 Utilize Appendix A of this procedure to document the forklift inspections performed. Appendix A may be maintained on the forklift for a duration of 1 week (7 days).
- 5.2.3 Completed inspection checklists are to be turned in to the Unit Maintenance and/or Operations Supervisor for record retention.
- 5.2.4 All Mobile Equipment found in an unsafe condition shall be immediately removed from service and shall be tagged “Do Not Operate”.

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- 5.2.5 Defects or unsafe conditions, when found, shall be immediately reported to the supervisor and department authorized to make repairs on the equipment.
- 5.2.6 All Mobile Equipment shall be maintained in a safe condition, free of oils, chemicals and other substances that may be harmful to personnel, pose a flammable hazard or that pose a threat to the environment.
- 5.2.7 Mobile Equipment shall be inspected for leaks / spills prior to be putting in service. Any leaks / spills shall be reported immediately, contained and remediated.
- 5.2.8 All Mobile Equipment must have the rated fire extinguisher on the equipment as recommended by the manufacturer. The extinguisher must be charged and maintained in good, operating condition.

5.3 Safe Operation of Mobile Equipment

5.3.1 Powered Industrial Trucks (PITs) (Forklifts)

- 5.3.1.1 Operators must be certified to utilize PITs.
- 5.3.1.2 Operators must conduct a documented “Pre-Shift Inspection” (Appendix A) and the equipment must be deemed safe prior to operating.
- 5.3.1.3 Forklift Operators shall utilize the seatbelt at all times and stay within the confines of the cab. Operators shall keep arms and legs from being placed between the uprights of the mast or outside the running lines of the truck.
- 5.3.1.4 When traveling into a process unit or other congested areas, a spotter shall be used to assist the Forklift Operator maneuver equipment and load safely.
- 5.3.1.5 At no time will operators conduct horseplay or allow passengers to ride anywhere on forklifts.
- 5.3.1.6 The backup alarm should sound at all times when the unit is in reverse. Always sound horn before rounding corners, entering or exiting doorways, and to warn pedestrians that may not see you of your approach.
- 5.3.1.7 Forklifts shall never be used to push or tow rail cars.
- 5.3.1.8 Operators shall never operate a forklift while approaching an individual standing in front of a fixed object, bench or structure.
- 5.3.1.9 Operators shall turn the ignition off when exiting.
- 5.3.1.10 No person shall be allowed to stand or pass under the

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elevated portion of any forklift, whether loaded or empty.

- 5.3.1.11 A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock or platforms.
- 5.3.1.12 Brakes shall be set and wheel blocks shall be in place to prevent movement of trucks, trailers or railroad cars while loading or unloading.
- 5.3.1.13 Never use a gasoline or diesel-powered forklifts inside buildings, trucks, trailers or railcars without proper ventilation. Carbon monoxide can accumulate which has the potential to result in serious injury or death.
- 5.3.1.14 forklifts shall never be used to lift or hoist personnel.
- 5.3.1.15 Operators shall not use cell phones, mobile phone or wear ear buds / head phones while operating equipment.
- 5.3.1.16 Operators shall not load forklifts in excess of their rated load or capacity. Loads should be secured to mast / forks while travelling.
- 5.3.1.17 Forklifts may not be left unattended while under load.
 - 5.3.1.17.1 Unattended shall mean:
 - 5.3.1.17.1.1 The forklift is out of sight of the operator, or the operator is more than 25 feet from the forklift.
- 5.3.1.18 Evaluate the need for AC / heaters for forklifts with enclosed cabs used outdoors.
- 5.3.1.19 All units operated indoors shall have a front and rear blue safety light, rear view mirrors and headlights mounted on the driver's overhead guard.
- 5.3.1.20 When parked, forks must be touching the ground to prevent a tripping hazard.
- 5.3.1.21 Follow manufacturer's instructions and apply the proper techniques to manually re-position the forks. Be aware of potential pinch points.
- 5.3.1.22 Slings (synthetic or wire rope) shall not be wrapped around the forks or the mast for hoisting purposes. Only fork attachments designed for hoisting purposes may be utilized if approved by manufacturer.

5.3.2 Telehandler (Extendable Boom Forklifts)

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- 5.3.2.1 Operate Telehandlers according to the manufacturer's instructions.
- 5.3.2.2 Operator must always wear the seatbelt and stay 100% within the confines of the operator's cab.
- 5.3.2.3 Before leaving the seat, the operator shall place the lift carriage in its lowest position, fully retract the boom, set the brake, turn off the engine, and if the Telehandler/Extendable Boom Forklift is on an incline, chock the wheels.
- 5.3.2.4 Do not use Telehandler/Extendable Boom Forklifts to elevate or lift personnel.
- 5.3.2.5 Maintain proper tire pressure at all times, as this is essential for the stability of the Telehandler/Extendable Boom Forklift and tipping over can occur due to under-inflated tires.
- 5.3.2.6 Care must be taken to ensure the existing ground conditions are acceptable for the loads being placed upon them by the Telehandler/Extendable Boom Forklift while in use.
- 5.3.2.7 Know the weight of the load and the boom angle and length at the location furthest from the Telehandler/Extendable Boom Forklift before you pick up the load.
- 5.3.2.8 Verify loads are stable or properly secured (banded, stretch wrapped, etc.) before transport or elevation.
- 5.3.2.9 It is recommended that loads in excess of three times the fork span width shall not be carried or lifted with a Telehandler/Extendable Boom Forklift.
- 5.3.2.10 Follow the manufacturer's recommendations for maximum allowable boom lengths.
- 5.3.2.11 Do not extend the boom unless the frame is level (0 degrees).
- 5.3.2.12 Do not raise the boom unless the frame is level (0 degrees).
- 5.3.2.13 Always check for power lines, pipe lines and overhead obstructions before raising the boom.

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- 5.3.2.14 Ensure no part of the Telehandler/Extendable Boom Forklift or the load could possibly come within 20 feet of an electrical source.
- 5.3.2.15 Do not lower the boom without first retracting it. IT IS POSSIBLE to boom down and exceed the load chart resulting in the Telehandler/Extendable Boom Forklift tipping over the front.
- 5.3.2.16 When travelling keep boom lowered and retracted. Caution – with some machines this creates extensive blind spots and visibility is limited to the driver's side of the boom only.
- 5.3.2.17 Observe all applicable traffic regulations.
- 5.3.2.18 Telehandler/Extendable Boom Forklifts routinely operated on roadways with automobile traffic must be equipped with turn signals, brake lights and headlights. Telehandler/Extendable Boom Forklifts operated on public roadways must meet the requirements of the local governing body.
- 5.3.2.19 Slings or other similar devices shall not be used to support loads directly from the forks.
- 5.3.2.20 Slings or other similar devices shall not be connected to the boom, boom tip (knuckle) or carriage.
- 5.3.2.21 Use a qualified signal person for all suspended loads and where operator visibility is limited.

5.3.3 Scissor Lifts & Aerial Lifts

- 5.3.3.1 The site must understand and follow the manufacturer requirements for limiting use in severe weather and high winds to prevent potential for tip over.
- 5.3.3.2 Operators must be certified to utilize Scissor Lifts and Aerial Lifts.
- 5.3.3.3 Operators must conduct a documented "Appendix B - Pre-Shift Inspection Checklist" and the equipment must be deemed safe prior to operating.
- 5.3.3.4 Operators must assess their hazards within the work environment including stabilization and positioning prior to using.
 - 5.3.3.4.1 Work surfaces must include inspections for drop offs, holes, slopes, bumps, obstructions and other

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hazards that would affect safe working conditions, tip overs or loss of control which may cause injury to Operators.

5.3.3.4.2 Operators must assess, identify and control potential crush hazards associated with lifting, operating or otherwise utilizing Scissor lifts and Aerial Lifts.

5.3.3.5 Operators shall not operate Scissor or Aerial Lifts beyond their rated capacity, including personnel, tools and equipment.

5.3.3.6 Operators shall not utilize Scissor or Aerial Lifts to lift or transport equipment beyond the rated capacity such as, but not limited to, piping, pumps, valves, etc.

5.3.3.7 Operators shall maintain 100% fall protection using manufactured anchor points. Operators must comply with HSP 319 Fall Protection.

5.3.3.8 If elevated work platforms are used as a point of entry or exit to another elevated working surface, such as the roof of a building, a working plan shall be developed to ensure 100% tie off between working surfaces, per HSP 319 Fall Protection.

6.0 TRAINING REQUIREMENTS

6.1 Employees must be trained and certified on Forklifts, Scissor Lifts and/or Aerial Lifts prior to operating such equipment.

6.1.1 Initial Certification

6.1.1.1 Initial forklift training and Certification will be conducted as part of the hire/onboarding process of applicable employees.

6.1.1.2 Initial Certification consists of formal instruction, demonstrations, practical exercises and an evaluation delivered by a Competent Trainer.

6.1.1.3 Certification cards will be provided to each passing attendee to maintain on their person while operating equipment within the facility.

6.1.2 Recertification

6.1.2.1 Recertification consists of a documented evaluation of hands-on operation of the equipment, and shall be performed, at a minimum, every 3 years following the

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initial Certification training.

6.1.2.2 Recertification training shall also be provided to the operator when:

6.1.2.2.1 The operator has been observed to operate the vehicle in an unsafe manner.

6.1.2.2.2 The operator has been involved in an accident or near miss incident.

6.1.2.2.3 The operator has received an evaluation that reveals the operator is not operating the truck safely.

6.1.2.2.4 The operator is assigned to drive a different type of truck or lift.

6.1.2.2.5 A condition in the workplace changes in a manner the could affect safe operation of the equipment.

7.0 PROGRAM REVIEW

7.1 A documented review of this procedure shall be conducted every three (3) years, at a minimum.

7.2 Documented self-audits shall be conducted to assure performance and adequacy of the sites' Mobile Equipment program to include a documented review of completed pre-shift inspections.

8.0 RECORDKEEPING

8.1 Results from self-audits performed shall be kept for a minimum of 1 year.

9.0 REFERENCES

9.1 29 CFR 1910.178 – Subpart N – Powered Industrial Trucks

9.2 29 CFR 1926.453 – Subpart L – Scaffolding – Aerial Lifts

9.3 29 CFR 1926 Subpart CC – Cranes & Derricks in Construction

9.4 Scaffolding eTool – Aerial Lifts

9.5 Scaffolding eTool – Scissor Lifts

10.0 APPENDICES

10.1 Appendix A – Forklift Operator's Weekly Checklist

10.2 Appendix B – Scissor & Aerial Lift Checklist

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Revision History

Rev	Changes	Approved	Date
0	Procedure Established.	H. Garner	03.12.24

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Appendix A

Pre-Shift Inspection Checklist – Forklifts

To be completed in full by Certified Forklift Operator each day before using the equipment.

This document, once completed, is to be forwarded to the Maintenance Department for recordkeeping and escalated to your Supervisor for any deficiencies.

Date: _____ Operator Name: _____ Unit/Area: _____

Lift Type: _____ Manufacturer: _____ Model: _____

Day of the Week		Mon		Tue		Wed		Thurs		Fri		Sat		Sun	
Date		/ /		/ /		/ /		/ /		/ /		/ /		/ /	
(Checks Before Starting Forklift)		S	U	S	U	S	U	S	U	S	U	S	U	S	U
1.	Seat & Seatbelt														
2.	Tire Conditions														
3.	Forks & Attachments														
4.	Hydraulic Levels & Connection														
5.	Fire Extinguisher														
6.	Obvious Damage or Leaks														
7.	Safety Guards / Covers														
8.	Mirrors & Bodywork														
9.	Data Plate / Capacity Legible														
10.	Attachments rated / approved by Manufacturer														
(Checks When Engine is Running)		S	U	S	U	S	U	S	U	S	U	S	U	S	U
11.	Hoist, Tilt, Reach, & Extension														
12.	Steering														
13.	Brakes & Parking														
14.	Horn, Lights, & Beacon/Alarms														
15.	Hydraulic Functions														
16.	Operating System & Controls														
17.	Gauges / Instruments														
18.	Other:														

Operator Name / Signature for each day



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Appendix B

Pre-Shift Inspection – Scissor & Aerial Lifts

To be completed in full by a Certified Aerial Scissor Lift operator each day before using the equipment. This document, once completed, is to be forwarded to the Maintenance Department for recordkeeping and escalated to your Supervisor for any deficiencies.

Date: _____ Unit/Area: _____ Lift Type: _____

Manufacturer: _____ Model: _____ Max. Height: _____

	Day of the Week	Mon		Tue		Wed		Thurs		Fri		Sat		Sun	
	Date	/ /		/ /		/ /		/ /		/ /		/ /		/ /	
	(Checks Before Starting Forklift)	S	U	S	U	S	U	S	U	S	U	S	U	S	U
1.	Tires														
2.	Fire Extinguisher														
3.	Working Platform / Cleanliness														
4.	Damage or Leaks														
5.	Safety Guards / Covers														
6.	Platform Controls Functionality														
7.	Controls Labelled / Legible														
8.	Foot Switch														
9.	Oil & Hydraulic Leaks														
10.	Operator Manual on Equipment														
11.	Back-Up / Other Alarm Functionality														
12.	Outriggers														
13.	Door Latch														
14.	Service / Parking Brake														
15.	Emergency Stop														
17.	Other														

Operator Name / Signature for each day

