Document Revision Change Table

Revision Number	Revision Description	Revised By	Revision Date
Rev. 07	Updated site procedure to include all requirements from N-ID-OSA 001	G. Dawson	11/07/2024
Rev. 06	Reviewed Procedure, no updates	G. Dawson	6/11/2019
Rev. 06	Updated procedure to require forks to be on the ground when forklift is parked/stationary	G. Dawson	3/9/2016
Rev. 05	Updated procedure per Safety and Health Advisory 221	G. Dawson	05/28/2015
Rev. 04	Updated procedure with medical requirements (4.3.6)	G. Dawson	11/12/2014
Rev. 03	*Considered as starting document for revision change table*		

1. PURPOSE

To provide a procedure for safe operation of powered industrial trucks such as fork trucks, and motorized hand trucks, used to carry, push, pull, lift, and stack or tier material.

2. DEFINITIONS

Powered Industrial Trucks (PITS) – Self-propelled mobile equipment such as fork trucks, platform lift trucks, and motorized hand trucks, used to carry, push, pull, lift, stack or tier material.

Backup Warning Device – A warning device that gives an audible alarm when put in reverse; or uses infrared light, ultrasonic waves, radar, or other effective devices to detect objects or persons at the rear of the equipment and sounds an audible alarm when a person or object is detected.

3. PROCEDURE

Corporate Procedure for Powered Industrial Trucks (N-ID-OSA 001)

The BASF Beaumont Site will follow and adhere to the Corporate Procedure for Powered Industrial Trucks.

3.2 Specifications

3.2.1 New Trucks

All new trucks shall meet the design and construction requirements of **Part II, ANSI B56.1.**

3.2.2 Labels, Nameplates and Markings

Approved trucks shall bear a label or identification indicating approval by a nationally recognized testing laboratory. The user shall see that all nameplates and markings are in place and are maintained in a legible condition.

3.2.3 *Use in Hazardous Locations*

*Where hazardous conditions or locations exist, the type of truck that may be used in a given area shall comply with **29 CFR 1910.178.*** Entrances to classified areas where industrial trucks are intended to be used shall be posted with durable markers.

3.2.4 *Overhead Guards*

High lift trucks shall be equipped with an overhead guard constructed in accordance with ANSI B56.1.

3.3 Power Supply

3.3.1 Filling Fuel Tanks

Do not fill fuel tanks while the engine is running. The storage, handling, and filling of liquid fuels or liquefied petroleum gas shall be in accordance with **NFPA 505**, **30**, and **38**.

3.3.2 Battery Charging and Changing

Battery charging and changing shall be in accordance with **NFPA 505**. On electric trucks, use only a battery having a service weight within the minimum/maximum range specified on the truck nameplate.

3.4 Inspections

Inspect each industrial truck at the beginning of each shift in which it will be used. Document the inspections.

3.5 Repair and Maintenance

3.5.1. Defective Trucks

Powered industrial trucks that are defective, in need of repair, or are unsafe shall reported and removed from service until restored to a safe operating condition. Authorized personnel shall make all repairs.

3.5.2. Replacement Parts

All replacement parts for industrial trucks shall be equivalent to those used in the original design. No modifications or additions shall be allowed unless the original equipment manufacturer authorizes modifications or additions. When the OEM grants such authorization, make any repairs or replacements in accordance with the manufacturer's criteria.

3.5.3. ***Standards*** *Maintenance of PITs shall comply with* ***29 CFR 1910.178****,* ***NFPA 505****, and* ***ANSI B56.1****.*

3.6 Safety Equipment

3.6.1 Fire Extinguisher

All PITs shall be equipped with an appropriate fire extinguisher.

3.6.2 Seat Belt

A seat belt and other operator protection device/restraint systems shall be provided if the manufacturer makes such available. The operator shall use the protective de- vice or restraint system when provided.

3.6.3 Lighting

Where general lighting is fewer than two (2) lumens per square foot, auxiliary directional lighting shall be provided on the truck.

3.6.4 Ventilation

Ventilation shall be provided in enclosed areas to ensure proper oxygen levels and that air contaminants from equipment exhaust are maintained at permissible levels.

3.6.5 Access

Keep fire aisles, access to stairways, and fire equipment clear.

3.6.6 Backup Warning Devices

Backup Warning Devices include alarms or equivalent audible / visual warning device e.g., projected (on floor) LED light beams, proximity sensing alarms, radar, and other equivalent technologies to warn personnel in the proximity that the truck is in motion.

The use of LED light beams is recommended, especially in areas where noise might mask an audible warning.

Sites shall ensure that manufacturer-installed backup warning devices on PITs are maintained and used. Use of PITs without OEM backup warning devices shall be evaluated for risk including frequent pedestrian traffic, vehicle traffic, blind spots, intersections, etc., to determine the need for backup warning alarms or equivalent audible/visual warning devices. PITs without backup warning devices should only be used when conditions/circumstances render the warning devices ineffective or create additional hazards.

3.7 General Truck Operation

3.7.1 Do not drive trucks up to anyone standing in front of a bench or other fixed objects.

3.7.2. Ensure that personnel stand clear of the rear swing area before turning.

3.7.3 No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.

3.7.4 Unauthorized personnel shall not be permitted to ride upon PITs. A safe place to ride, approved by the manufacturer, shall be provided where riding of trucks is authorized. Do not ride motorized hand trucks unless they are of the hand/rider design.

3.7.5 Arms and legs are prohibited from being placed between the uprights of the mast, between the mast and the truck, or outside the running lines of the truck.

3.7.6 A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, platform, or freight car.

3.7.7 Do not use trucks to open or close freight doors. Trucks shall not be

- Used for opening or closing freight doors, and
- Driven onto open sided flat bedded trailers or rail cars.

3.8 Unattended Trucks

3.8.1 General

A powered industrial truck is unattended when the operator is 25 feet or more from the vehicle that remains in their view or whenever the operator leaves the vehicle, and it is not in his/her view.

3.8.2 Requirements

When a powered industrial truck is left unattended, load-engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and brakes shall be set. Wheels shall be blocked if the truck is parked on an incline.

3.8.3 Dismounted Trucks

When the operator of an industrial truck is dismounted and within 25 feet of the truck still in his/her view, the load engaging means shall be fully lowered, controls neutralized, and brakes set to prevent movement.

3.9 Unloading/Loading Transportation Containers

Set brakes and wheel blocks or dock locking mechanisms in place to prevent movement of trucks, trailers, or railroad cars while loading or unloading, including while dock boards or bridge plates are in position. Fixed jacks are necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor. The flooring of trucks, trailers, and railroad cars shall be checked for brakes and weakness before powered industrial truck are driven onto them.

3.9.1. There shall be sufficient clearance under overhead installations, lights, pipes, sprinkler systems, wiring, and other overhead obstructions.

3.9.2. Use an overhead guard as protection against falling objects. One should note that an overhead guard is intended to offer protection from the impact of small pack- ages, boxes, or bagged material representative of the job application but not to withstand the impact of a falling capacity load

3.9.3. Handle only stable or safely arranged loads within the capacity of the equipment. Exercise caution when handling off-centered loads that you cannot center.

3.9.4. Completely engage the load with the load-engaging means during travel. Fork length should be at least two-thirds of the load length. Carefully tilt the load back- ward if a tilt is provided.

4.0 Use as a Personal Lift

4.0.1 Where a standard lift truck is used as a personnel lift, it shall be equipped with a work platform that is securely seated on the forks fastened to the vertical face and be provided with standard handrails, mid-rails, and toe boards.

4.0.2 The truck shall have a firm and level footing with travel controls in neutral and the park brake engaged.

- Barricade the area.

- The truck shall have an overhead guard, and the operator shall not leave the
  controls while using the truck as a personnel lift.
- The area shall be barricaded.
- The personnel shall be lifted and lowered smoothly and shall remain on the floor of the platform.
- Avoid overhead obstructions and electrical wires.

4.1. Additional Precautions

Whenever a truck is equipped with vertical only or vertical and horizontal controls capable of elevating with the lifting carriage or forks for lifting personnel, take the following additional precautions for the protection of personnel being elevated:

- Use a safety platform firmly secured to the lifting carriage and/or forks.
- Provide means whereby personnel on the platform can shut off power to the truck.
- Provide such protection from falling objects as operating conditions indicate as necessary.
- The combined weight of the platform, load, and personnel shall not exceed one-half of the capacity as indicated on the nameplate of the truck and manufacturer's recommendations.

4.2 Truck Operation While Traveling

4.2.1 Mark protrusions of loads outside normal widths.

4.2.2 Observe all traffic regulations as outlined in **29 CFR 1910.178**.

4.2.3 The driver shall be required to slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs for- ward view, the driver shall be required to travel with the load trailing.

4.2.4 Cross railroad tracks diagonally wherever possible. Parking closer than eight (8) feet from the center of the railroad tracks is prohibited.

4.2.5 The driver shall be required to look into the direction of and keep a clear view of the path of travel, observing for other traffic, personnel, and safe clearances.

4.2.6 When ascending or descending on grades, one must follow these procedures:

- Ascend or descend grades slowly.
- When ascending or descending grades in excess of 5%, drive loaded trucks with the load upgrade.

- On all grades, tilt back the load and load engaging means, if applicable, and raise only as far as necessary to clear the road surface.
- Travel in a straight path, avoiding turns wherever possible.

4.2.7 Travel with load-engaging means or load low and, where possible, tilted back. Elevate the load only during stacking.

4.2.8 Secure dock board or bride plates before driving over them. Drive over dock boards or bridge plates slowly and carefully. Never exceed their rated capacity.

4.2.9 Approach elevators slowly, and enter them squarely after the elevator car is properly leveled. Once on the elevator, neutralize controls, shut off the power, and set the brakes. Do not exceed the capacity of the elevator.

4.2.10 Motorized hand trucks must enter elevators or other confined areas with the load end forward.

4.2.11 *Anyone needed to speak to the operator is recommended to maintain a minimum distance of two (2) feet from the lift. The operator should shut off the truck and lower the forks to the ground when a pedestrian approaches to within two (2) feet.*

4.2.12 *Two-thirds of the height of a load being below the mast is recommended.*

4.3 Training

4.3.1 Medical Approval

Only authorized and certified operators who have been medically approved (See N- ID-OCH 008: *Mobile Equipment Operator Health Examination*.) shall be permitted to operate a PIT.

4.3.2 Safe Operation

- Each facility shall ensure that each PIT operator is competent to operate a PIT safely as demonstrated by the successful completion of the training and evaluation specified in this section.

- Before permitting an employee to operate a PIT (except for training purposes), the employer shall ensure that each operator has successfully completed the training required by this section.

4.3.3 Operation of Powered Industrial Trucks by Trainees

Trainees may operate a PIT only:

- Under direct supervision of persons who have the knowledge, training, and experience to train operators and evaluate their competence, and
- Where such operation does not endanger the trainee or other employees.

4.3.4 General Training Program Requirements

- Training shall consist of a combination of formal instruction, practical training, and evaluation of the operator's performance in the workplace.
- Persons who have the knowledge, training, and experience to train PIT opera- tors and evaluate their competence shall conduct all operator training and evaluation.

4.3.5 Training Program Content

Powered industrial truck operators shall receive initial training in the following topics, except in topics which facility personnel can demonstrate are not applicable to safe operation of the truck in the employer's workplace:

A. Truck-Related Topics

- operating instruction, warnings, and precautions for the types of trucks the operator will be authorized to operate
- truck controls and instrumentation – where they are located, what they do, and how they work
- engine or motor operation
- steering and maneuvering
- visibility (including restrictions because of loading)
- fork and attachment adaptation, operation, and use limitations
- vehicle capacity
- vehicle stability
- any vehicle inspection and maintenance that the operator will be required to perform
- operating limitations
- any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicles that the employee is being trained to operate

B. Workplace-Related Topics

- surface conditions where the vehicle will be operated

- composition of loads to be carried and load stability
- load manipulation, stacking, and unstacking
- pedestrian traffic in areas in which the vehicle will be operated
- narrow aisles and other restricted places in which the vehicle will be operated
- hazardous (classified) locations in which the vehicle will be operated
- ramps and other sloped surfaces that could affect the vehicle's stability
- closed environments and other areas in which sufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust
- other unique or potentially hazardous environmental conditions in the work- place that could affect safe operation

C. Other Requirements

Training on the OSHA Powered Industrial Truck standard must be included.

4.3.6 Refresher Training and Evaluation

Refresher training, including an evaluation of the effectiveness of that training, shall be conducted to ensure that the operator has the knowledge and skills needed to operate the powered industrial truck safely.

A. Refresher Training Triggers

Provide refresher training to the operator in relevant topics when:

- 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 has received an evaluation that reveals that he/she is not operating the truck safely.
- The operator is assigned to drive a different type of truck.
- A condition in the workplace changes in a manner that could affect safe operation of the truck.

B. Frequency of Evaluations

Conduct an evaluation of each PIT operator's performance at least once every three (3) years.

4.3.7 Avoidance of Duplicative Training

If an operator has previously received training in a topic specified in this section, and such training is appropriate to the truck and working conditions encountered, additional training in that topic is not required if the operator has been evaluated and found to be competent to safely drive the truck.

4.3.8 Certification

Facility personnel shall certify that each operator has been trained and evaluated as required by this section. The certification shall include each of the following:

- name of the operator
- date of the evaluation
- identity of the person(s) performing the training and/or evaluation

5.0 References

Superior Document Number	Superior Document Title
OSHA, 29 CFR 1910.178	*Powered Industrial Trucks*
MSHA, 30 CFR § 77.410	*Mobile Equipment, Automatic Warning Devices*
MSHA, 30 CFR § 56.14132	*Horns and Backup Alarms*
MSHA	*Horns, Backup Alarms, and Automatic Warning Devices Guidance*
ANSI B56.1	*Safety Standard for Powered Industrial Trucks*
N-ID-OCH 008	*Mobile Equipment Operator Health Examinations*
NFPA 505	*Fire Safety Standard for Powered Industrial Trucks*
NFPA 30	*Flammable and Combustible Liquids Code*
NFPA 58	*Liquefied Petroleum Gas Code*

5.1 Abbreviations

ANSI	**A**merican **N**ational **S**tandards **I**nstitute
CFR	**C**ode of **F**ederal **R**egulations
MSHA	**M**ine **S**afety and **H**ealth **A**dministration
NFPA	**N**ational **F**ire **P**rotection **A**ssociation
OEM	**o**riginal **e**quipment **m**anufacturer
OSHA	**O**ccupational **S**afety and **H**ealth **A**dministration
PITs	**p**owered **i**ndustrial **t**truck**s**