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<i>UPF Powered Industrial Trucks</i>

REVISION LOG

Revision	Description	Intent	Non Intent
5	This revision includes updated safety position titles, added references and removes 3.1 Operator Training requirements covered by the training department.		X
4	This revision is a complete re-write; therefore, no revision bars are shown. This revision further establishes requirements for the operation and maintenance of Powered Industrial Trucks (PIT).	X	
Previous revisions	On record		

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1.0 INTRODUCTION

1.1 Purpose

The purpose of this procedure is to ensure the necessary safety and health requirements for the operation and maintenance of Powered Industrial Trucks (PIT) on the UPF construction site and support areas.

1.2 Description

This procedure applies to all personnel performing work with PITs on the UPF construction site and support areas, including subcontractors.

2.0 RESPONSIBILITIES

2.1 Construction Manager (CM)

The CM has the overall responsibility of ensuring the implementation of this procedure, of ensuring that all project personnel actively participate, and of providing worker support, facilities, and other resources necessary to carry out this procedure effectively.

2.2 Environment, Safety, and Health (ES&H) Manager

The ES&H Manager has the overall authority regarding the interpretation of the regulations associated with the procedure and the interpretation of the procedure with respect to intent and application.

2.3 Environment, Safety, and Health (ES&H) Representative

The ES&H Representative has the responsibility of compliance oversight with the procedure through periodic field inspections and is responsible for supplying technical advice and interpretation of the environmental, safety, and health codes included in the procedure.

2.4 Equipment Manager

The Equipment Manager is responsible for inbound/outbound inspections, receipt of daily equipment inspections, maintenance and equipment records.

2.5 Training Manager

The Training Manager is responsible for the coordination of: (1) verification of training and training records and (2) arranging training/refresher training of PIT operators.

2.6 Discipline Superintendent (DS)

The DS is responsible for being thoroughly familiar with this procedure and the individual responsibilities regarding compliance and implementation of this procedure.

2.7 Supervisor

The Supervisor is responsible for ensuring that the applicable safety controls and processes are incorporated into planning and executing the work and that the workers are implementing and complying with this procedure within their areas of responsibility.

2.8 Spotter

The Spotter is responsible for performing his/her duties within the guidelines of UPF-CP-227, *UPF Safety Watches*.

2.9 Operator

The Operator is responsible for understanding and complying with the requirements of this procedure and the requirements of the PIT manufacturer.

3.0 POWERED INDUSTRIAL TRUCK (PIT) OPERATIONS

3.1 General Equipment

- Lift trucks, stackers, and other similar vehicles shall have rated capacities clearly posted on the equipment so as to be clearly visible to the Operator
- When auxiliary removable counterweights are provided by the manufacturer, corresponding alternate rated capacities shall also be clearly shown on the vehicle. These ratings shall not be exceeded
- No modifications or additions that affect the capacity or safe operation of the equipment shall be performed without the manufacturer's prior written approval
If such modifications or changes are made, the capacity, operation, maintenance instruction plates, tags, and decals shall be changed accordingly. In no case shall the original safety factor of the equipment be reduced
- Steering or spinner knobs shall not be attached to the steering wheel of equipment, or originally equipped with such.

3.2 Pre-Start Planning and Inspection

3.2.1 Pre-Start Planning

- Before a PIT is used, the Operator shall check the work area for possible hazards, such as, but not limited to, the following:
 - Drop-offs or holes, including those concealed by water, ice, mud, etc.
 - Slope(s)
 - Bumps and floor obstructions
 - Debris
 - Overhead obstructions and utilities (e.g., electrical power lines)
 - Hazardous locations and atmospheres
 - Inadequate surface and support to withstand all load forces imposed by the PIT in all operating configurations
 - Wind and weather conditions
 - Presence of unauthorized persons
 - Other possible unsafe conditions
- While clearing the path of travel, if hazards identified above are encountered, attempt to eliminate the hazard. If the hazard cannot be mitigated or removed from the travel path, obtain approval to navigate the PIT through the area from the DS and ES&H Representative, and document controls on the Safety Task Analysis and Risk Reduction Talk (STARRT) card before proceeding per UPF-CP-227, *Safety Watches* procedure.

3.2.2 Pre-Start Inspection

- The Operator completes a pre-start daily inspection of the PIT utilizing UCN-23249 *Powered Industrial Truck Daily Checklist*. The completed checklist will remain with the equipment and be submitted to the Project Equipment Superintendent (PES) on a monthly basis for review
- The Operator removes the PIT from service when found to be in need of repair, defective, or in any way unsafe. The Operator tags the PIT with a “DANGER – Defective Tool/Equipment – Do Not Use” tag (with the specific defects noted) and notifies his/her supervisor.

3.3 General PIT Operations

- Operate the PIT in accordance with the manufacturer’s recommendations
- When used, Spotters maintain visual or verbal contact with the Operator while the equipment is moving. If contact is lost between the Spotters and the Operator, the Operator stops the PIT immediately. Operations resume only after confirmation is made between the Spotters and the Operator
- The Operator wears a seatbelt when provided by the PIT manufacturer
- PITs are not to be driven up to anyone standing in front of a fixed object
- Personnel are not allowed to stand or pass under the elevated portion of any PIT, whether loaded or empty
- Unauthorized personnel shall not be permitted to ride on PITs
- Arms and legs are prohibited from being placed between the uprights of the mast or outside the running lines of the PIT
- The Operator selects flat parking surfaces (when possible) away from traffic, where the vehicle does not block doors, pedestrian routes, aisles, exits, etc.
- When a PIT is left unattended, load-engaging means are to be fully lowered, controls neutralized, power shut off, and brakes set
- The Operator will chock wheels and set the parking brake if the PIT is parked on an incline
- The Operator maintains a safe distance from the edge of ramps or platforms while on any elevated dock or platform
- The Operator is not to use the PIT for opening or closing doors
- Overhead guards are to be used as protection against falling objects. Overhead guards are intended to offer protection from the impact of small packages, boxes, bagged material, and any other items representative of the job application
- A load backrest extension can be used whenever necessary to minimize the possibility of the load (or part of it) falling rearward
- Free rigging is not allowed. For below-the-tines lifts, only approved lifting attachments will be utilized. The PIT capacity, operation and maintenance instruction plates, tags, and decals shall be modified accordingly
- Other attachments and accessories shall be approved prior to use, and the PIT capacity, operation and maintenance instruction plates, tags, and decals shall be modified accordingly
- Only approved PITs will be used in hazardous locations. Contact your ES&H Representative for assistance in determining appropriate PITs for specific locations, such as enclosed areas/inside buildings.

3.4 Loading/Unloading

- The Operator ensures the load is within the PIT's rated capacity
- The Operator ensures that the load is secure and that loose or uneven loads are tied to prevent shifting during lifting and traveling operations
- The Operator positions the load squarely on the forks and in contact with the carriage
- The Operator tilts the mast back to lift the load
- The brakes are set and wheel blocks implemented to prevent movement of trucks or trailers while loading or unloading
- Fixed jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor
- The floors of trucks and trailers are to be checked for breaks and weaknesses before the PIT is driven onto the transport
- The Operator proceeds straight into the trailers to load or unload
- The Operator ensures the proper safety weight or height-to-load ratio is maintained while loading or unloading stacked materials from racks.

3.5 Traveling

- The Operator observes traffic regulations, including authorized speed limits
- The Operator maintains a safe distance from vehicles ahead and sustains control of the PIT
- The Operators do not pass other vehicles/equipment traveling in the same direction at intersections, blind spots, or other dangerous locations
- The Operators slow down and sound the horn at cross aisles and other locations where vision is obstructed
- The Operators travel with the load trailing when the load obstructs forward view
- The Operators ascend and descend grades slowly, as follows:
 - When ascending or descending grades in excess of 10%, loaded PITs are to be driven with the load upgrade
 - Load and load-engaging means are to be tilted back, if applicable, and raised only as far as necessary to clear the road surface
- A PIT is operated at a speed that permits it to be brought to a stop in a safe manner in varied travel and weather conditions
- The Operator reduces the speed to a safe level while negotiating turns
- The Operator ensures that the forks are in the lowered position when traveling without a load. An injury or damage to property/equipment could result if the forks are in a raised position.

3.6 Follow Refueling and Battery Charging

3.6.1 Fuel as follows:

- Comply with the manufacturer's instructions for gasoline, diesel, and/or propane fueling
- Refuel only in assigned, ventilated areas containing no ignition sources
- Turn off the ignition prior to filling the PIT fuel tanks
- Replace the fuel cap before restarting the engine.

3.6.2 Charge batteries as follows:

- Comply with the manufacturer's instructions for charging batteries
- Execute battery charges in areas designated for that purpose
- Protect the charging apparatus from possible collision damage.

3.6.3 Spills

Report spillage of oil, fuel, or battery acid immediately to supervisor, UPF Environmental and Plant Shift Superintendent (PSS). Attempt to contain the spill with spill kits until clean-up can be performed by the appropriate personnel.

3.7 Tires

- Traction-treaded cushion tires: Replace the tire when the tread pattern is worn to the point of disappearing
- Plain-tread cushion tires: Replace the tire when the wear reaches the wear indicator. (This is often the top of the brand identification lettering on the side of the tire)
- Pneumatic tires: Replace the tire when the tread pattern disappears
- To operate safely, pneumatic tires must be kept properly inflated. Because pneumatic truck tires are rated for high loads, they usually require high pressure (typically 125 psi). High air pressure also makes tire mounting a dangerous job
- If the PIT tires travel through oil or chemicals, switch to oil-resistant tire compounds in order to ensure safe operating characteristics and to increase the tires' service life
- The best tire shall be selected for each application. The right tire will be determined by a combination of tread design, tire compounds, tire construction, and the particular application.

4.0 RECORDS

Records generated by this procedure shall be maintained in accordance with Y15-95-800, *UPF Document Management*. Record types for documents submitted to the UPF DMC are identified in ML-PS-801768-A001, *Uranium Processing Facility Project Master Document Type List*. Quality Type is listed as Quality-Lifetime (QA-L), Quality-Nonpermanent (QA-NP), or Non-Quality (Non-QA).

Records generated during the performance of this procedure include:

Record Number	Record Title	Record Holder	System/ Location	Quality Type
UCN-23249	<i>Powered Industrial Truck Daily Checklist</i>	UPF DMC	InfoWorks	QA-NP

5.0 REFERENCES

5.1 Source References

29 CFR 1926 Subpart O, *Motor Vehicles, Mechanized Equipment, and Marine Operations*

29 CFR 1926.441, *Batteries and Battery Charging*

Bechtel ES&H Core Process 207, *Powered Industrial Trucks*

5.2 Interfacing References

ML-PS-801768-A001, *Uranium Processing Facility Project Master Document Type List*

PL-SH-801768-A002, *Construction Waste Management Plan for UPF*

UPF-CP-200, *General Safe Work Practices*

UPF-CP-227, *UPF Safety Watches*

Y15-95-800, *UPF Document Management*

Y90-95-027, *UPF Training Program*

6.0 SUPPLEMENTAL INFORMATION

Appendix A, Acronyms and Definitions

APPENDIX A Acronyms and Definitions

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ACRONYMS:

CM	Construction Manager
DS	Discipline Superintendent
PES	Project Equipment Superintendent
PIT	Powered Industrial Truck
PSS	Plant Shift Superintendent
STARRT	Safety Task Analysis and Risk Reduction Talk
UPF	Uranium Processing Facility

DEFINITIONS:

Free Rigging	The direct attachment or placement of rigging equipment (e.g., slings, shackles, rings, etc.) onto the tines of a PIT for a below-the-tines lift. This type of lift does not use an approved lifting attachment.
Motorized Hand Truck	A powered truck (controlled by a walking or riding operator) equipped with wheeled forks designed to go under or between pallets.
Powered Industrial Truck (PIT)	A mobile, power-propelled truck used to carry, push, lift, stack, or tier materials; commonly known as forklifts, pallet trucks, rider trucks, or platform lift trucks. Solid rubber, low-profile tires are associated with slab PITs, and foam-filled, high-profile tires are associated with rough-terrain lifts.
Rough-Terrain Forklift Truck	A fork truck with a vertical mast and/or a pivoted boom (variable reach or fixed length) that is intended to be used on unimproved natural terrain and the disturbed terrain of construction sites.
Unattended	A PIT is unattended when the operator is 25 feet or more away from the vehicle, though still in view of it, or whenever the vehicle is out of the operator's line-of-sight.