

Control No:

Policy Name: Powered Industrial Truck and Pedestrian Safety Policy

Responsible Corporate Function/Business Segment: Global Environmental Health & Safety (EHS)

Effective: 10/01/2017

Coverage: Employees Worldwide

Policy Overview & Objective

This policy serves as a template to ensure the incorporation of a defense-in-depth, or multi-layered, approach to protecting pedestrians from accidents involving Powered Industrial Trucks (PITs) at all Greif sites. It is not intended to supplant site procedures or policies. However, sites should utilize this document to ensure local procedures and policies contain the basic elements, as well as best-practices, for personnel safety defined herein.

The Policy

All sites shall develop, implement, administer and maintain a program to prevent injuries associated with pedestrian interaction with PITs. Site programs should contain the “Policy Elements” outlined herein and any additional elements that are required by the regional legislation for pedestrian safety. In the case of conflicting requirements, sites should meet the more stringent requirement(s).

Application:

This policy applies to all Company operations utilizing PITs. Each Strategic Business Unit shall develop, implement, monitor and administer an effective program to ensure compliance with this policy.

Definitions:

- 1) **Operator**-An individual that has successfully completed both formal and practical training to operate a specific PIT.
- 2) **PIT**-Any mobile, power-propelled truck used to carry, push, pull, lift, stack, or tier materials. Powered industrial trucks are also commonly known as forklifts, pallet trucks, rider trucks, fork trucks, or lift trucks.
- 3) **Pedestrian**-Any person (employee, contractor, inspector, or visitor) who is traveling on foot. Once an operator departs a PIT, they become a pedestrian.
- 4) **Spotter**-An individual with the role of ensuring the route of a PIT is free and clear of obstacles and pedestrians.

Program Elements:

A Pedestrian Safety Plan serves to reduce the risk of serious injury that can occur when pedestrians are struck by PITs. All facilities must prepare a site-specific Pedestrian Safety Plan in general accordance with this policy. At a minimum the process includes:

Planning & Development:

- Conduct a Powered Industrial Truck Traffic Flow Risk Assessment
- Identify conditions where heightened awareness is required to keep pedestrians safe.

Implementation:

- Roadways and footpaths should be separate whenever possible and clearly demarcated.
- Implement protection for personnel who work near PIT routes.
- As possible, PIT routes should be far enough away from doors or gates that pedestrians use, or from pedestrian routes that lead on to them, so the safety of pedestrians is not threatened. When the physical limitations of an area prevent isolation from pedestrians, other safety protocols, as defined within this policy, must be implemented.
- Commit the management support and resources needed to implement Pedestrian Safety activities.
- Provide training to employees with regard to pedestrian safety.

Program Reviews:

- Annual Self-Assessment of site Pedestrian Safety Plan implementation and effectiveness.
- Ongoing site observations and reviews of PIT/Pedestrian interaction.
- Annual review of this policy.

These elements are discussed in the following sections. Additional guidance documents are provided in the appendices.

A. Planning and Development

1. PIT Traffic Flow Risk Assessment

A PIT Traffic Flow Risk Assessment should be completed for each site to identify pedestrian safety risks and plan safety actions (**Appendix A**). This assessment will help each site identify the greatest exposure for PIT and pedestrian interaction, and assess the effectiveness of the administrative procedures that are enacted.

B. Implementation

1. Elimination (Exclusion) of Pedestrians

The primary and most effective means of protecting pedestrians is to exclude them from any area in which PITs are in operation. This mandates clearly defined pedestrian exclusion areas, regardless of if the PIT activity is temporary or permanent. **Permanent Exclusion Zones** may include rerouting pedestrian or PIT travel through a given area so only one or the other is allowed. **Temporary Exclusion Zones** may include establishing, supervising and enforcing the exclusion of pedestrians from an area to which they are normally allowed access.

Permanent Exclusion Zones should be clearly identifiable by:

- Clearly marked (painted) zones
- Installation of physical barriers
- Postings at each point. Postings shall be used to explain the danger, the requirements for pedestrian entry, contact information, and any other information essential to personnel safety.
- Permanently installed flashing lights may be utilized to:
 - Notify pedestrians of the PIT activity, *or*
 - Notify PIT operators of pedestrians
- Light barriers may be utilized to designate a pedestrian exclusion areas;
- Painted or taped lines (yellow, yellow and black striped, red)
- Barricades (chain, rope, guardrails, robust fencing, etc.).

Temporary Exclusions Zones may be defined and controlled with attendants (spotters), and/or barricades (ribbon, rope, caution/danger tape, portable fencing or gates, chains, etc.). Spotters must always maintain an adequate distance between themselves, the truck, and the load. Spotters and operators will utilize previously established means of communication and signaling. Suitably positioned, portable flashing lights may be utilized to alert pedestrians to the activity and the temporary exclusion area.

2. Exceptions to Pedestrian Exclusion Zones

Exceptions allowing PIT/Pedestrian interaction shall be approved on the basis of necessity in regard to site safety, site maintenance, or other critical evolutions. Each site shall develop a procedure that governs pedestrian traffic in designated PIT operation areas. Local management shall decide and approve the course of action on a case-by-case basis. Procedures governing the safety of pedestrian traffic within these areas must clearly define situational controls. Both PIT operators and potential pedestrians shall be trained to the procedure(s). Options for controlling these activities include:

- Cease all PIT operations in the area (preferred)
PITs report to a designated area for accountability until the pedestrian traffic has been terminated.
- Isolation of the pedestrian traffic
The area in which pedestrians are to occupy is isolated from the PIT traffic through the use of demarcated paths and, when possible, physical barricades, including fencing, gates, and ribbon/rope/chain. A recommended pedestrian marking is provided in Appendix B.

3. Site/Facility Safety equipment

While the primary means of defense for pedestrians is the total elimination of foot traffic within areas of truck operation, this is not always possible. In such areas, a number of options exist to provide situational awareness to pedestrians of vehicle traffic. These include:

- Portable barriers
- Wall, overhead and column mounted mirrors
- Flashing lights
- Postings
- Stanchions and rope, chain, ribbon
- Automated warning equipment worn by both pedestrians and truck operators.

4. Training and Evaluation

a) **Powered Industrial Truck Operator Training and Performance Reviews**

Training of Powered Industrial Truck operators is essential. PIT operators at all Greif sites *shall* receive training consistent with the region's PIT policy, and demonstrate the skill sets necessary for operating their assigned type of vehicle.

b) **Pedestrian Training**

Site orientation training shall include training specific to pedestrians who may be required to enter areas in which PITs may operate. Pedestrians with work activities requiring them to access a PIT environment shall be instructed in regard to the minimum responsibilities for keeping themselves safe. These include:

- Approval is required prior to entering an Exclusion Area.
- Establishing eye contact-The operator and pedestrian(s) shall establish acknowledged eye contact, either with a wave or verbally.
- Relying upon sight. Sound is not a good indicator. Pedestrians must exercise caution at corners, intersections and blind spots. Utilize overhead, wall and column mirrors
- Use of management-approved, high visibility clothing.
- Use of clearly defined pedestrian lanes and crossings.
- Maintaining adequate distance between pedestrians and trucks to allow for the slow braking speed and possible load loss during rapid braking. Truck avoidance. Never approach a truck from the rear or a blind spot. Never stand beside an operating lift. Give a wide berth to a truck, as the rear end swings opposite of the front.
- Right-of-Way - Pedestrians have the right of way, meaning PIT operators are responsible for pedestrian safety, and that pedestrians should pay attention to PIT traffic and yield at all times. While the truck may stop, the load may keep moving and endanger the pedestrian.

C. Program Reviews and Assessments

1. **Traffic Flow Risk Assessment**

Pedestrian Safety Plans will be reviewed at least biennially to identify necessary changes. The Traffic Flow Risk Assessment included in **Appendix A** shall be used to document this evaluation and the plan updated accordingly.

2. **Ongoing Management/Safety Team Reviews**

a) Observations

A fundamental tenet of safe PIT operations is operator reviews. Aside from the periodic, documented review of individual performance, general observations (documented or not) may help drive operator behavior and safety performance. It is recommended that supervision and management, as well as local safety committees, periodically stop to observe PIT operations, provide feedback (both positive and negative) and thereby reinforce the facility standards. When necessary, intervention should be performed utilizing the protocols for pedestrian interactions with PIT operators described herein.

b) Reviews

Documented observations, close-calls (near-misses), and accident reports should be periodically discussed by both management and safety committees. Attention should be given to the:

- frequency of incidents
- severity of incidents
- location of incidents, and
- quality of inspections, inspection reports, and maintenance activity with a focus upon any gaps between the incident data and the inspection/maintenance reports.

Addendum

By adapting and completing the forms provided in the following appendices, this policy will serve as your facility's Pedestrian Safety Plan. The appendices include the following templates and/or guidance documents:

Appendix A: Powered Industrial Truck Traffic Flow Risk Assessment Completed/reviewed annually)

Appendix B: Pedestrian Marking Scheme

Appendix C: Pedestrian Safety Training Verification Form

**Appendix A
Powered Industrial Truck Traffic Flow Risk Assessment**



Instructions

*Use this guide to conduct a review of the facility's **departments or areas** to identify activities and/or conditions that should be managed for pedestrian safety. Add additional categories and items as necessary. All items checked "No" must have a Corrective Action. This survey should be conducted biennially or when changes in the facility or operation occur.*

Facility: _____ **Date:** _____

Dept./Area: _____ **Completed by:** _____

PIT Traffic Flow Risk Assessment		Current Practice(s)	Satisfactory?	Planned Action(s)
Work Area Conditions	Have safe traffic flow patterns been established?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Does the work area allow for segregating pedestrian traffic and vehicles?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Are there physical barriers separating truck and pedestrian traffic?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Has all nonessential traffic been rerouted out of the area?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Have all areas of obstructed vision, blind corners, etc. been eliminated?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Are safety rules and vehicle safe operating procedures reinforced with signs and notices in the work area?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Moving Equipment Review	Has equipment been outfitted with essential safety features, mirrors, seat belts, horns, etc.?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Are equipment deficiencies identified in pre-work inspections?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Are identified deficiencies promptly corrected or equipment tagged out of service for repair?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	



**Appendix A
Powered Industrial Truck Traffic Flow Risk Assessment**

Personnel, contractors, Others in Work Area	Have procedures been established to monitor and control the flow of personnel into the area?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Is there provision for driver to driver or driver to pedestrian communication?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Have employees been trained on the proper use of the equipment and safe work practices?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
	Other:		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Appendix B Recommended Pedestrian Marking Scheme

Below are examples of the recommended marking schemes to provide consistency across all locations. Locations with existing marked walkways may maintain those; the below marking scheme is recommended for all new/updated walkways.

Timeline to complete should be identified in your Pedestrian Safety Plan

- As plants modify/move equipment
- Renovations
- Repair/replacement of exiting marking systems
- Installation of barriers/hardening from Traffic Flow Risk Assessment should drive changes in marking scheme

Pedestrian Safe Areas

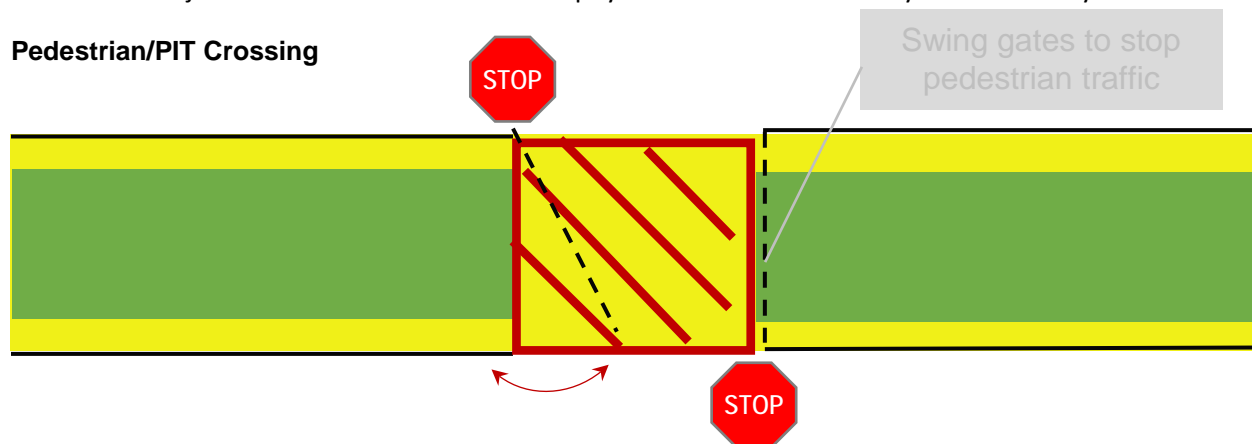


Zone marking for pedestrian safe walking zones (42" width)

- 4" yellow line
- 36" green
- 4" yellow line

Physical barriers, bollards must be installed on side of pedestrian safe zone that is adjacent to a PIT travel aisle. Adjust as needed to accommodate physical limitations that may exist at facility.

Pedestrian/PIT Crossing



- PIT crossing zone will be marked yellow, with red cross-hatch.
- Stop sign will be posted at physical barrier for PIT and pedestrian.
- No product storage allowed within 36" of PIT crossing.
- Storage adjacent to cross walk must be low enough to allow line of sight to PIT driver and pedestrians in pedestrian safe zone.

