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POWERED INDUSTRIAL TRUCK OPERATOR TRAINING

By SeaBright Insurance Loss Control

Since 1971, businesses who used any type of powered industrial truck were challenged to devise a training program to ensure their employees were adequately skilled in the safe operation of the equipment. The Occupational Safety and Health Administration (OSHA) Powered Industrial Truck regulation simply stated that *only trained and authorized operators shall be permitted to operate a powered industrial truck*. However, OSHA gave no specifics as to how to do that. On December 1, 1998, OSHA changed the standard and took a stronger stand. The standard now stipulates what is required in the way of training operators and qualifying those operators on powered industrial trucks. Minimums now exist as to what must be included in an operator's initial training and refresher training, as well as expectations regarding operator evaluations and certification. The effective date of this revised standard was March 1, 1999.

What is a powered industrial truck? By definition, it is a mobile, power-driven vehicle used to carry, push, pull, lift, stack, or tier material. This group includes the vast majority of material handling equipment in industry. Specific types of equipment include: high lift trucks; counterbalanced trucks; cantilever trucks; rider trucks; forklift trucks; high lift platform trucks; low lift trucks; low lift platform trucks; motorized hand trucks; pallet trucks; narrow aisle rider trucks; straddle trucks; reach rider trucks; single side loader rider trucks; high lift order picker rider trucks; motorized hand/rider trucks; or counterbalanced front/side loader lift trucks. In this Update, the term forklift will be used synonymously with powered industrial truck.

The new standard's goal is to ensure all forklift operators receive the necessary instruction and training to work safely and without injury. Employers still have the responsibility to ensure employees have the knowledge and specialized skills to do their jobs correctly and safely.

THE OBJECTIVE: REDUCING THE RISK

There are about 100 forklift fatalities in the United States every year. Data also indicates that thousands of additional injuries each year are forklift related. The National Institute for Occupational Safety and Health (NIOSH) sponsored research studying two different types of power industrial truck operator training. Their research results indicated a well-planned training program could result in a 61% improvement in performance scores. The study concluded that operators made fewer errors upon completing the training. Fewer operator errors can result in increased production, less damaged product, as well as fewer accidents, injuries and fatalities.

The following table lists the types and frequency of fatal events in 2006.

Forklift Fatalities by Type of Incident 2006		
Event or Exposure	Number	Percent
Struck by object, caught in or compressed by equipment or objects	24	28
Contact with objects and equipment:	20	24
Overturned	18	21
Collisions	7	8
Other	16	19

Source: "U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2006"

WHO IS COVERED UNDER THIS STANDARD?

All operators working in general industry, construction, and the maritime industry must now comply with the standard. These standards include 29CFR1910 for general industry, 1926 for construction, 1915 for shipyards, 1917 for marine terminals, and 1918 for longshoring. The powered industrial truck operator-training standard is 29CFR1910.178. All other industry specific standards mentioned above have been changed to reference this standard.

29CFR1910.178 specifically excludes personnel who operate vehicles used for earth moving, over-the-road hauling, or agricultural operations.

OPERATOR SELECTION

The proper selection of a powered industrial truck operator starts with whether or not the person is capable of performing the tasks and duties of the position. Detailed job descriptions, and job hazard analyses will help to identify the minimum requirements of an operator at your facility. When evaluating potential candidates, the following important factors should be considered:

- **Vision** - The operator must have good vision in order to operate a vehicle safely. If the potential operator has visual restrictions or requirements for driving an automobile, they should be applied to operation of any powered industrial truck.
- **Hearing** - The ability to hear well is important not only for the operator, but also for the safety of others near the forklift. The ability to identify various sounds at their location can be critical when handling material in tight or congested areas. A good percentage of forklift accidents are the result of being struck by forklifts. Could it be that the operator and/or the worker on the ground did not hear each other?
- **Environmental Conditions** - Some forklift operators may be required to work in extreme environmental conditions, such as extreme heat or cold. Extreme conditions can reduce reaction times, effect the operator's concentration, or change the equipment's level of control or maneuverability.
- **Physical limitations** - If the candidate has physical limitations, they should be closely evaluated against the "essential functions" of your company's powered industrial truck operator's written job description. If the "essential functions" can be completed, the company may have a duty to accommodate the operator. The Americans with Disabilities Act (ADA) requirements may need to be reviewed if you have such a candidate.

TRAINING REQUIREMENTS

Operators of powered industrial trucks must be trained and evaluated *before being assigned and allowed to operate a powered industrial truck*.

Forklift operators who have received recent training on the required topics which meet the standard, need not undergo training on the same topics. If these operators were evaluated and deemed competent to operate the forklift safely using the same type of equipment and under the same working conditions, duplicate training can be avoided.

Refresher training and evaluation must also be conducted for each operator. An evaluation of each operator's performance must be done at least every three years. More frequent training is called for if: the operator has been observed operating the forklift in an unsafe manner; they have been involved in an accident or near-miss incident; the operator receives an evaluation revealing that the equipment is not being operated safely; the operator is re-assigned to a different type of powered industrial truck, or; any condition in the workplace changes which could affect safe operation of the truck. If any of these occur then refresher training and an evaluation must be done.

WHO CAN CONDUCT THE TRAINING?

Do you have someone on staff that has the knowledge, training, and experience to instruct operators and evaluate their competence? If so, OSHA allows that person to conduct the training for your organization. The determination whether the trainer is qualified is made by the *employer*.

Any potential company trainers should first be thoroughly evaluated themselves. Prior to designating a trainer, ask these basic questions:

- Is my trainer familiar with my business and equipment? Remember, the training must be applicable to what is actually happening in your business.
- What training methods will be used? Will there be audio/visual support, lecture, and handouts?
- Are there any barriers that my trainer must overcome? Barriers may include language, scheduling, equipment availability, and interpersonal communication skills.
- Does the trainer have the requisite knowledge, training and experience that are needed to train powered industrial truck operators, *and* critically judge their competency.

OSHA purposely left out any accreditation requirements for powered industrial trucks trainers. They instead provided minimum training requirements within the new standard. The standard is believed to be sufficiently detailed, so when followed by employers or professional trainers adequate training will result. A secondary reason for not dictating accreditation was that OSHA felt that for them to certify the thousands and thousands of company and professional trainers, the accreditation process would overwhelm their resources. In addition, they understood that requiring small businesses to certify powered industrial truck trainers would be unnecessarily burdensome.

TRAINING PROGRAM CONTENTS

Operator training must have three sections. The training has been broken out to help ensure a thorough training program. The following are the specific topics that must be included in the training program:

- **Formal instruction** such as lecture, discussion, interactive computer learning, videotape or written manual. This part of the training is considered the "classroom" session. Gone are the days of gathering the employees around the VCR, popping in a videotape, and considering that training.
- **Practical training** must also be conducted. Practical training includes demonstrations that are performed by the trainer and practical exercises that are performed by the trainee. This "hands-on" approach to training allows the trainee the opportunity to demonstrate his or her skills in a controlled environment.
- **An evaluation of the operator's performance** in the workplace must be done by the trainer upon completion of the formal and practical sessions. An evaluation should consist of a written examination and field proficiency test.

Within each of the training sections, equipment and location specific training must be included. These topics are:

Specific Powered Industrial Truck Related Topics:

- Operating instructions, warnings, and precautions for the types of trucks the operator will be authorized to operate.
- Differences between the truck and the automobile.
- 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 due to 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.
- Refueling and/or charging and recharging of batteries.
- Operating limitations.
- Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate.

Workplace-Related Topics:

- Surface conditions where the vehicle will be operated.
- Composition and load stability.
- Load manipulation, stacking, and unstacking.
- Pedestrian traffic in areas where the vehicle will be operated.
- Narrow aisles and other restricted places where the vehicle will be operated.
- Hazardous (classified) locations where the vehicle will be operated.
- Ramps and other sloped surfaces that could affect the vehicle's stability.
- Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.
- Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.

CERTIFYING THE OPERATOR

If you and your trainer are satisfied with the operator's performance, then they will be considered "certified" by your company. Certification demonstrates that the operator has been trained and evaluated in the operation of a specific powered industrial truck.

As with all training, powered industrial truck operator training should be well documented. Be sure the training information is kept in the company files, and the information includes: the name of the operator; date of the training; date of the evaluation; the status of the person (certified/not-certified); the course outline; a copy of the examinations or tests given; the identity of the person(s) performing the training or evaluation. In addition, if an outside vendor is used, include the name, address and organization of the outside trainer.

You may also want to provide the certified operator with a wallet card indicating certification and date retraining must take place. This allows on-the-spot verification of the operator's qualifications.

Be aware that the certification of the operator must be justified based on the requirements set forth in the standard. Careful documentation of each step of the training process will validate your decision on whether or not the employee does have the skills and knowledge necessary to be a certified powered industrial truck operator.

History has indicated a need to improve upon a driver's ability to operate a powered industrial truck safely. The benefits of proper and safe operation far outweigh the time and energies spent training operators. Fewer accidents, fewer near-miss incidents, lower operating costs and increased production are all keys to a successful business.