



MNOSHA Instruction **STD 3-13.4**

September 27, 2017

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SUBJECT: Compliance Assistance for the Powered Industrial Truck Operator Training Standards; 1910.178(l) and 1926.602(d)

Purpose:

To provide guidelines to ensure uniform enforcement of the revised powered industrial truck operator training standards for construction and general industry.

Scope:

This instruction applies MNOSHA-wide.

References:

1. 29 CFR 1910.178(l) and 1926.602(d), "Powered Industrial Truck – Operator Training."
2. MNOSHA Instruction STD 3-13.3B, "Seatbelts on Earth Moving and Material Handling Equipment," dated April 23rd 2012.
3. Federal OSHA Instruction CPL 2-1.28, "Compliance Assistance for the Powered Industrial Truck Operator Training Standards," dated August 11, 2000 and CPL 2-1.28A dated November 30, 2000.
4. ANSI B56.1-2016, "Safety Standard for Low Lift and High Lift Trucks."
5. ANSI B56.5-2016 "Safety Standard for Industrial Vehicles and Automated Functions of Manned Industrial Vehicles".
6. ANSI B56.6-2011 "Safety Standard for Rough Terrain Forklift Trucks"

7. ANSI B56.7-2016 “Safety Standard for Industrial Crane Trucks”
8. ANSI B56.9-2012 “Safety Standard for Operator Controlled Industrial Tow Tractors”

Application:

These standards apply to all industries except agricultural operations.

Cancellation:

This instruction replaces MNOSHA Instruction STD 3-13.4, dated June 20, 2012.

Background:

Since the adoption of the OSHA Standard, ANSI B56.1, the basis for 1910.178, has been revised several times. In 1998, OSHA revised its training requirements to incorporate performance requirements that provide flexibility to employers in developing methods of training for powered industrial truck operators.

The standards require that the employer shall ensure that each powered industrial truck operator is competent to operate a powered industrial truck safely and the ability to acquire, retain, and use the knowledge and skills necessary to safely operate the truck under the specific conditions on the worksite(s). These standards also require a periodic evaluation of each operator’s performance; and refresher training based primarily on unsafe operation, an accident or near miss, deficiencies found in a periodic evaluation of the operator, the introduction of different equipment, or attachment, or a change in a workplace condition that affects safe operation. The training requirements are intended to enhance the safe operation of powered industrial trucks in the workplace. Compliance with these training requirements will significantly decrease the number of injuries and fatalities resulting from unsafe powered industrial truck operations. The training requirements are an important control designed to ensure the safe operation of powered industrial trucks in the workplace.

The training requirement found in 1910.178(l) for operators of industrial trucks and in 1926.602(d) for operators of powered industrial trucks in construction specifies that the employer must develop a complete training program. 1910.178(l)(2)(i)(A) requires that operators of powered industrial trucks be trained under direct supervision in the operation of such vehicles before they are allowed to operate them independently. Per 1910.178(l)(2) the training must consist of a combination of the following: lecture, discussion, interactive computer learning, video tape, and written material. In addition, the employer must provide practical training that demonstrates the ability to properly operate a powered industrial truck. The training program must provide knowledge that equips the trainee to recognize hazards of operating the vehicle in the workplace, and the requirements of the OSHA standard for powered industrial trucks. Since the working conditions in the construction industry vary based on the unique nature of each worksite, these evaluations must, as a general

matter, occur on a more frequent basis in the construction industry. Operators who have completed training must then be evaluated while they operate the vehicle in the workplace. Operators must also be periodically evaluated (at least once every three years) to ensure that their skills remain at a high level and must receive refresher training whenever there is a demonstrated need. To maximize the effectiveness of the training, OSHA will not require training that is duplicative of other training the employee has previously received if the operator has been evaluated and found competent to operate the truck safely. Finally, the training provisions require that the employer certify that the training and evaluations have been conducted.

ACTION:

- A. Determine the type of powered industrial truck used. The Powered industrial truck training standard applies to:
 - High and Low lift trucks** as defined in ANSI B56.1
 - Guided Industrial Vehicles** as defined in ANSI B56.5
 - Rough Terrain Forklift Trucks** as defined in ANSI B56.6
 - Industrial Crane Trucks** as defined in ANSI B56.7
 - Operator Controlled Industrial Tow Tractors** as defined in ANSI B56.9

- B. Ensure the employer has evaluated employees before providing training to ensure they have visual, auditory, physical, and mental ability to operate the equipment.

- C. Evaluate instructional techniques to ensure employer has:
 1. Provided instructional material produced by the manufacturer (Operator's manual on site)
 2. Emphasized safety throughout program
 3. Provided general safety rules and why
 4. Provided an introduction to the equipment and work environment that demonstrates:
 - a. How controls work properly and improperly
 - b. Work surface conditions
 - c. Grade considerations
 - d. Other environmental conditions
 - e. Covered applicable topics in 1910.178
 5. Operator competency testing

- D. Ensure that all training is conducted by a person who has the knowledge, training, and experience to train operators and evaluate their competence.

- E. When possible, observe powered industrial truck operations to determine if trucks are being operated safely, and conduct employer/employee interviews to verify training program implementation.

- F. Check if an evaluation of each powered industrial truck operator's performance once every three years to ensure that the employee has retained and continues to use the knowledge and skills necessary for safe operation of the vehicle. The required evaluation does not have to be a formal, structured exercise. For example, an evaluation could be as simple as having a person with the requisite skills, knowledge, and experience observe the operator performing several typical operations to ensure that the powered industrial truck is being operated safely and asking the operator a few questions related to the safe operation of the vehicle.
- G. Check if construction employers evaluate each powered industrial truck operator's performance each time the operator is assigned to a site. Check that these employers conduct refresher training when an assignment presents hazards that are not the same or substantially the same as those on the operator's previous work assignments.
- H. Determine whether the employer has certified that all required training and evaluations have been conducted. In accordance with MNOSHA Instruction CPL 2.111A, "Paperwork and Written Program Violations," the following will apply when citing 1910.178(l)(6): When the employer has properly trained and evaluated powered industrial truck operators, but has failed to certify that the action was taken, no citation will be issued. The requirement for certification and the reasons for the requirement will be explained to the employer and the action noted in the case file. The employer will also be informed of possible penalties for subsequent violations.
- I. Violations of powered industrial truck operator training requirements in Construction shall be cited under 1910.178(l). In the case of construction where 1926 and 1910.178 are not addressed, MNOSHA will utilize 1926.20 and 1926.21.

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For the MNOSHA Management Team

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Attachments: Appendix A - 1910.178(l) - Questions and Answers

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APPENDIX A 1910.178(I) – QUESTIONS & ANSWERS

Paragraph (I)(1)(i) requires that each powered industrial truck operator have the competency to operate a powered industrial truck safely.

1. Can an employee be allowed to operate a powered industrial truck if the employee can't read?

Yes, during training and evaluation, a determination must be made whether the employee has the knowledge and skills to perform the job. For example, if the employee cannot read and comprehend the operator's manuals, load charts or instruction warnings for the types of trucks the employee will operate, then this information would have to be taught by means other than having the employee try to read the truck manuals. Information obtained during the initial employee evaluation can be used to, among other things, determine how best to train the employees.

2. Can an employee with poor vision in one eye or a hearing impairment be allowed to operate a powered industrial truck?

The employer has the responsibility under this training standard to ensure that each operator is capable of performing the duties that are required of the job.

The Americans with Disabilities Act (ADA) addresses the issue of whether employers may impose physical qualifications upon employees or applicants for employment. The ADA permits employers to adopt medical qualification requirements necessary to ensure that an individual does not pose a *"direct threat to the health or safety of other individuals in the workplace,"* provided all reasonable efforts are made to accommodate otherwise qualified individuals. The employer should consult with appropriate medical personnel to assist in determining operator physical qualifications.

Paragraph (I)(2)(i) allows trainees to operate a powered industrial truck.

3. When can a powered industrial truck operator trainee operate a powered industrial truck in the workplace?

An operator trainee can operate a truck only under the direct supervision of a person who has 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. What industries are covered by these training requirements?

The powered industrial truck operator training requirements apply to all industries in which the trucks are being used, except agricultural operations.

Paragraph (l)(2)(ii) requires that the training consist of a combination of formal instruction, practical (demonstrations performed) training, and evaluation of the operator's performance in the workplace.

5. Can my powered industrial truck operator training consist only of formal instruction such as watching a videotape?

No, a combination of formal instruction and practical training is required by the standard. Although formal training is invaluable for teaching the principles of vehicle operation, it is the hands-on training and evaluation of vehicle operation that finally proves the adequacy of the training and the ability of the employee to use that training successfully.

6. Can tool box meetings or informal discussions be considered formal instruction?

Yes, tool box meetings or informal discussions can be considered formal instruction when the principles of safe powered industrial truck operation are covered by the designated trainer.

Paragraph (l)(2)(iii) requires that all operator training and evaluations be conducted by a person who has the knowledge, training, and experience to train powered industrial truck operators and evaluate their competence.

7. How could an employer determine the qualifications of trainers?

An example of a qualified trainer would be a person who, by possession of a recognized degree, certificate, or professional standing, or who by knowledge, training and experience, has demonstrated the ability to train and evaluate powered industrial truck operators.

8. Can the person providing the training come from outside the company?

Yes, the employer may authorize a trainer from outside the company to conduct the training, such as a training consultant or a manufacturer's representative. Nonetheless, the employer must have evidence that the operators have been trained in the required program topics.

Some employers believe they must use an outside training consultant. However, an employer may utilize an employee who has the knowledge, training, and experience to provide training and evaluations in accordance with 1910.178(l)

9. When a powered industrial truck operator is assigned to an employer by a union hiring hall and works for more than one employer over a period of time, which employer is responsible for ensuring that the operator has been trained and evaluated under the standard?

In the construction industry training program will consist of the conditions on the worksite in accordance with 1910.178(l)(3).

Each employer for whom an employee works is responsible for ensuring that the employee has been trained in accordance with the standard. In hiring hall situations, the training under 1910.178(l)(3)(i), **Truck-related topics**, may be conducted by a labor union, joint labor-management training organization, an association of employers, or another third-party trainer as long as the person(s) conducting the training have the knowledge, training, and experience to properly conduct the training. An individual employer that relies on such training would not be relieved of the provisions of 1910.178(l)(3)(ii), **Workplace-related topics**, which provides for training on site-specific matters. But the employer need not duplicate training if the outside training covered all of the employer's site-specific conditions. [For specific guidance for Longshoring and Marine Terminal industries, see Federal OSHA Instruction CPL 2-1.28, dated August 11, 2000.]

10. Can the evaluation required by (l)(2)(ii) be based entirely on observation of the operator in a training facility outside the workplace?

No. The evaluation must take place in the workplace so that the evaluator can observe the operator under actual workplace conditions. [For specific guidance for Longshoring and Marine Terminal industries, see Federal OSHA Instruction CPL 2-1.28, dated August 11, 2000.]

In paragraph (l)(3), OSHA has provided a list of subjects to ensure that the training contains the appropriate information for the operator.

11. Are employers required to train powered industrial truck operator trainees in all of the topics listed in paragraph (l)(3)?

It is the responsibility of the employer to select the particular items that are pertinent to the type of trucks that the employee will be allowed to operate, and the work environment in which the vehicle will be operated. The employer may leave out elements if the employer can demonstrate that they are not relevant to safe operation in the employer's workplace.

12. Do these training requirements apply only to high lift and low lift trucks?

No, these requirements apply to all types of powered industrial trucks, including specialized powered industrial trucks covered by 1910.178(a). The training standard applies to vehicles covered by volumes of consensus standards such as **Low Lift and High Lift Trucks**, ASME B56.1; **Guided Industrial Vehicles**, ASME B56.5; **Rough Terrain Forklift Trucks**, ASME B56.6; **Industrial Crane Trucks**, ASME B56.7; and **Operator Controlled Industrial Tow Tractors**, ASME B56.9. The standard does not apply to earth-moving equipment or vehicles used for over-the-road hauling. Therefore,

equipment that was designed to move earth but has been modified to accept forks is not covered by the powered industrial truck operator training standard.

NOTE: On November 30, 2000, federal OSHA reissued CPL 2-1.28A removing references to ASME B56.8, "Personnel and Burden Carriers." While OSHA is reviewing the appropriate training and coverage of personnel and burden carriers, the powered industrial truck operator training standard [1910.178(l)] will not be enforced for this type of equipment.

13. Must an employee receive separate training in each make and model of powered industrial truck that the employee operates?

No. An operator who has been trained on a particular type of powered industrial truck (e.g., a sit-down counterbalanced rider truck) may, without additional training, operate other makes and models of that same type of truck, unless there is a significant difference in the applicable truck-related and workplace-related topics listed in paragraph (l)(3) for the different make and model of truck.

14. Must an employee receive separate training on each specialized attachment?

There are a variety of attachment to powered industrial trucks which affect their performance and use. The load capacity of the forklift is reduced by the weight of the attachment. An employer must train an operator on the use of each specialized attachment if the attachment impacts performance and use of the powered industrial truck.

15. Would these training requirements include training operators in the use of operator restraint systems?

Yes, when seatbelts or operator restraint systems are required. (See MNOSHA Instruction STD 3-13.3B covering seatbelts on earth-moving and material handling equipment.) Employers are required to train employees in all operating instructions, warnings and precautions listed in the operator's manual for the type of vehicle which the employee is being trained to operate.

16. Does OSHA require employers to train operators in vehicle stability?

Employers are required by paragraph (l)(3) to train operators in vehicle stability. Non-mandatory Appendix A to the training standard provides guidance to employers in understanding the basic principles of vehicle stability.

Paragraph (l)(4) specifies that an evaluation be conducted of each powered industrial truck operator's performance.

17. How often are evaluations required to be conducted after training has been successfully completed?

The employer must conduct evaluations at least once every three years and as part of the initial training provided to the operator. In addition, for operators provided refresher training under the standard, an evaluation of the effectiveness of that refresher training must be performed. This evaluation does not have to be formalized but must consist of a person who has the knowledge, training, and experience observing each operator perform all typical operations to ensure that the powered industrial truck is being operated safely. A more extensive evaluation must be conducted at least once every three years. The date of the previous training controls the time frame for the next evaluation; i.e., the three-year evaluation must be done within three years of the previous evaluation or within three years of initial training.

18. When would refresher training be required?

Refresher training is required when information available to the employer shows that the employee lacks the skills or knowledge to operate the truck safely. If the employee has been observed operating the vehicle in an unsafe manner, has been involved in an accident or near miss, or has received an evaluation that reveals the employee is not operating the truck safely, refresher training is required. In addition, refresher training is required when the employee is assigned to drive a different type of truck or a condition in the workplace changes that could affect the safe operation of the truck. An evaluation of the effectiveness of the refresher training is required.

Paragraph (l)(5) allows the employer to forgo that portion of the training that an employee has previously received.

19. Is it necessary to retrain powered industrial truck operators if they have already received training in some of the topics listed in paragraph (l)(3)?

The employer must evaluate the applicability and adequacy of an operator's prior training. Employers need not retrain an employee in a training topic if the prior training is appropriate to the truck and working conditions encountered. Additional training in that topic is not required if the operator is evaluated and found to operate the truck safely.

20. Would infrequent operation of powered industrial trucks by a worker create a need for more frequent refresher training?

Training is most effective when it is quickly reinforced on the job; lack of ongoing reinforcement at work prevents effective transfer of knowledge to the job. In the construction industry workers with limited experience operating powered industrial trucks may not have the opportunity to consolidate their skills when not working. To ensure competence, an employer may need to conduct refresher training and evaluations for these certified operators on a more frequent basis.

Paragraph (l)(6) requires that the employer certify that the required training and evaluations have been conducted.

21. What does OSHA require the employer to include in the certification that the required training and evaluations have been conducted?

The certification consists of the name of the operator, the dates of the training, the date of the evaluation, and the identity of the person(s) conducting the training and evaluation.

Paragraph (l)(6) does not specify who must maintain the records; however, the employer is ultimately responsible for ensuring the availability of these records. If a third-party trainer conducts the training and agrees to maintain the records, the trainer would need to ensure the records are immediately available to the employer.