Mobile Equipment Safety

The Risk

Mobile equipment is critical to the handling of wood fiber in the pellet business. When people and machinery share a plant site everyone must be on the same page to reduce the likelihood of injury. Understandably, “struck by” injuries are some of the most severe injuries on a plant site. The following information outlines some best practices to assist in managing the risk associated with mobile equipment.

Mobile equipment is defined as “a wheeled or tracked vehicle which is engine or motor powered, together with attached or towed equipment.”

The Controls

Equipment Design
Equipment should be evaluated carefully to ensure the equipment is the right design for the activity. Design considerations are the operating terrain, load capacities, size and dimensions, and maneuverability. Consideration should be given to whether or not the equipment will be used in a dust cloud. If so, the equipment should be properly rated for the environment to prevent a wood dust fire and/or explosion.

Operator Training and Qualification
Before operating equipment the operator should be trained and qualified. Training should include general safety information, equipment specific information (refer to the owner’s manual), site specific training, and a skills evaluation to determine competencies. Only qualified operators should be allowed to operate equipment. Any restricted areas should be well identified and communicated to all operators.

Where no specific requirements for operator training can be found, an employer should ensure the following items are covered in operator training:

- Capabilities and limitations of the specific piece of mobile equipment
- Basic maintenance requirements
- Pre-trip inspection requirements
- Operating requirements of mobile equipment including safe loading and unloading
- Use of required personal protective equipment
Mobile Equipment Maintenance and Inspections
Mobile equipment should be inspected and maintained in accordance with applicable standards and manufacturer’s specifications. Operators should complete a documented pre-shift inspection prior to operating any piece of equipment. In addition, qualified personnel should carry out documented maintenance procedures in accordance with the manufacturer’s specifications. A well-defined process and procedure should be established to identify how to remove and tag defective equipment from service.

Pedestrian Visibility, Routes, and Right of Ways
Clearly marked pedestrian routes should be established to keep workers out of the path of machinery. Right of ways should be clearly established and communicated to both the equipment operator and all workers and visitors to the plant site. Workers should maintain a high level of visibility if their activities require them to be in the area of equipment.

Powered Industrial Trucks (PIT’s)
Any mobile power-propelled truck used to carry, push, pull, lift, stack or tier materials. Powered Industrial Trucks are regulated under the OSHA 1910.178 standard:

**OSHA 1910.178:** The standard requires employers to develop and implement a training program based on the general principles of safe truck operation, the types of vehicle(s) being used in the workplace, the hazards of the workplace created by the use of the vehicle(s), and the general safety requirements of the OSHA standard. Trained operators must know how to do the job properly and do it safely as demonstrated by workplace evaluation. Formal (lecture, video, etc.) and practical (demonstration and practical exercises) training must be provided. Employers must also certify that each operator has received the training and evaluate each operator at least once every three years.

Prior to operating the truck in the workplace, the employer must evaluate the operator’s performance and determine the operator to be competent to operate a powered industrial truck safely. Refresher training is needed whenever an operator demonstrates a deficiency in the safe operation of the truck.

Record Retention
As a best practice training records for mobile equipment should be retained for a minimum of three years, however PIT’s have a regulatory requirement of three years for retention under OSHA 1910.178.

Disclaimer
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