Landscaper Dies When Struck By Front End Loader In Massachusetts

Investigation #: 96-MA-016-01 Release Date: August 29, 1997

SUMMARY

On April 4, 1996, a 40 year old male machinist turned landscaper died of injuries sustained when he fell from the bucket of a front end loader and was run over by the vehicle. The victim and a co-worker were riding in the bucket of the truck which was driving along a paved two-lane road to a parking area when the incident occurred. The victim was thrown from the bucket when the vehicle started bouncing. The operator stopped the vehicle when he saw the victim had been thrown out. A passing motorist stopped and assisted with CPR while the operator went for emergency assistance. The local police arrived shortly, followed immediately by the fire department emergency medical services. The victim was transported by ambulance to a nearby city hospital emergency room where he was officially pronounced dead less than forty-five minutes following the incident. The MA FACE Program concluded that to prevent similar future occurrences, employers should:

- c instruct their employees never to ride in the bucket of a front end loader.
- c assure that operators of heavy equipment are properly trained and licensed.
- c assure that they educate themselves and their employees about the hazards of all the machinery and equipment used in their business.

INTRODUCTION

On April 4, 1996, the MA FACE Program learned through a call from the police department to the Occupational Fatality Hotline, that a 40 year old male landscaper died of injuries sustained when he fell from a front end loader and was run over by the vehicle. An investigation was immediately initiated.

On April 25, 1996, the MA FACE Field Investigator met with the employer and his

lawyer to discuss the incident. The police report, death certificate, witness interviews and newspaper narratives were obtained during the course of the investigation.

The company was an out-of-state landscaping contractor in business for approximately ten years at the time of the incident. It employed between three and twelve workers at a time on a seasonal basis. At the time of the incident, there were nine company employees on site including three supervisors and six laborers, one of whom was the victim. There was a person designated in charge of safety on the incident site but there were no written company safety policies and procedures in place on the day of the incident.

The victim was a former machinist who had just been hired by the landscaping company as a laborer. He had worked for the company for three days at the time of his death. He had no prior background or training in landscaping or construction work practices.

INVESTIGATION

On April 4, 1996, a landscaping contractor was working at a residential development to clean up sand and leaves (debris) left from the winter. A crew of three supervisors and six laborers were on the site. The men were raking leaves and sweeping sand then shoveling this debris into the bucket of a front end loader. The front end loader was used to transport the debris to a dump truck for disposal. The job had continued for three days. This was the victim's first job as a landscape laborer. He had previously been employed as a machinist and had no experience in either landscaping or construction and was not familiar with the machinery and equipment being used.

At approximately 3:00 p.m., the men were quitting for the day. Three of the men climbed into the bucket of the front end loader to ride the approximately 300 feet to the area where their trucks were parked. One of the men jumped out in order to pick up a rake on the ground and proceeded to walk to retrieve another pickup truck in the area. As the loader traveled down the paved road, it began to bounce. One of the men in the bucket was tossed against one of the bucket supports, while the victim was thrown backwards out of the bucket onto the pavement. Observing this, the operator applied the brakes, but both tires rolled over the victim before coming to a stop.

The operator immediately ran to seek help. A passing motorist stopped and assisted with CPR. The local police arrived shortly, followed immediately by the fire department emergency medical services. The victim was transported by ambulance to a nearby city hospital emergency room where he was officially pronounced dead less than forty-five minutes following the incident.

The investigation revealed that the operator had not been licensed to operate the front end loader as required by Massachusetts state law. The victim had not received any safety training prior to the start of work. The owner had been aware of the hazards of other machinery and equipment used in his business such as mowers, but had not considered riding in the bucket as a safety hazard because he had seen so many people do it on construction sites.

CAUSE OF DEATH

The medical examiner listed the cause of death as blunt chest trauma.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Employers should instruct their employees never to ride in the bucket of a front end loader.

Discussion: Although common in practice, riding on any part of construction or industrial vehicles that is not intended for carrying people is prohibited. OSHA, the Society of Automotive Engineers (SAE) as well as all equipment manufacturers expressly prohibit the practice. Equipment that is intended to transport employees must have seats which are anchored as part of the vehicle and sufficient for the number of persons being transported.

Recommendation #2: Employers should assure that operators of heavy equipment are properly trained and licensed.

Discussion: The operator of the loader had not been licensed in the operation of that equipment, which is required by the Commonwealth of Massachusetts. Part of the licensing process is becoming familiar with the applicable safety regulations and being tested on that knowledge. This training would have informed the operator of the serious hazard of allowing workers to ride in the bucket of the front end loader. Licensing also gives the operator more authority over the operation of the vehicle since violations of the regulation would result in the loss of his license.

Recommendation #3: Employers should develop, implement, and enforce a comprehensive safety program that covers all workers.

Discussion: The employer did not have a comprehensive safety program, nor did it provide safety training. The employer had also underestimated both the hazards that might be encountered by his employees and the amount of training required to perform the job. Employers should take advantage of materials provided by equipment manufacturers, trade associations, insurance carriers and US Department of Labor - OSHA to learn more about these hazards. They, with the cooperation and input of employees, should then use this information to develop a comprehensive safety program.

Comprehensive safety programs should include, but not be limited to, training for workers in the recognition and avoidance of safety hazards, regular job site safety surveys, written safety rules and procedures, and the provision of personal protective equipment. Furthermore, daily, weekly, and/or monthly jobsite safety meetings, conducted by a designated safety person, are essential. Such meetings remind employees of the dangers associated with their occupation(s) and how best to deal with them. If the employees had received vehicle safety awareness training, they would have understood the hazards of riding in the bucket of the loader, and this incident may have been prevented.

REFERENCES

Code of Federal Regulations, 29 CFR 1926 Subpart O, Motor Vehicles, Mechanized Equipment, and Marine Operations

Commonwealth of Massachusetts, 520 CMR 6.00: Hoisting Machinery

Handbook for On-Highway Vehicles and Off -Highway Machinery (v. 3), Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, PA 15096, 1997.

Safety Manual for Backhoe/Loader, Equipment Manufacturers Institute, 10 S. Riverside Plaza, Chicago. Illinois 60606-3710, 1975.