

**Case 74. 46-year-old male foreman was killed when he was entangled in a 10-foot silo auger.**

On June 24, 2004, a 46-year-old male foreman was killed while preparing a silo for demolition. The victim entered the 20-foot diameter by 80-foot high silo through a 20- x 30-inch opening. He had a light, light cord, and shovel with him. The 10-foot sweep auger was running. It was a common work practice to enter the silo with the sweep auger running. The silage remaining in the silo was approximately two feet high and covered the floor of the silo. It appeared he entered the silo to clean out the remaining grain material so the work crew could install jacks to raise the silo to remove the bottom piece of the silo. A caretaker for the property spoke with the victim before he entered the silo, and then left. When the caretaker returned, he went to the silo to check out what was going on within the silo and found the victim lying on the floor. The caretaker ran to the crew who were working at another silo and told them their boss was "down" in the silo. The crew ran to the silo and one of the crewmembers unplugged the sweep auger power cord and went in the silo to try to help the victim. The caretaker had already turned the power off. When the coworker entered the silo, the caretaker called 911. Crewmembers removed a 30-inch by 8-foot long section of the silo to allow for the fire department to remove the victim's body. The victim was declared dead at the scene.

MIOSHA issued the following Serious and Other citations to the employer:

Serious:

GENERAL RULES, PART 1, RULE 114(1).

An employer shall develop, maintain, and coordinate with employees an accident prevention program, a copy of which shall be available at the worksite.

INSTANCE A.

No accident prevention program for the company. The employees were exposed to working at great heights/confined spaces/augers/electric tools.

INSTANCE B.

No First Aid/CPR trained worker on the site.

Serious:

GENERAL RULES, PART 1, RULE 121(1).

An employee required to enter into confined or enclosed spaces shall be instructed as to the nature of the hazards involved, the necessary precautions to be taken, and in the use of required protective and emergency equipment. The employer shall comply with any specific rules that apply to work in dangerous or potentially dangerous areas.

No instruction (training) given to employees before requiring them to enter a silo to clean out the remaining silage and remove some panels, install the jacks and start lowering the silo. The employees were exposed to an unknown atmosphere

and did not have the equipment or the training for the equipment if they needed it to enter the silo.

Serious:

**GENERAL RULES, PART 1, RULE 121(2).**

Before an employee enters a manhole, well, shaft, tunnel, or other confined space when the atmosphere might be hazardous due to a condition such as deficiency of oxygen, or might be toxic in excess of the maximum allowable limits prescribed by the department of public health, the atmosphere shall be tested and the results recorded. The records shall be maintained at the job site. If the atmosphere is hazardous, either sufficient ventilation to eliminate the hazard shall be provided or respiratory equipment prescribed by the department of public health shall be worn.

No testing of the atmosphere inside of the silo. The employees were exposed to the air being non-compatible for human usage while in the confined space with only one small opening approximately 30 x 20 inches to clean the silo before they could set up the jacks for the lowering stage. There were no provisions for a 2<sup>nd</sup> person to be stationed at the opening for a possible rescue. They did not have a means to remove the worker if that worker needed to be removed without sending in more workers.

Serious:

**GENERAL RULES, PART 1, RULE 127(3).**

The power source of any machine to be repaired, serviced, or set up, where unexpected motion or an electrical or other energy source would cause injury, shall be locked out by each employee doing the work, except when motion is necessary during setup, adjustment or troubleshooting. Any residual pressure shall be relieved before and during the work. A machine connected by a cord to an electric power source shall be considered in compliance if the plug is disconnected and the disconnection is within view of the operation.

No lock-out tag before entering a silo that had a 10-foot long auger located on the bottom floor and went 360 degrees around to remove the contents. The auger was running when the employee went into the 30 x 20-inch opening to remove and clean the silage. The auger would send the material into a hole in the center to a 2<sup>nd</sup> auger that was below the floor that would send that material out of the silo. The silo was 20 feet in diameter and 80 feet high.

Other:

**ADMIN RULE 2132, RECORDING & REPORTING OF OCCUPATIONAL INJURIES & ILLNESSES, RULE 1132(1).**

Create and post MIOSHA 300A the Annual Summary of Injuries and Illnesses as required in subrules (a), (b), (c), (d) of this rule.

No 300 log for employees at the company.

Other:

ADMIN RULE 2129, RECORDING & REPORTING OF OCCUPATIONAL INJURIES & ILLNESSES, RULE 1129(4).

Basic requirement. You must enter each recordable injury or illness on the MIOSHA 300 log and 301 incident report within 7 calendar days of receiving information that a recordable injury or illness has occurred.

Not entering the fatality on a 300 log within 7 days of death.

Other:

ADMIN RULE 2139, RECORDING & REPORTING OF OCCUPATIONAL INJURIES & ILLNESSES, RULE 1139(1).

Report orally, work-related fatalities or hospitalization of 3 or more employees as described in rule 408.22110 within 8 hours to the Michigan Department of Labor and Economic Growth, Michigan Occupational Safety and Health Administration.

Not notifying the Department within 8 hours of the fatality.