



FEB 1 2011

Dear Grain Storage Facility Operator:

Last July, two teenagers (ages 14 and 19) were killed in a tragic incident involving a grain elevator in Illinois. Both young workers suffocated after being engulfed in a grain bin they had entered to help clear. A third young worker was pulled out of the storage bin alive, and was hospitalized after being trapped for 12 hours.

Unfortunately, this was not a rare occurrence and this trend is continuing. Researchers at Purdue University documented 51 grain entrapments in 2010 alone. The Occupational Safety and Health Administration (OSHA) has found that grain entrapments generally occur because of employer negligence, non-compliance with OSHA standards, and/or poor safety and health practices.

I am writing to you today because it is your responsibility to prevent your workers from dying in grain storage facilities. All employers, and especially those in high hazard industries such as the grain industry, must recognize as well as prevent workplace hazards. As an employer, you must be vigilant and always follow the long established, common sense safety practices that will prevent these tragedies. A copy of OSHA's *Grain Handling Facilities* standard, 29 CFR 1910.272, is enclosed for your reference. This standard contains the rules that must be followed. States that operate their own occupational safety and health programs under plans approved by Federal OSHA enforce comparable standards but may have different or additional requirements. A list of State plans is available at www.osha.gov/dcsp/osp/index.html.

When workers enter storage bins, employers must (among other things):

- 1) Turn off and lock out all powered equipment associated with the bin, including augers used to help move the grain, so that the grain is not being emptied or moving out or into the bin. Standing on moving grain is deadly; the grain can act like 'quicksand' and bury a worker in seconds. Moving grain out of a bin while a worker is in the bin creates a suction that can pull the workers into the grain in seconds.
- 2) Prohibit walking down grain and similar practices where an employee walks on grain to make it flow.
- 3) Provide all employees a body harness with a lifeline, or a boatswains chair, and ensure that it is secured prior to the employee entering the bin.
- 4) Provide an observer stationed outside the bin or silo being entered by an employee. Ensure the observer is equipped to provide assistance and that their only task is to continuously track the employee in the bin.

- 5) Prohibit workers from entry into bins or silos underneath a bridging condition, or where a build-up of grain products on the sides could fall and bury them.
- 6) Test the air within a bin or silo prior to entry for the presence of combustible and toxic gases, and to determine if there is sufficient oxygen.
- 7) Ensure a permit is issued for each instance a worker enters a bin or silo, certifying that the precautions listed above have been implemented.

As an employer of workers facing these hazards, you have the legal obligation to protect and train your workers. OSHA will not tolerate non-compliance with the Grain Handling Facilities standard. OSHA has investigated several cases involving worker entry into grain storage bins where we have found that the employer was aware of the hazards and of OSHA's standards, but failed to train or protect the workers entering the bin. OSHA has aggressively pursued these cases and we will continue to use our enforcement authority to the fullest extent possible. Just in the last 15 months, OSHA has issued several large penalty citations to grain elevator operators for these very hazards.

- On November 23, 2009, OSHA fined Tempel Grain Elevators LLP more than \$1.5 million following the May 29, 2009 death of a teenage worker at the company's Haswell, Colorado grain storage operation. The youth suffocated after being engulfed by grain in one of the facility's bins. The company also exposed three other teenage workers to the cited hazards.
- On May 27, 2010, OSHA fined the South Dakota Wheat Growers Association of Aberdeen, South Dakota more than \$1.6 million following the death of a worker who had suffocated after being engulfed by grain. OSHA's investigation found that five additional workers were also at risk of being engulfed when they were sent into the bin to dig the victim out.
- On August 4, 2010, OSHA fined Cooperative Plus, Inc. in Burlington, Wisconsin \$721,000 after a worker was buried up to his chest and trapped in frozen soybeans. The worker was ultimately rescued after a four hour ordeal.
- On January 24, 2011, OSHA fined Haasbach LLC in Mount Carroll and Hillsdale Elevator Co. in Geneseo and Annawan, Illinois, following the deaths of three workers, including two teenagers. The workers were killed when they suffocated after being engulfed by grain. The fines to both companies totaled \$1,284,000.

If any employee dies in a grain storage facility, in addition to any civil penalties proposed, OSHA will consider referring the incident to the Department of Justice for criminal prosecution pursuant to the criminal provisions of the Occupational Safety and Health Act of 1970.

I am calling on you today to prevent these needless deaths. OSHA State Consultation Programs are available to assist you in complying with OSHA standards. If you have further questions,

please contact your local OSHA Area or State Plan Office or your State Consultation Program.
More information is available at www.osha.gov.

Sincerely,

David Michaels, PhD, MPH

Enclosure