

NGFA Safety Tips: Preparing Bins for Harvest

...Committed to promoting safety and health in the workplace...

Suggested Tasks Prior to and During Bin Entry

Incidents potentially can occur when a worker stands next to or underneath bridged or cliffed grain inside of a grain bin.

Therefore, as the fall harvest draws near, here are a few suggestions to prepare for a proper bin entry, if one is absolutely necessary, so as to prevent incidents such as entrapments from occurring.

If it is necessary to have employees enter a bin, silo or tank, commercial facilities are to follow the applicable practices, including the issuing of a *bin entry* grain storage unit unless absolutely necessary.

Remember: do not enter a

permit, found in OSHA's grain handling facilities standard [29 CFR 1910.272(g)], which took effect in 1988, to help minimize the risk.

Once it has been determined that a certain task must be completed inside the bin, then the facility can begin the pre-task planning and permitting process.

Pre-task planning process: A sit-down with employees to identify roles and responsibilities during the task and identify:

- equipment to be locked out
- forms of communication
- equipment needed for the work
- emergency action plan



Before the bin entry process, train employees and supervisors in the following roles and responsibilities: **Entry Supervisor**; **Attendant**; **and Entrant**.

Disclaimer: The National Grain and Feed Association make no warranties, expressed or implied, concerning the accuracy, application or use of the information contained in this publication. Further, nothing contained herein is intended as legal notice. Competent legal counsel should be consulted on legal issues. Grain handling facilities should contact experienced safety and health legal counsel or a third-party expert if they have questions about the proper way to implement the items addressed in the document.

NGFA Safety Program

- The NGFA is committed to promoting safety and health in the workplace, and shares the Occupational Safety and Health Administration's (OSHA's) commitment to protecting employees.
- The NGFA's extensive efforts to enhance safety include unprecedented research and education efforts launched in the early 1980s that helped lead to a dramatic reduction in the number of fire and explosion incidents in commercial grainhandling facilities.
- Each year, NGFA jointly sponsors regional safety seminars with affiliated state and regional grain and feed associations. The one-day conferences focus on keeping grain handling employees physically safe.

Roles during bin entry process:

- Entry Supervisor: Leads the process for the entire duration of the entry. Responsibilities include:
 - Inspects the space to be entered; looks for bridged grain, grain beyond the natural angle of repose, hung up grain and anything else that may pose a physical threat to an entrant;
 - Ensures that the air monitor is calibrated and bump tested, and that the space is safe for human occupancy;
 - Leads the bin entry team through a lock out, tag out and verification process for all equipment that poses a risk of entanglement or engulfment to the entrant; and
 - Follows compliance criteria in the permit process and issues it to the approving authority.
- Attendant: Stays in direct communication with the entrant and has access to additional assistance through the entire duration of the entry. Responsibilities include:
 - Monitors the space and outside factors for any changes that could pose a hazard to the entrant and terminates the entry if unexpected hazards or abnormal conditions arise;
 - Controls entry into the space to authorized entrants only; and
 - Stays in direct communication with the entrant, if possible within eye site.
- **Entrant:** Works inside the space and communicates with the attendant. Responsibilities include:
 - Conducts the work needed inside the space;
 - Communicates with the attendant as often as necessary;
 - Wears appropriate harness and lifeline when entering bins containing grain or other commodities;
 - Maintains control and use of air monitor and other tools; and
 - Stays alert for changing conditions inside the space that could pose a hazard and immediately exits the space if necessary.

Remember: Entering any grain storage unit is a process that requires planning and preparation. Ensure that your bin entry program is up to date and all involved employees are trained properly to address potential hazards. Some of the key requirements are:

- Every effort should be taken to avoid entry, if possible
- Turn off and lock out all potentially hazardous energy sources
- Never walk on or walk "down" grain to make it flow
- Never enter on or below bridged grain or hung up grain
- Test the bin's atmosphere before entry
- The attendant must remain by the entrance during the entry process
- Ensure that rescue equipment is serviceable and available
- Follow the permit and all other safety precautions

More safety information at www.ngfa.org

Contact VP Safety and Regulatory Affairs Jess McCluer or Manager of Training, Education and Regulatory Affairs Jim Seibert at 202-289-0873

NGFA | 1400 Crystal Dr. | Suite 260 | Arlington | Virginia | 22206

NGFA Reference Corner

OSHA Fact Sheet

CLICK HERE

OSHA Grain Handling Standard 29 CFR 1910.272(g)

CLICK HERE

OSHA LockOut/TagOut 29 CFR1910.147

CLICK HERE

OSHA Emergency Action Plan 29 CFR 1910.38

CLICK HERE