Why Are They Still Entering Grain Bins?
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News Flash: Employee “fell into a grain bin”..??????? Really????

- Approximately 30 deaths each year and twice that number in non-death entrapments.
- Entanglements and near misses….not counted.
- Grain carts/gravity wagons
- Trucks
- Anywhere grain is or might be moving
News Flash: Employee “fell into a grain bin”..... Really????!!!!

• What really happens
• Grain won’t flow....
  • Material stuck on walls
  • Walking down grain, auger running
  • Bridge breakthrough
News Flash: Employee “fell into a grain bin”..??????? Really????

- What really happens
  - Cleaning out a bin
  - Breaking up chunks for reclaim system
  - Dislodging bridges or walls of grain
  - Moving a stuck sweep auger
  - Fumigation, top dressing
  - Equipment/structural repairs
Prevention: “good” grain

Good **Grain Condition** Management

- Condition going in the bin
- Aeration management
- Monitoring
  - Temperature Cables
  - Air Quality Monitors
- Recordkeeping
- Marketing poor quality quickly

- Condition never improves in storage
- When should you run aeration systems?
- Why do I need to monitor?
- Why do I need so many stinking records?
“New” Equipment/Techniques

Fixing Problems from Outside

• Break up chunks
• Dislodge stuck grain
• Zero Entry Sweeps with clod breakers
• Aeration control/monitoring systems
• Insect monitoring

Other Equipment

• Whips and drills
• Grain Vacs
• CO₂ Blasters
• Bin “Bots”
• Moving Floors
• Vibrators
• Air Blasters
• Inflatable bladders
Prevention

Training...are we doing it right?

- Do football teams watch a 15 min performance video once a year and never practice? **NOOOOOO!!!**
- Hands-on training, drills...for everyone
  - Bin Entry Procedures/Permits
  - “What-if” scenarios
  - Grain Handling Basics
“New” Equipment/Techniques/Attitudes

Quote....

• “Anybody down there that can help me?.....S*#@ it…I’ll do it myself”

• Remedy: Always have a partner at the door and in communication at all times

Process Changes

• Lock out ....no exceptions!
• Air quality monitoring
• Written housekeeping procedures
• Written bin entry and cleaning procedures
• Discipline policy
Complete Organization Participation

Management

• Welfare of workers must be #1
• Equipment…much cheaper than an incident!
• Support/require training
• Understand the tie between every action and safety/welfare

Employees

• Seek/suggest training
• See/Say mentality
• Be responsible for yourself and your partners
• Be prepared…it’s your life!!
• If you don’t know…ask.
• Don’t take shortcuts…ever!
Commercial Facilities: Keep Good Records (more than 10 employees)

Management

• OSHA 1910.272 Grain Handling Safety Standards
• Know what they are
• Be diligent in following rules
• Create an atmosphere that allows employees to report
• Train and re-train employees

Employees

• Be familiar with the standards
• Follow the rules
• Report violations: See/Say
• Ask questions if you don’t understand
• Always be alert
Non-Commercial Facilities (under 10 employees) ... look familiar?

Management

• OSHA 1910.272 Grain Handling Safety Standards
• Know what they are
• Be diligent in following
• Create an atmosphere allowing employees to report
• Train employees & family

Employees

• Be familiar with the standards
• Follow the rules
• Report problems: See/Say
• Ask questions if you don’t understand
• Always be alert

• IMPORTANT: Let someone know you are going in the bin...never work alone!
Training? What do we cover?

Equipment
- How to operate all equipment
- Lock out/tag out
- Guards
- Electrical precautions
- Fall protection
- PPE
- Air quality monitoring

Operations
- Procedures for bin entry
- Procedures for clean out
- Chemical applications
- Who to call/what to do in an emergency
- Equipment available for rescue (Do you have a coffer dam?)
Training? Work with local emergency groups

• Local fire departments need to know about your facility
• Help them obtain equipment they need so they can help you
• Create a friendship with the people who can help you

• They need to know:
  • Materials you handle
  • Chemicals
  • Electrical service
  • Standards that you must meet
Training? Where do we get information?

- GEAPS chapters
- Websites
- Land Grant Universities
- Commercial vendors/consultants
- Fire Departments
GEAPS EXCHANGE
Grain Engulfment Demonstrations

• Exhibit Hall at Exchange
• Demonstrations
  Sunday 1:45 pm and 4:00 pm
  Monday 10:30 am and 1:45 pm
  Tuesday 10:30 am
Questions, Suggestions???

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