



FACEBOOK FORUM

FIRST DUE CONSIDERATIONS FOR GRAIN BIN RESCUE

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INSTRUCTORS: Dave Newcomb
Bill Fulton

GRAIN BIN FIRST DUE CONSIDERATIONS

Introduction: Nationwide there are approximately 30 grain entrapments in the United States and about half of those incidents are fatal. More than 60% of those incidents happen on the family farm. It is important to understand that 60% of fatalities are would be rescuers, 50% happen after the first responders are on the scene and 90% of incidents are attributed to bad air quality in the bin.

In preplanning an incident First responder need to consider the following:

- 1) Labor intensive: 50 to 100 responders not uncommon
- 2) Time consuming: 4-6 hours if operations go well
- 3) Multiple levels of expertise are needed: Awareness level, Operations level and Technician level along with elevator personnel, law enforcement and EMS are all involved in grain incidents
- 4) What are the capabilities of Mutual Aid companies requested to the scene?
- 5) What is the Availability and response time of the nearest Technical Rescue Team?
- 6) Work with Dispatch agencies to determine automatic dispatch of needed agencies

Considerations on Arrival to an Incident:

- 1) Number and Location of the patients (if multiple bins which one is involved)
- 2) Lock out and Tag Out all equipment that can make the grain move
- 3) Start Air monitoring of the bin involved from the entrance of the bin
- 4) Determine if patients are partially submerged or totally submerged

Considerations for a partially submerged patient:

- 1) Assess patient mental and physical condition
- 2) Assess possibility of patient being totally engulfed
- 3) Using a rope secure the patient to the roof of the bin.
- 4) If patient is showing signs of distress cut the bin to remove the grain from around their chest.
- 5) If patient is located near the side of the bin do not cut directly below the patient to draw them under the grain.
- 6) Have properly trained responders ready to make entry to package and remove the patient.

Considerations for a totally submerged patient:

- 1) Use bin fans to move air through the grain
- 2) Begin cutting operations to remove grain to uncover the patient
- 3) Move grain from around the bin until patient is exposed
- 4) Have properly trained responders ready to make entry to package and remove the patient.

Considerations for cutting a bin:

- 1) Cut holes in pairs
- 2) Holes must be on opposite sides
- 3) Cut holes in unison
- 4) Do not cut across seams of the bin or the stiffeners

Requirements for entry personnel into a bin:

- 1) Operations or Technician level training
- 2) Proper PPE (Helmet, Gloves, Harness, retrieval line, safety glasses, ear plugs, coveralls, steel toed boots)
- 3) Air monitoring device at the entrance and on one of the rescuers at the location of the patient.

Conclusion: Grain Bin responses are Low frequency / High Risk incidents. They require large numbers of equipment and trained personnel working in unison to save lives. With the proper training first responders will not be put at risk when responding to these types of incidents.