

## Who should attend:

Anyone 8 to 80 years old who works around flowing grain.

Anyone who could potentially render aid to person trapped in a grain engulfment.

Fire Department personnel and other first responders who have the potential to respond to emergencies in a grain facility.

In this class a strong emphasis is placed on entrapment prevention and safe work practices.

There are NO pre-requisites for this class.

## Students will:

Become familiar with the hazards of flowing grain, allowing them to work safer and prevent grain entrapment.

Meet the OSHA training requirements for OSHA 1910.272 (Grain Handling Standard), qualifying them to work around flowing grain.

Actively participate in a live engulfment / rescue scenario in a controlled environment.

Be qualified to be part of a grain rescue team.

## Class Length & Structure

4 hours of training time - Two full classes can be done in a single day.

2 hrs. Interactive Classroom Presentation with Hands-on Exercises

2 hrs. Live Grain Engulfment / Rescue Simulation



## Standards This Class Meets

### OSHA:

1910.272

Grain Handling Standard

1910.146

Confined Space Standard

1910.147

Lock out, Tag out Standard

1910.38

Emergency Action Plans

### NFPA:

1670

Rescue Teams

1006

Technical Rescuer

Qualifications

### ANSI:

Z359

Fall Protection Code

## Topics Covered

Classroom materials are presented through lecture, Power Point presentation and hands on activities. A strong emphasis is placed on engulfment prevention and safe work practices.

- Safe bin entry
- Detecting and mitigation atmospheric hazards
- Grain dust explosion considerations
- Lock out, tag out
- Assembly and use of a bin entry life line
- Entrapment hazards
- Roles of a bin Entrant
- Roles of a bin Attendant
- Concepts of bin rescue
- Grain engulfment rescue
- Use of coffer dams
- Safe bin cutting
- Auger entanglement
- Patient handling

## Live Grain Engulfment / Rescue Simulation

Live engulfment training is done in a controlled environment. (SATRA's engulfment simulator)

This exercise is designed to be as real life as possible and utilizes all safe bin entry practices taught during the classroom session.

Students, play the roles of a bin entrant and attendant. The entrant, wearing a harness and lifeline, enters the simulator. The entrant becomes the victim of a grain engulfment. A three student rescue team works together to free the victim from the entrapment using a Res-Q Tube.

The scenario is repeated several time with other participants filling the roles of victim and rescuers.

Every attendee has the opportunity to experience what it feels like to be the victim of a grain entrapment and act as a rescuer. This experience drives the point home that grain entrapments present a true danger and that entrapment prevention is essential.



## Equipment / Supplies Needed

**DO NOT purchase new equipment in preparation for training.**

Information provided during training will allow you to make informed purchasing decisions, get hands-on time with the products you are considering, and get the most from your equipment budget.

### Students:

- No special equipment is needed. Clothing that covers legs and boots or tennis shoes are suggested for participation in the grain entrapment / rescue simulation.

### Facility:

- 200 bushels of grain which is returned when training is completed.

*Grain does not need to be available at the training site. SATRA can pick it up and return it to a nearby location.*

- Classroom space & seating for students. Classroom areas that have electrical power, projector and screen available are preferred, but not necessary.

*Suggested locations: church, community center, fire department apparatus bay, high school auditorium.*

### SATRA Provides:

- All personal protective equipment (helmets, safety goggles, gloves)  
*NOTE: Firefighters participating in this training DO NOT need their turn out gear.*
- All ropes, harnesses and ancillary equipment for hands-on exercises.
- Cofferdams (a variety of different types).
- Specially designed engulfment simulator.
- An appropriate number of instructors to ensure safe practices during the live simulation.



## Certification

Upon successful completion of this course students receive certification.

### Grain Handling Industry Employees:

Annual recertification is required.

### Emergency Responders:

Certification requirements are up to the authority having jurisdiction. We recommend recertifying every 2 years.