

# Confined Spaces on the Farm Meeting Kit



## DEFINING FEATURES OF CONFINED SPACES

- The space is enclosed or partially enclosed.
- The space is not designed or intended for continuous human occupancy.
- The space has limited or restricted means of entry or exit that may complicate the provision of first aid, evacuation, rescue or other emergency response services.
- The space is large enough and configured in a way that a worker could enter to perform assigned work.

## CONFINED SPACE HAZARDS ON THE FARM

- Grain and feed storage facilities
- Corrugated steel bins
- Silos
- Sumps, tunnels, and pump pits
- Forage storage
- Manure storage tanks
- Manure transport vehicles
- Bulk transport vehicles
- Sprayer and chemical transport vehicles
- Forage and silage dump wagons
- Feed grinders/mixers
- Feed mixer wagons tanks
- Storage and mixing tanks, bins, and silos
- Bulk liquid storage tanks
- Containment areas around diked storage tanks
- Wells, cisterns, dry wells, septic tanks
- Grain driers
- Fuel storage tanks

## DETERMINING WHETHER A SPACE IS A CONFINED SPACE – RECOGNITION

Once you have determined the confined spaces at your farm, you must identify the associated hazards.

- Evaluate all confined spaces to determine if they contain any actual or potential hazards.
- Train workers to never enter a confined space before the hazards have been identified and steps have been taken to mitigate those hazards.

- Ensure workers review, understand, and follow the written procedures before entering confined spaces and know how and when to exit. Ensure there is a safe means to enter and exit the space.
- Consider chemical reactions that could occur based on the materials in the confined spaces, and potential byproducts that could create a hazardous atmosphere.
- Ensure air sampling is conducted prior to anyone entering the space.
- Ensure that sampling equipment can measure potential by products.
- Use an appropriate routine and simple detection approach. A 4-gas meter will only detect oxygen deficiency and three additional hazards (usually flammability, carbon monoxide, and hydrogen sulfide). Detector tubes or a simple hand-held meter such as a photoionization detector may also be needed.
- Ensure confined spaces are properly ventilated.
- Ensure that workers entering confined spaces maintain contact at all times with a trained attendant either visually, by phone, or by two-way radio.
- Use appropriate equipment (fall protection, rescue, air monitoring, lighting, and communication) according to entry procedures.
- Develop an emergency action plan that includes quick removal of the entrant and procedures for facility operators and local responders.
- Wear proper equipment: Use the correct respirator and make sure all equipment is tested and grounded.
- Follow lock-out procedures to avoid accidental start-up of equipment, and disconnect and cap all input lines.
- Have at least one trained and equipped coworker standing by in case there's trouble. Decide ahead of time how to communicate.
- Use spark-proof tools, lights, and fans.
- A harness and attached lifeline is key for performing a rescue. Simply putting a rope around the waist isn't enough.
- If a worker must be rescued, never go in after them unless another trained and equipped worker is there. Have trained rescuers on standby.

## **FINAL WORD**

The safest approach for preventing injuries in confined spaces is to simply perform all work from outside of the confined space when possible.