Confined Spaces on the Farm Meeting Kit

WHAT’S AT STAKE

Confined spaces on farms can present significant hazards to farmworkers and animals alike. A confined space is an area with limited entry and exit points and is not intended for continuous occupancy. These spaces can include grain bins, silos, manure pits, storage tanks, pump stations, wells and cisterns, tunnels and underground passages. It’s crucial to recognize the potential dangers associated with confined spaces on farms and implement safety measures to prevent accidents and injuries.

WHAT’S THE DANGER

COMMON HAZARDS AND SAFETY CONSIDERATIONS RELATED TO CONFINED SPACES ON THE FARM

- Many confined spaces lack proper ventilation, leading to a buildup of toxic gases or a deficiency of oxygen, which can be life-threatening to anyone entering the space.
- Grain bins, silos, and manure pits can be particularly dangerous since workers may be buried in grain, engulfed in flowing materials, or trapped in tight spaces, making rescue efforts difficult.
- Decomposing organic matter in manure pits or silos can produce gases like methane, ammonia, and hydrogen sulfide, which can be fatal if inhaled in high concentrations.
- Poorly maintained confined spaces, such as dilapidated silos or storage tanks, may risk collapse.
- Decomposing organic matter, manure, or stored grains can produce toxic gases such as methane, ammonia, and hydrogen sulfide leading to potential poisoning risks for workers.
- Wiring inside confined spaces can pose electrocution risks if not properly maintained or isolated.

- In case of an accident or emergency inside a confined space, the lack of proper rescue procedures and equipment can hinder timely rescue efforts.
- Confined spaces often have restricted entry and exit points, making it challenging to escape quickly.
- Working near confined spaces may involve the risk of accidentally activating machinery or equipment, causing harm to workers inside.

HOW TO PROTECT YOURSELF

ESSENTIAL SAFETY PRECAUTIONS TO DEAL WITH CONFINED SPACES

- Identification and Assessment: Identify all confined spaces on the farm and assess their potential hazards.
- Safety Procedures and Policies: These should include guidelines for entry, work, and exit from confined spaces, as well as protocols for air monitoring, ventilation, communication, and emergency response.
- Training and Education: Training for all farmworkers should cover the hazards of confined spaces, proper use of PPE, emergency procedures, and importance of adhering to safe protocols.
- Permit System: Before anyone enters a confined space, they must obtain a permit that confirms all safety measures have been followed and issued by a designated authority after a safety inspection.
- Air Monitoring: Regularly monitor the air quality inside confined spaces before, during, and after work. Do not allow entry if the air quality is unsafe.
- Ventilation: Ensure that confined spaces are adequately ventilated before and during work to prevent the buildup of toxic gases and improve air circulation.
- Proper Equipment and PPE: Provide appropriate personal protective equipment (PPE) to workers to include hard hats, safety goggles, gloves, respiratory protection, and harnesses with lifelines for rescue purposes.
- Communication: Establish a communication system between workers inside and outside the confined space.

- Rescue Plan: Develop a well-defined rescue plan that outlines the steps to be taken in case of an emergency inside a confined space.
- Regular Inspections and Maintenance: Conduct regular inspections and maintenance of confined spaces and their associated equipment.
- Emergency Equipment: Ensure that rescue equipment, such as tripods, winches, and first aid supplies, is readily available and in good working condition.
- Keep Out Unauthorized Personnel: Clearly mark and barricade confined spaces to prevent unauthorized access.
- Documentation and Record-Keeping: Maintain detailed records of confined space assessments, training, permits, and any incidents or near misses.

COMMON TOOLS USED IN CONFINED SPACES ON THE FARM

- Gas Detectors and Air Monitors: Gas detectors can detect toxic gases like methane, ammonia, and hydrogen sulfide, while air monitors assess oxygen levels.
- Ventilation Equipment: Blowers, fans, and ducts are used to improve air circulation and provide proper ventilation inside confined spaces, reducing the risk of toxic gas buildup.
- Personal Protective Equipment (PPE): Depending on the hazards present, PPE may include hard hats, safety goggles, gloves, respirators, coveralls, and safety harnesses with lifelines for rescue.
- Lighting Devices: Proper lighting is critical for visibility in confined spaces.
- Confined Space Tripod: A tripod with a winch and retrieval system can be used for safely lowering and raising workers into and out of confined spaces during rescue operations.
- Hand Tools: These may include wrenches, hammers, screwdrivers, pliers, and other tools relevant to the job.
- Lockout/Tagout (LOTO) Equipment: LOTO devices are used to secure energy sources and prevent equipment from accidental activation during maintenance or repair work.
- Communication Devices: Reliable communication tools such as

two-way radios or wireless headsets enable clear communication between workers inside and outside the confined space.

- First Aid Supplies: It’s essential to have a well-stocked first aid kit available near the confined.
- Rescue Equipment: Stretchers, may be required to evacuate an injured worker from a confined space.
- Barriers and Warning Signs: Use barriers and warning signs to restrict access to the confined.
- Measuring Instruments: Measuring tools like tape measures, levelers, or moisture meters may be necessary.

FINAL WORD

By emphasizing the importance of confined space safety, farms can create a safer and more productive working environment for their employees and ensure the well-being of all individuals involved in farm operations.