## **Manure Storage Entering Procedures**

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Avoid entering manure storage areas if at all possible!! Many deaths have occurred when people entered manure storage areas without proper safety precautions. If you must enter a manure storage area, the following entry procedures will minimize, but not eliminate, the risks!

Recognize that conditions are of greatest risk when manure is agitated or moved. Movement and agitation increase the release of dangerous gases, sometimes several fold. When agitating, pumping, or moving manure, take precautions to be sure that extra ventilation is provided to nearby areas (e.g., buildings over or near the manure storage).

- 1. Test before entering. Test the oxygen level to make sure that adequate oxygen is available. Also test for hydrogen sulfide, a particularly toxic gas, to be sure that concentrations are safe (less than 10 ppm).
- 2. Provide additional forced ventilation. Additional ventilation will increase oxygen and decrease hydrogen sulfide and other toxic gases.
- 3. Monitor conditions. Oxygen will be consumed while working in a manure storage area, and additional agitation from working can increase the toxic gas levels. Monitor conditions while working.

- 4. Use a safety line. A worker in a confined space or manure storage area should wear a body harness with a safety line. The safety line should be held by enough people and/or a winch so that the worker can be pulled out of the area if a problem develops.
- 5. Wear a supplied air respirator. If oxygen levels are below the safe concentration or gases are present at toxic levels, use a supplied air respirator. The person using a respirator should be trained on the use of the mask. It is particularly important that the mask form a tight seal around the face.
- 6. Provide a clear escape path. Make it as easy as possible for the worker to exit the manure storage area quickly. Don't block the path with tools or objects.
- 7. Keep fire away. Methane gas is a byproduct of manure degradation, and it is flammable. Keep fire and other ignition sources such as electrical tools away from the manure storage area. Test the methane level with an explosion meter.
- 8. Know first aid. Someone on the site should be trained in CPR and first aid measures.