## FATAL ALERT

On August 3, 2011, two men died while attempting to repair the pumps in a septic tank. Prior to the accident, the owner of a company hired an independent Septic Tank Servicing Company to help him clean and repair a septic tank system. No one witnessed the two men enter the septic tank on the day of the accident, but employees did indicate they had seen the owner enter another tank the day before. According to co-workers, prior to the men entering the tank on the day of the accident, 3 employees offered their help and the employer/owner said no.

During the pump repair process, the owner and independent contractor entered the septic tank using a flexible home escape ladder. While in the septic tank they were both exposed to high concentrations of hydrogen sulfide (H2S) and low levels of oxygen. Both men died while in the septic tank. Testing done during the investigation indicated there was 1000 parts per million of Hydrogen Sulfide in the tank.

The men did not follow any Confined Space entry procedures such as, no one was assigned to monitor the workers while they were in the septic tank, no equipment was used to assess the tank for hazardous gases, inadequate equipment was used to access the tank, no plan was made to ensure a timely rescue could be made, and neither man was wearing adequate personal protective equipment necessary for work of this nature.

Late in the day the assistant Manager went looking for the owner and saw something in the open septic tank that concerned her and she called 911 for help.

## **Significant Factors:**

- The pumps on the lower tank had not been working properly and water levels were high in the septic tank.
- No Confined Space Program entry procedures were being followed.
- No one saw the two men go into the septic tank the day of the accident.
- One of the men was experienced at septic tank work.
- No testing was done to determine if hazardous vapors were present prior to entry.
- There was inadequate equipment used to access/egress the tank.
- There was no rescue equipment available at the work site.
- There was no rescue plan established prior to entry into the tank.

## **Recommendations:**

- Ensure that confined spaces are identified with signage and a brief warning to not enter unless authorized and who to contact if entry is needed.
- Ensure all employees are trained to understand their responsibilities relating to confined space entry prior to entering a confined space.
- Ensure all employees are trained to recognize the hazards of their work place and understand the methods to use to avoid the hazards.