



# 5-2 Safety Short

6 July 2007

## Confined Spaces

### What is a Confined Space

- Is large enough or so configured that an employee can bodily enter and perform work.
- Usually has limited or restricted means for entry or exit (i.e. sewers, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry).
- Is not designed for continuous employee occupancy.

### Typical Confined Spaces

- Boiler, Degreaser, Furnace
- Pipeline, Pit, Pumping Station
- Reaction or Process Vessel, Mills
- Septic Tank, Sewage Digester
- Silo, Storage Tank, Barges
- Sewer, Utility Vault, Manhole
- Trenches, Shafts, Caissons

### Hazards of Confined Spaces

Hazards are not readily apparent, detectable by odor, or visible

- Oxygen Deficient Atmospheres - Asphyxiation is the leading cause of death in confined spaces
- Oxygen Enriched Atmospheres -- over 21% leads to violent ignition
- Flammable Atmospheres – excessive amount lead to explosion
- Toxic/deadly gases – Products stored/leaking,decomposition
- Temperature – extremely hot or cold
- Engulfment Hazards-Loose materials stored in bins and hoppers - grain, sand, coal, etc. – water or sewage flow
- Noise, Slick/Wet Surfaces, Falling Objects, Rodents/snakes

## Identifying a Confined Space

- Confined spaces may be encountered virtually anywhere; therefore, their recognition is the first step in preventing fatalities.
- Reasons for entering may be done for various reasons, i.e., inspection, repair, maintenance

## Unauthorized Entry

- The deaths of workers in confined spaces constitute a recurring occupational tragedy; approximately 60% of the fatalities have involved would-be rescuers.
- Rescue procedures are established and practiced with the confined space team....only procedure you should make is to call 911 and wait for emergency personnel
- Do not enter any confined space you have not been authorized to enter
- Do not enter a confined space if you hear someone yelling for help
- Do not enter a confined space even if you observe an incapacitated person inside

**Unless you have been trained and designated as a confined space entry member, you should never under any circumstance enter a confined space.**