August 2013

CIRSA HAZARD ALERT

Published by the CIRSA Loss Control Department | Your Partner in Risk Management

Confined Space Entry and Rescue

Public works, parks and recreation, water, and wastewater employees may have to enter confined spaces to perform periodic inspections of equipment and maintenance. Every year, employees throughout the United States are seriously injured or killed due to not having and/or not following proper safety procedures for confined space entry.

Some examples of confined spaces are: tanks, manholes, sewers, digesters, boilers, furnaces, silos, hoppers, utility vaults, pipes, trenches, tunnels, ducts, bins, and pits.

A confined space is large enough and configured so that an employee can enter and perform work (if you stick your arm and head in, that is entry), has limited or restricted means of entry or exit, and is not designed for continuous employee occupancy.

A permit-required confined space has one or more of the following characteristics: 1) contains or has the potential to contain a hazardous atmosphere; 2) contains a material that has the potential for engulfing an entrant; 3) has an internal configuration such that an entrant could become trapped or asphyxiated; 4) contains any other serious safety or health hazard.

Below is a list of activities that must be done to perform these entries safely:

1. Train all employees who will be involved in any entry. This should include classroom and hands-on training.
2. Create an inventory of, and properly classify and sign, all of your confined spaces; many will be permit-required confined spaces due to the hazards present.
3. When entering a permit-required confined space, complete a permit prior to entry.
4. A gas monitor should be utilized and tested prior to every entry. Calibration and sensor changes should be performed per the manufacturer's recommendations.
5. The atmosphere inside the confined space should be thoroughly tested with a calibrated gas monitor by a trained employee prior to any entry. If it is not working properly or not used properly, serious injuries or death can occur.
6. A body harness, winch, tripod, and atmospheric tester should be utilized for every entry when the entrant cannot be easily reached by another employee standing at (not entering) the entrance. If a hazardous atmosphere exists, a ventilation/blower system must be properly utilized to make the atmosphere safe for entry.
7. If you are dependent on the fire department or another outside agency for confined space rescue, give them advance notice of when you will be entering a confined space. Make sure they are trained and equipped for confined space rescue, they have had an opportunity to inspect and train in your confined spaces, and they are onsite and ready to enter any confined space that is classified as immediately dangerous to life and health (IDLH). You should inspect their confined space entry program/procedure and equipment to determine if they can enter your confined spaces safely.
8. If you will be performing your own rescues, conduct routine confined space rescue training. Have rescue personnel onsite and ready to enter any confined space that is classified as IDLH.

CIRSA has various resources available to assist you in developing your confined space entry program, including sample permits and procedures, training videos, and online courses. Contact the CIRSA Loss Control Department at 800-228-7136 for more information.

3665 Cherry Creek North Drive ▪ Denver Colorado 80209 ▪ 303-757-5475 ▪ 800-228-7136 ▪ www.cirsa.org