



HR/LF

FFCC – Policy/SOG Program

Operations

Special Operations –
Confined Space – Initial
Company Actions

SOG # 10-11

Life Safety Initiative: 3

Issued: 11/30/10

Subject: Confined Space – Initial Company Actions

Purpose: This standard operating guideline establishes the department guidelines for initial company actions at the scene of a confined space incident. This SOG is written to comply with the intent of NFPA 1670 at the awareness level.

Scope: This policy applies to all members of the Fire Department

Definitions

Confined space

A confined space is any area or vessel, which meets all 3 of the following criteria:

1. Is large enough and so configured that an employee can enter and perform work
2. Has limited means of entry or exit
3. Is not designed for continuous occupancy

Permit required confined space

A permit required confined space is defined as confined spaces which have one or more of the following:

1. Contains or has a potential to contain a hazardous atmosphere
2. Contains a material with potential for engulfment
3. Is so structured that an entrant could become trapped or asphyxiated
4. Contains any other recognized serious safety or health hazard – i.e. moving parts, noise

Recovery mode

Recovery mode is defined as situations where the victim is obviously expired or after a period of time during the rescue operation where time, conditions, or other factors have reduced the chance for the victim's survival to minimal.

Rescue mode

Rescue mode is defined as situations where the victim is believed or known to be alive. If this is unknown, personnel should operate in the rescue mode until time, conditions, or other elements make the chance for survival minimal.

Guideline

Philosophy

Confined space rescue operations present a significant danger to fire department personnel. The safe and effective management of these operations requires special considerations and resources. Examples of possible confined spaces includes tunnels, sewers, tanks, process vessels, manholes, storm drains, furnaces, and industrial spaces.

Initial arriving companies of the _____ Fire Department function at the AWARENESS level.

Therefore it is the policy of the _____ Fire Department that personnel SHALL NOT enter into a confined space. Entry is defined as breaking the plane of the opening to the confined space.

Examples of activities and functions appropriate at the AWARENESS level include:

- Recognition of a confined space incident
- Recognition of confined space hazards
- Performing a **non-entry** retrieval
- Identifying resource needs
- Initiating response of operations and/or technician level personnel
- Establishing scene control and management

Response

The standard response to any reported confined space incident shall be _____.

Upon the confirmation of a confined space incident with a person(s) trapped, or believed to be trapped, the alarm should be upgraded to a _____.

Arrival assessment

- The first arriving officer should establish command and complete an initial size-up including:
 - Secure any witnesses
 - Obtain the confined space entry permit and any other available information
 - Location, number, condition of victims, and length of time in confined space
 - Utility and other scene hazards – i.e. hazardous materials, low oxygen levels
 - Type of work being performed in the confined space
 - Type of PPE being used by victim(s)
 - Determination of rescue or recovery mode
 - Determination of additional resources needed

Scene safety

- Establish hot, warm, and cold zones (utilize barrier tape and natural boundaries)
- Ensure that unauthorized/untrained personnel do not enter the confined space
- Confirm or implement lock out/tag out

Initial operations

- If victim is attached to a body harness and retrieval line, the rescuers may lift the victim from the confined space area
- Attempt to establish contact with victim(s)
- Establish atmospheric monitoring
- Establish ventilation of confined space after atmospheric monitoring
- If safe to do so and if it can be accomplished from outside the confined space, shutdown non-essential equipment that is located within the confined space
- Establish staging area for additional arriving apparatus and personnel

By the order of: _____

Fire Chief

Date: 11/30/10

References:

- NFPA 1670, *Standard on Operations and Training for Technical Search and Rescue Incidents*, 2009 edition
- OSHA: 29 CFR 1910.146

Resources (*click title to access resource*):

OSHA Confined Space website

NIOSH Firefighter Fatality Investigation reports

- Confined Space Incident Kills Two Workers- Company Employee and Rescuing Fireman
- Carbon Monoxide Kills Three Volunteer Firefighters Inside Well in Pennsylvania
- Two Men Die in Well Cleaning Operation—Maryland

National Near-Miss Reporting System – Grouped Report – Confined Space

Firefighter Close Calls.Com—Weekly Fire Drills (*available on website*)

- TRA scenarios (5/27/10)
- Technical Rescue Support (3/12/07)

Disclaimer

We encourage our readers to use the policy and SOG templates as just one resource in developing your own local procedures. It is important that you research your own local requirements, needs, level of training and practices.