# Confined Space Rescue Response

## 308.1 PURPOSE AND SCOPE

This policy provides guidance on various confined space entries pursuant to Arizona Division of Occupational Safety and Health (ADOSH) rules (29 CFR 1910.146; AAC § R20-5-602).

### 308.1.1 DEFINITIONS

Definitions related to this policy include:

**Attendant** - An individual stationed outside one or more permit spaces to monitor the authorized entrants and who performs all duties assigned.

**Confined space** - A space that:

(a) Is large enough and so configured that a person can bodily enter and perform work.

(b) Has limited or restricted means for entry or exit.

(c) Is not designed for continuous human occupancy.

**Entry** - The action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

**Entry permit** - Written or printed document that is provided by the District to allow and control entry into a permit-required confined space to perform work in the space.

**Entry supervisor** - The person responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing and overseeing entry operations, and for terminating entry as required.

**Permit-required confined space** - A confined space that has one or more of the following characteristics:

(a) Contains or has a potential to contain a hazardous atmosphere.

(b) Contains a material that has the potential for engulfing an entrant.

(c) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross-section.

(d) Contains any other recognized serious safety or health hazard.

## 308.2 POLICY

It is the policy of the Blue Ridge Fire District to establish permit-required confined space incident response guidelines in compliance with applicable regulations, ADOSH, and required training and equipment to reasonably ensure members' safety while they are performing permit-required, confined space rescues.

## 308.3 GENERAL REQUIREMENTS

District procedures shall meet the standards and requirements set forth in 29 CFR 1910.146 and this policy (AAC § R20-5-602).

District standards and procedures will include, but are not limited to:

(a) The requirements of an entry permit.

(b) Training requirements for members entering into confined spaces.

(c) Equipment requirements.

(d) Notification to members entering a confined space of any known or suspected hazards that the member may face during entry and any other information necessary to enable the attendant to monitor safe entry by the member.

(e) Requirements for members entering confined spaces.

(f) Requirements of the entry supervisor.

(g) Requirements for members who are assisting others within the confined space.

## 308.4 PROCEDURES

District members should be trained to identify and measure atmospheric hazards within confined spaces. Reasonably practicable attempts at self-rescue or nonentry rescue should be made prior to any entry.

District members should adhere to National Institute for Occupational Safety and Health (NIOSH) guidance and comply with 29 CFR 1910.146 when performing a confined space rescue (AAC § R20-5-602).

Any time there is questionable action or lack of movement by the worker inside the confined space, a verbal check should be made. If there is no response, district rescue personnel should conduct a survivability profile and a risk analysis, based on the information documented on the entry permit.

### 308.4.1 PRECAUTIONS

No ignition sources should be introduced into the confined space when atmospheric hazards are attributable to flammable or explosive substances or to lighting and electrical equipment.

Members should perform continuous atmospheric monitoring during all confined space rescue operations. If atmospheric conditions change adversely, members should exit the confined space until appropriate precautions for any new hazards are developed and implemented.

Work time should be closely monitored because heat stress emergencies may be caused by a warm atmosphere inside a confined space.

### 308.4.2 HAZARD EVALUATION/PERMIT REQUIREMENTS

If members of the District respond to an incident requiring permit-required confined space entry, a written hazard evaluation shall be performed. The hazard evaluation shall include, but is not limited to (29 CFR 1910.146; AAC § R20-5-602):

(a) Recognition, determination and declaration of the situation as a permit-required confined space incident, including the date, time and location.

(b) Denial of entry to unprotected persons.

(c) Assessment of all readily available confined space documentation (e.g., Safety Data Sheets, any existing permits, plans or blueprints of the space).

(d) Assessment of the purpose of the entry, number of victims, locations and injury conditions.

(e) Discussions with witnesses, a supervisor and other sources of information.

(f) Assessment of any current or potential space hazards, in particular, any hazards that led to the necessary rescue.

(g) Measures used to isolate the space and eliminate or control the hazards.

(h) Communications procedures used by entrants and attendants.

(i) Determination and declaration if a body is recovered or a victim is rescued.

## 308.5 TACTICAL GUIDELINES

### 308.5.1 PRIMARY ASSESSMENT

Upon arrival, the first-in company should:

- Establish command and provide a report of conditions.
- Assess immediate hazards to rescuers, contact witnesses or otherwise look for clues as to the cause of the confined space emergency.
- Conduct a survivability profile of the victims, including the number, location and condition of the victims and how long they have been trapped.
- Establish communication with the victims, if possible.
- If applicable, locate any confined space permit that has information about the space.
- Determine whether the operation will be a rescue or a recovery.

### 308.5.2 SECONDARY ASSESSMENT

After completing the primary assessment, the first-in company should:

- Determine the type of confined space and what type of products are used or stored in the space.
- Identify any known hazards (e.g., electrical, mechanical, stored energy).

- Determine the stability of the confined space and conduct a hazardous materials size-up.

### 308.5.3 INCIDENT COMMANDER RESPONSIBILITIES

- Determine if adequate technician-level trained personnel are on-scene to safely complete the rescue.
- Determine whether the proper equipment is at the scene to safely complete the rescue (e.g., atmospheric monitoring equipment, intrinsically safe lighting and communications, self-contained breathing apparatus (SCBA), ventilation equipment, victim removal equipment).
- Establish a perimeter and ventilation, if needed.
- Assign resources, which should include a hazards officer.
- Ensure all utilities are locked-out, including electrical, gas and water.
- Evaluate the structural stability of the confined space and surrounding area.
- Remove or restrict the flow of any product in or flowing into the confined space.
- Ensure all entry and backup personnel are wearing the proper level of personal protective equipment (PPE) (e.g., helmet, gloves, proper footwear, eye protection, appropriate skin protection, a Class III harness and safety tag line, SCBA) and any additional equipment deemed necessary for the safety of personnel, given the totality of the circumstances.
- Ensure the appropriate method of extrication is determined and constructed.
- Ensure district-approved procedures are followed to perform the rescue.

### 308.5.4 VICTIM ASSISTANCE

- If possible, the entry team should bring a supply of breathable air for the victims.
- Rescuers shall not remove their SCBA and give them to the victims.
- If indicated and practicable, complete C-spine precautions should be taken.
- After treatment for immediate life-threatening injuries, the victims should be packaged appropriately for extrication (e.g., backboard, rescue basket).

### 308.5.5 VICTIM TRANSFER

Immediately after reaching the point of egress, the victims should be transferred to awaiting medical personnel.

## 308.6 TERMINATION OF THE RESCUE

At the conclusion of the rescue, the Incident Commander should:

- Account for all personnel.

- Ensure all tools and equipment used for the rescue/recovery are removed (unless there has been a fatality, then consideration may be given to leaving tools and equipment in place for investigative purposes).
- Ensure proper decontamination procedures are implemented if personnel or equipment have been contaminated during the operation.
- Determine if a formal critical incident stress debriefing or a routine debriefing and Post-Incident Analysis (PIA), in accordance with the Post-Incident Analysis Policy, is warranted and, if so, implement as appropriate.