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Revised:

INCIDENT MANAGEMENT SYSTEM AND TACTICAL OPERATIONS MANUAL

SERIES 387

OPERATIONAL GUIDELINE CONFINED SPACE RESCUE

PURPOSE

To establish guidelines relative to Tactical Operations, for agencies actively participating in the PCSORT group, related to Confined Space rescue incidents.

REFERENCE

NFPA 1670, Standard on Operations and Training for Technical Rescue Incidences, Code of Federal Regulations Title 29 CFR 1910-146, Permit Required Confined Spaces; WAC 296-809 All Confined spaces; WAC 296-62-145 Confined Spaces; NIOSH Publication No.80-106 Working in Confined Spaces; ANSI Z117 Safety Requirements for Working in Tanks.

DEFINITIONS

I.C. Incident Command

I.M.S. Incident Management System

P.P.E Personal Protective Equipment

B.C. Battalion Chief

Ops. Operations

Tech. Technician

Blanking or Blinding: (Shutting off piping systems where no valve exists) or (installing a device used to control energy)

Lockout Tagout: (All fixed mechanical devices and equipment effectively shut down and locked off) (electrical equipment shall be locked (off) with a key type pad lock).

RESPONSIBILITIES

I. This operational guideline is applicable to all personnel and agencies responding to or involved with a PCSORT, Response/Incident. This operational guideline pertains to all team members/agencies responding to or involved with a confined space PCSORT, Response/Incident.

II. These guidelines are to be utilized by personnel involved with a PCSORT response, and assist with strategic and tactical decision making while conducting operations around and in Confined Space

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environments during an emergency; rescue and non emergency; recovery, operation. However, this guideline by no means circumvents the use of training, practice, experience, and judgment by an individual or individuals while operating at Confined Space related events. The well being of emergency and civilian personnel is not to be risked for any activity that is not essential to the immediate protection of life. Nor shall any emergency personnel conduct, or participate in, any PCSORT Confined Space event, in which they are neither trained nor equipped for.

PROCEDURE

I. Safety

1. The safety of rescue personnel, shall be the highest priority in any Confined Space related incident and or training.
2. The Incident Management System (IMS) shall be utilized to assure the safety and accountability of all personnel involved.
3. Risk/Hazard Analysis: PCSORT personnel conducting rescue and support activities are exposed to many Risk and Hazards. These conditions are constantly changing and for the safety of all personnel involved, need to be taken into account including but not limited to:
 - A. Stress
 - B. Drowning
 - C. Heavy lifting
 - D. Excessive Noise
 - E. Adverse Weather
 - F. Excessive Fatigue
 - G. Confined Space Operations
 - H. Armed Thieves and Looters
 - I. Contaminated Air and Water
 - J. Oxygen Deficient Atmosphere
 - K. Falling Materials or Flying Objects
 - L. Electrocution from Damaged Utilities
 - M. Exposure to Smoke, Dust, Toxic Atmospheres etc
 - N. Secondary Collapse from Aftershock, Vibration, and Gravity
 - O. Irate Victims and Families
 - P. Fall or Tripping Hazards
 - Q. Dangerous Equipment
 - R. Exposure to Haz-Mat

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- S. Unstable Structures
 - T. Fire and Explosion
4. Any PCSORT members/rescuers, working in and around a Confined Space or participating in training, shall have with them as a minimum the following Personal Protective Equipment (PPE).
- A. Helmet
 - B. Eye Protection
 - C. Dust Mask
 - D. Ink/Grease Pen
 - E. Hearing Protection
 - F. Leather Work Gloves
 - G. Helmet Light and Flashlight
 - H. Safety Footwear (steel toe)
 - I. Whistle
 - J. Coveralls
 - K. Full body harness/wristlets
5. When a perimeter has been established and general area ventilated. Assure lockout, tag out, and blank out procedures are completed and the Confined Space is deemed safe for entry, air monitoring will take place at the point of access prior to making entry into the structure.
6. If air monitoring equipment detect air qualities that would require the use of respiratory protection, prior to entry, the rescue teams will be outfitted with such equipment.
- A. SCBA's may be worn if it will not hamper the efforts of the rescuers.
 - B. Preferably, utilization of supplied air systems, though not always obtainable would be the equipment of choice.
 - C. The following are examples of readings requiring respiratory protection and or, if possible, ventilation to assist with improving conditions to a safe level:
 - (1). Less than 19.5% oxygen or 23.5% oxygen enriched atmospheres
 - (2). LEL 10%
 - (3). CO 35ppm
 - (4). H2S 10ppm
7. The following is the recognized standard for emergency signaling and communication:
- A. 3 short blast (1 sec. ea.) – Evacuate
 - B. 1 long blast (3 seconds) - Stop/All quiet
 - C. 1 long/1 short blast - Resume all operations

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8. Depending on the size of the incident, it must be recognized that more than one Safety Officer should be utilized.
 - A. Safety Officer- reports directly to the IC and is responsible for overall scene safety. Primarily mobile and takes the position of objective observer, no hands on and watches over entire incident.
 - B. Site Specific Safety Officer- responsible for safety at a given location or an on-going rescue or task shall report to Rescue.
 - C. A person or a team, reporting to the site safety officer may be assigned to a single location to monitor the existence of a special hazard.
9. From an Operational standpoint, as entrance into the Confined Space is the next task to be carried out, consideration must be given to either a secondary means of escape or pre-established escape routes to areas of safe refuge. No rescuers will enter a confined space until these safety guidelines are in place as part of the overall rescue plan for an incident or a specific task or rescue.
10. When all necessary equipment is in place with rescue crews ready, prior to entering the confined space a safety briefing will take place. Information to discuss and highlight at the briefing will be as follows:
 - A. The results of air monitoring and based on those results if the need exist to continue air monitoring within the structure for the length of the incident.
 - B. Respiratory protective equipment being utilize, if any, and how long the rescue crews will be allowed to remain in the confined space before being replaced.
 - C. Ensure the back-up team is ready to go and that they are utilizing the same PPE required of the initial entry team.
 - D. Review emergency evacuation signals and communications.
 - E. Review the number and location of safety personnel being utilized for the incident and specific task or rescue.
 - F. Discuss pre-determined escape routes and emergency escape plans.
 - G. Ensure rescuers are equipped with PPE relative to initiating patient care and working around body fluids. This should include at least laytex gloves, mask and eye protection.

II. Command Structure

1. National Incident Management System (NIMS) shall be utilized when organizing the Rescue Incident.
2. The Passport Accountability System shall be initiated and maintained through-out the duration of the incident in accordance with Local Jurisdictional standards.

III. Recognized Certification Standards: NFPA (1670)

1. The following will be the Recognized Standard, as it pertains to Certification, at the **Awareness, Operations, and Technician** Level. Certification to one or all of these Levels will fall within the Guidelines specified in **(NFPA 1670)**. Awareness,

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Operations, and Technician Level certifications will be recognized in the area of Confined Space/Rescue.

- A. Organizations operating at Confined Space incidents shall meet all the requirements specified in Chapter 7 Confined Space Search & Rescue and Chapter 4 General Requirements of NFPA 1670.
- B. Awareness-Level functions at a Confined Space incident shall include up to, but **not exceed** the standards specified in 7.2 Awareness Level For Confined Space and 6.2 Awareness Level for Rope Rescue, of NFPA 1670
- C. Organizations operating at the Operational-Level shall meet the Awareness/Operational-Level requirements specified in 7.3 Awareness and Operational Level for Confined Space Operations, 6.3 Operations for Rope Rescue, 11.2 Awareness Level for Trench And Excavation Search and Rescue of NFPA 1670.
- D. Operations-Level functions, at a Confined Space incident shall meet the requirements specified in NFPA 1670 (7.3.3)
- E. Organizations operating at the Technician-Level shall meet all the Operational/Technician-Level requirements specified 7.4 Technician Level for Confined Space and 8.4 Technician Level for Vehicle and Machinery Search and Rescue of NFPA 1670.

IV. Essential Positions

1. Incident Commander

- A. The Incident Commander shall meet training objectives in accordance with this Guideline and his/her Local Jurisdictional standards.
- B. The Incident Commander shall be responsible for the management of all incident operations.
- C. The Incident Commander plans and directs the overall strategy for the incident and establishes the organizational elements necessary to manage the incident.
- D. The Incident Commander shall coordinate staffing and personnel activities as well as manage resources.
- E. The following is a list of positions an Incident Commander may assign for a Confined Space incident and the level of training required to fill that position:

	Title	Training Level
(1).	Operations	Technician
(2).	Rescue	Technician
(3).	Safety Officer	Technician
(4).	Controller	Technician/Operations
(5).	Rope Systems	Technician/Operations
(6).	Air Systems	Technician/Operations

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- (7). Hazard Control Technician/Operations
- F. The Incident Commander will fill all other positions in accordance with the Confined Space Organizational Chart based on the level of the incident
- 2. Rescue
 - A. Rescue shall meet training objectives in accordance with this Guideline and his/her Local Jurisdictional standards.
 - B. Rescue shall be responsible for the direct management of all incident tactical operations.
 - C. Rescue reports to the Incident Commander or Operations.
- 3. Safety Officer (Technical Rescue Team)
 - A. The Safety Officer shall meet training objectives in accordance with this Guideline and his/her Local Jurisdictional standards.
 - B. The Safety Officer shall be responsible for the overall safety of rescuers and patients.
 - C. The Safety Officer shall report to the Incident Commander.
 - D. The Safety Officer shall identify potential hazardous situations, investigate accidents that occur within the incident area, as well as advise the IC, Operations or Rescue in matters affecting personnel safety.
 - E. The Safety Officer shall perform a safety check on all rescuers and protective equipment prior to its usage.

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