

Division 12

September 2024 - TRT Drill

Host: Wood Dale Fire Department

Date(S): September 9th (Black), 10th (Red),

Time: 0900-1200

Topic: Confined Space – OPER/ TECH



Description:

Wood Dale is hosting a permit-required confined space entry drill. See the attached lesson plan for further details.

Contact:

Paul Drawz – *Wood Dale FD*

Contact - (224) 520-1173

Location:

Wood Dale Station 69

412 Park Lane

Wood Dale, IL

OSMF JPR Objectives

Confined Space OPER and TECH – See the attached lesson plan.

Apparatus Needed – Arizona Vortex, Rope, Hardware, stokes basket, Mannequin, Harness, SABA

Scheduling Notes:

- 1) TRT training is typically the second Monday, Tuesday, and Wednesday of each month or as modified to address potential or known conflicts in advance.
- 2) The location for the training, when indicated as TBD/ Regional, permits multiple training sessions to occur on the same date and the same topic, however, at a location that better accommodates TRT team members. Locations will be finalized one month prior to the training date.

DIVISION 12 TRT INSTRUCTOR GUIDE
LESSON PLAN

Lesson Title: : Confined Space Drill – September 2024
Level of Instruction: Confined Space OPER/ TECH
Method of Instruction: Hands-on
Learning Objective: Vertical confined space entry and victim retrieval
References: 29CFR1910.146 -Confined Space, 29CFR1910.120 -Haz whopper; 29CFR1910.147 - LO/TO; NFPA 350 -Confined Space; NFPA 1670 -technical rescue; NFPA 1006 -professional qualifications; Jones and Bartlett Confined Space, Division 12 SOP/entry form
Location: Wood Dale Station 69, 412 Park Lane, Wood Dale, IL
Time/dates: September 9 th and 10 th , 2024 (0900-1200)
Instructor: Tony Sally
Materials Needed: Arizona vortex, SARs system/SCBA, short spine board, sked, ventilation fan, atmosphere monitors, helmets, harnesses, rope rescue equipment
Safety Hazards / Identification: The training location is a permit-required confined space categorized by OSHA 29CFR1910.146 (large enough to enter, limited means of ingress/ egress, not designed for continuous human occupancy). The rescue group supervisor assigns personnel roles/ responsibilities, performs LO/TO, and monitors the atmosphere. The organization making the entry is responsible for issuing the CS permit and is required by law to retain the permit for 12 months. Additionally, IL OSHA requires operations and technician level rescuers to perform continuing education of CS entry, including one practice or actual rescue annually.
Step #1 Lesson Preparation: Before beginning the training, the competent instructor will conduct a safety briefing, assemble gear, discuss mission objectives, and prepare the site. A confined space entry of more than five feet requires a mechanical device and full-body harness attached to a retrieval line. Any instructor or rescuer entering the confined space must be connected to a fall arrest system. The rescue group supervisor must brief the entrants on the following before a CS entry is made: <ul style="list-style-type: none">• The hazards present in the confined space• The route of ingress and egress Ventilation and atmospheric monitoring are required before entry into the confined space and throughout the operation. A change of 1% of the monitor equals 10,000ppm. Stratification of gasses is a concern for Confined Space rescue operations, and layered monitoring shall be performed at 15-minute intervals.

DIVISION 12 TRT INSTRUCTOR GUIDE
LESSON PLAN

Step #2 Presentation:

Scenario: The PW crew is working in a vault to repair a pipe and remove an inductor. The vault entrant is unresponsive after the attendant smelled a strong egg smell from the confined space. The attendant calls for help, returns to the vault opening and is overcome by the gas, falling into the vault.

The initial fire company, with a supervisor arrived on the scene and began monitoring/ determining the hazard profile. ICS is established, and the Division 12 technical rescue team is mobilized. The Incident Commander designates a Rescue Group Supervisor to achieve strategic and tactical goals for incident mitigation.

Awareness level:

- Identify the need for additional assistance;
- Attempt to affect a rescue without entering into the CS;
- Establish a perimeter (Hot, Warm, Cold) zone

Operations level (Minimum 4 persons):

- Begin the rigging process
- LO/TO hazards
- Ventilate the space
- Call for high-level trained technicians
- SABA systems
- HazMat decontamination

Technician level (Min 6 persons):

- Identify hazards
- Make a direct entry into the space.
- Control hazards
- Package patient

The goals of TRT:

- Set up overhead highpoint anchor,
- Use two sets of rescuers to affect a rescue, one pair per victim if staffing allows.
- Appropriately package each victim and remove them from the vault.
- Mitigate the atmospheric hazards ranging from Low oxygen >19.5 to hydrogen sulfide.

Step # 3 Application:

Illinois OSHA – Confined Space rescue requirement.

OSFM: Objectives on the attached document.

Rope Operations: 6.1.02, 6.1.03, and 6.1.04

Confined Space Operations:
7.2.01, 7.2.02, 7.2.03, 7.2.04,
7.2.05, 7.2.08, 7.2.13, 7.2.14,
7.2.16, 7.2.17, 7.2.18

Confined Space Technician:
7.3.3, 7.3.5 and 7.3.6

Each student is responsible for participating in the rescue process as outlined in the presentation and application of the training. The attached JPR's are used for guidance on student evaluation.

DIVISION 12 TRT INSTRUCTOR GUIDE
LESSON PLAN

Step #4 Evaluation: SWBAT (Student will be able to) successfully demonstrate the abovementioned skills. The instructor shall complete a Target Solutions assignment acknowledging that all participants have completed the skills reviewed.

OSFM Objectives – Select all that apply

OSFM Objectives – Select all that apply	
	Rope Operations
<input type="checkbox"/>	6.1.01 Direct a team
<input checked="" type="checkbox"/>	6.1.02 Direct a lowering operation
<input checked="" type="checkbox"/>	6.1.03 Construct a multiple-point anchor system
<input checked="" type="checkbox"/>	6.1.04 Construct a compound rope mechanical advantage system
<input type="checkbox"/>	6.1.05 Construct a fixed rope system
<input type="checkbox"/>	6.1.06 Direct the operation of a compound rope mechanical advantage system
<input type="checkbox"/>	6.1.07 Ascend a fixed rope in a high-angle environment
<input type="checkbox"/>	6.1.08 Descend a fixed rope in a high-angle environment
	Rope Technician
<input type="checkbox"/>	6.2.01 Complete an assignment
<input type="checkbox"/>	6.2.02 Manage the movement of the victim
<input type="checkbox"/>	6.2.03 Function as a litter tender
<input type="checkbox"/>	6.2.04 Direct a team (victim removal)
<input type="checkbox"/>	6.2.05 Direct a team (highline construction)
<input type="checkbox"/>	6.2.06 Direct a team (highline operation)
<input type="checkbox"/>	6.2.07 Access a victim
<input type="checkbox"/>	6.2.08 Isolate and manage potentially harmful energy sources
	Confined Space Operations
<input checked="" type="checkbox"/>	7.2.01 Initiate a Search Inside a Confined Space in those Areas Immediately Visible
<input checked="" type="checkbox"/>	7.2.02 Perform Size-up of a Confined Space
<input checked="" type="checkbox"/>	7.2.03 Conduct Monitoring of the Environment
<input checked="" type="checkbox"/>	7.2.04 Assess the Incident
<input checked="" type="checkbox"/>	7.2.05 Control Hazards
<input type="checkbox"/>	7.2.06 Apply and Use Self-Contained Breathing Apparatus (SCBA) as a Rescue Entrant
<input type="checkbox"/>	7.2.07 Apply and Atmospheric Respirator to a Victim
<input checked="" type="checkbox"/>	7.2.08 Perform Full Spinal Immobilization of a Victim Inside a Confined Space
<input type="checkbox"/>	7.2.09 Prepare for Entry into Horizontally Oriented Confined Space
<input type="checkbox"/>	7.2.10 Enter a Horizontally Oriented Confined Space for Rescue
<input type="checkbox"/>	7.2.11 Package a Victim in a Litter for Removal from a Horizontally Oriented Confined Space

DIVISION 12 TRT INSTRUCTOR GUIDE
LESSON PLAN

<input type="checkbox"/>	7.2.12 Assemble a Portable Anchor System for Application of a High Point of Attachment
<input checked="" type="checkbox"/>	7.2.13 Prepare for Entry into Vertically Oriented Confined Space
<input checked="" type="checkbox"/>	7.2.14 Enter a Vertically Oriented Confined Space for Rescue
<input type="checkbox"/>	7.2.15 Package a victim in a litter for removal from a horizontally oriented confined space
<input checked="" type="checkbox"/>	7.2.16 Access and Rapidly Remove a Victim from a Vertically Oriented Confined Space
<input checked="" type="checkbox"/>	7.2.17 Remove Entrants from a Confined Space
<input checked="" type="checkbox"/>	7.2.18 Terminate a Technical Rescue Operation
	Confined Space Technician
<input type="checkbox"/>	7.3.1 Initiate a Search Inside a Confined Space in those Areas Not Immediately Visible
<input type="checkbox"/>	7.3.2 Pre-Plan a Confined Space Incident
<input checked="" type="checkbox"/>	7.3.3 Apply and Use Supplied-Air Respirators (SARs) as a Rescue Entrant
<input type="checkbox"/>	7.3.4 Perform a Short Spinal Immobilization of a Victim Inside a Confined Space
<input checked="" type="checkbox"/>	7.3.5 Prepare for Entry into the Confined Space with a Hazardous Atmosphere
<input checked="" type="checkbox"/>	7.3.6 Enter a Confined Space with Atmospheric Hazards
	Trench Operations
<input type="checkbox"/>	8.1.01 Conduct a size-up
<input type="checkbox"/>	8.1.02 Implement a trench emergency action plan
<input type="checkbox"/>	8.1.03 Implement support operations
<input type="checkbox"/>	8.1.04 Support a nonintersecting straight wall trench
<input type="checkbox"/>	8.1.05 Terminate a technical rescue operation
<input type="checkbox"/>	8.1.06 Remove a victim from a trench
<input type="checkbox"/>	8.1.07 Disassemble support systems
	Trench Technician
<input type="checkbox"/>	8.2.01 Support an intersecting trench as a member of a team
<input type="checkbox"/>	8.2.02 Install supplemental sheeting and shoring for each two feet of depth below a shoring system
<input type="checkbox"/>	8.2.03 Construct load stabilization systems
<input type="checkbox"/>	8.2.04 Lift a load
<input type="checkbox"/>	8.2.05 Coordinate the use of heavy equipment
<input type="checkbox"/>	8.2.06 Release a victim from entrapment by components of a collapsed trench
	Structural Collapse Operations
<input type="checkbox"/>	6.2.01 Conduct a size-up of a light frame or unreinforced masonry (URM) collapsed structure
<input type="checkbox"/>	6.2.02 Determine potential victim locations in light frame and URM construction collapse incidents
<input type="checkbox"/>	6.2.03 Develop a collapse incident action plan
<input type="checkbox"/>	6.2.04 Implement a collapse rescue incident action plan
<input type="checkbox"/>	6.2.05 Search a light frame and URM constructed collapsed structure
<input type="checkbox"/>	6.2.06 Stabilize a collapsed light frame and URM construction structure

DIVISION 12 TRT INSTRUCTOR GUIDE
LESSON PLAN

<input type="checkbox"/>	6.2.07 Release a victim from entrapment
<input type="checkbox"/>	6.2.08 Remove a victim from a light frame and URM construction collapse incident
<input type="checkbox"/>	6.2.09 Lift a heavy load as a team member
<input type="checkbox"/>	6.2.10 Move a heavy load as a team member
<input type="checkbox"/>	6.2.11 Breach light frame and URM construction structural components
<input type="checkbox"/>	6.2.12 Construct cribbing systems
<input type="checkbox"/>	6.2.13 Inspect and maintain hazard-specific PPE
<input type="checkbox"/>	6.2.14 Inspect and maintain rescue equipment
<input type="checkbox"/>	6.2.15 Terminate an incident
	Structural Collapse Technician
<input type="checkbox"/>	6.3.01 Conduct a size-up of a collapsed heavy construction-type structure
<input type="checkbox"/>	6.3.02 Determine potential victim locations in a heavy construction-type incident
<input type="checkbox"/>	6.3.03 Develop a collapse rescue incident action plan
<input type="checkbox"/>	6.3.04 Implement a collapse rescue incident action plan
<input type="checkbox"/>	6.3.05 Search a heavy construction type collapsed structure
<input type="checkbox"/>	6.3.06 Stabilize a collapsed heavy construction type structure as a member of a team
<input type="checkbox"/>	6.3.07 Release a victim from entrapment by components of a heavy construction type collapse
<input type="checkbox"/>	6.3.08 Remove a victim from a heavy construction type collapse incident
<input type="checkbox"/>	6.3.09 Lift a heavy load as a team member
<input type="checkbox"/>	6.3.10 Move a heavy load as a team member
<input type="checkbox"/>	6.3.11 Breach heavy structural components
<input type="checkbox"/>	6.3.12 Construct cribbing systems
<input type="checkbox"/>	6.3.13 Stabilize a collapsed heavy construction type structure as a member of a team
<input type="checkbox"/>	6.3.14 Cut through structural steel
<input type="checkbox"/>	6.3.15 Coordinate the use of heavy equipment
	Vehicle Machinery Technician (VMT)
<input type="checkbox"/>	08.3.1 Create an Incident Action Plan for a Commercial or Heavy Vehicle
<input type="checkbox"/>	08.3.2 Stabilize Commercial / Heavy Vehicle
<input type="checkbox"/>	08.3.3 Determine the Heavy Vehicle Access & Egress Points
<input type="checkbox"/>	08.3.4 Create Access and Egress Points for Heavy Vehicle
<input type="checkbox"/>	08.3.5 Disentangle Victim(s)
<input type="checkbox"/>	08.3.6 Isolate and Mitigate Potentially Harmful Energy Sources
<input type="checkbox"/>	12.3.1 Plan for a large machinery incident
<input type="checkbox"/>	12.3.2 Stabilize large machinery
<input type="checkbox"/>	12.3.3 Determine large machinery access and egress points
<input type="checkbox"/>	12.3.4 Create access and egress openings for rescue from large machi
<input type="checkbox"/>	12.3.5 Disentangle victim(s)