



# Mississippi State Fire Academy

## Confined Space Rescue Operations Level Skill

**Objective:** NFPA 1006 7.2.5  
2017 Ed.

**Primary Task:**

Control Hazards of a Confined Space

### PERFORMANCE EVALUATIONS & INSTRUCTION SHEET

#### Performance Steps

1. The ability to utilize personal protective equipment;
2. Place scene control barriers.
3. Operate atmospheric monitoring equipment.
4. Use and confirm calibration of detection equipment and acquire representative samples of the space.
5. Ventilate a confined space.
6. Identify & isolate dangerous forms of energy.
7. Mitigate physical and atmospheric hazards.

#### INSTRUCTIONS TO THE CANDIDATE

The candidate, given a *Lock-Out / Tag-Out* tool kit, an air monitor(simulator), and a simulated hazardous condition shall perform the following tasks: 1. Demonstrate air monitoring sequence & state acceptable conditions. 2. Control designated hazardous energy affecting the space. 4. Apply appropriate Lock-Out device. 5. Apply appropriate Tag-Out tag with all required information. Verification that the hazards have been isolated and controlled

#### Air Monitoring & Sequence

Full Points- (all must apply)

- Given a calibrated air monitor, candidate shall demonstrate turning on air monitoring device in a clean, non hazardous atmosphere
- Candidate shall demonstrate fresh air "zero-out" calibration of the air monitoring device
- Candidate shall demonstrate general site and perimeter monitoring to establish protective zones
- Candidate shall demonstrate air monitoring in the correct order (Oxygen, Flammability, Toxicity)

#### Acceptable Entry Conditions

Full Points- (all must apply)

- Candidate demonstrates knowledge of the acceptable entry ranges (Oxygen-19.5% to 23.5%, Flammability-10% of LEL, Toxicity-PEL)
- Given a specific substance and proper reference material, candidate shall recognize and state the acceptable ranges and physical properties of said substance

#### Hazard Control & PPE Selection

Full Points- (all must apply)

- Candidate shall verbalize the need for ventilation
- Candidate shall verbalize selection of proper PPE as needed with regards to CPC
- Candidate shall verbalize selection of proper PPE as needed with regards to flash protective clothing, FR, turnouts, and provisions for a flammable atmosphere
- Candidate shall verbalize selection of proper level of respiratory protection
- Candidate shall demonstrate continuous air monitoring and document any changes in atmosphere
- Candidate shall verbalizes adequate decon plan for given product

#### Ventilation Plan & Procedure

Full Points- (all must apply)

- Candidate shall verbalize proper ventilation techniques as needed, based on confined space configuration and chemical properties of the given product (natural, positive, negative, combination, intrinsically safe, not short-circuited)
- Possible flammable gases are directed away sources of ignition
- Possible toxic gases are directed away responders and civilians

#### Application of Lock-Out Mechanism

Full Points- (all must apply)

- Candidate shall recognize and identify potential hazardous energy source
- Candidate shall perform the appropriate lock-out procedures in which applies to the given hazardous energy source
- Candidate fails to notify on site personnel of lock-out potential hazardous energy source

#### Application of Tag-Out Documents

Full Points- (all must apply)

- Candidate applies an appropriate tag-out device to the potential hazardous energy source
- Candidate chooses a tag-out device that is a clear warning to on site personnel
- Candidate chooses a tag-out device that is limited to one time use and ensures the potential hazardous energy source shall not be used until tag-out equipment has been removed

#### Verification of Control / Isolation

Full Points- (all must apply)

- Candidate verifies that all potential hazardous energy sources have been controlled with with the application of the chosen lock-out/tag-out device
- Candidate shall demonstrate continuous monitoring of equipment to ensure the applied lock-out/tag-out device is providing the level of safety needed

#### Safety Evaluation Criteria:

Full Points- (all must apply)

- Candidate's monitoring, ventilation, PPE selection, & LOTO ensures a safe operation