

## CONFINED SPACE ENTRY PROGRAM 901

### I. GENERAL COMPANY POLICY

Management is complying with the OSHA Confined Space Standard, 29 CFR 1910.146, and MDCIS Confined Space Standard, Part 90. The Confined Space Entry Program procedures will protect employees from injury or death when performing operations in or around confined spaces. This program applies to all work operations where employees must enter a confined space.

Copies of the written program may be obtained from Management and shall be maintained in the Health / Safety & Environment Manual. Management will be responsible for program review and necessary updates.

This program identifies confined spaces and establishes procedures for all affected employees according to their responsibilities under the program. All affected employees shall receive instructions for safe entry into confined spaces including, but not limited to; hazard evaluation, atmospheric testing, appropriate personal protective equipment, entrant, attendant, supervisor, and emergency/rescue procedures.

All affected employees shall be required to take an active role in this program. Management encourages all questions to provide clear understanding, safe work practices and involvement in the program.

### II. HAZARD EVALUATION FOR CONFINED SPACES

Management shall be responsible for conducting hazard evaluations to identify and list confined spaces.

#### Definitions

##### A. Confined Space

1. Is large enough and so configured that an employee can bodily enter and perform assigned work.
2. Has limited or restricted means for entry and exit.
3. Is not designed for continuous employee occupancy.
4. Any space so designated by the Company.

B. Permit - Required Confined Space. Has one or more of the following characteristics:

1. Contains or has the potential to contain a hazardous atmosphere
2. Contains a material that has the potential for engulfing an entrant
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section
4. Contains any other recognized serious safety or health hazard

C. Entry

Entry means 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.

D. Hazardous Atmosphere

Means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury or acute illness from one or more of the following causes:

1. Atmospheric Oxygen concentration below 19.5% or above 23.5%.
2. Flammable gas, vapor or mist in excess of ten percent (10%) of its Lower Explosive Limit (LEL) or Lower Flammable Limit (LFL).
3. Airborne combustible dust at a concentration that meets or exceeds its LEL.
4. Atmospheric concentration of any substance for which a dose or a Permissible Exposure Limit (PEL) is published in *Subpart G, Occupational Health and Environmental Control*, or in *Subpart Z, Toxic and Hazardous Substances*, of this part and which could result in employee exposure in excess of its dose or Permissible Exposure Limit.
5. Any other atmospheric condition that is immediately dangerous to life or health. (IDLH)

E. Immediately Dangerous to Life or Health (IDLH)

Means any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

#### F. Rescue

A means by which an individual removes unaided, extricated or is removed from danger or a hazard in the permit space.

There are three identified forms of rescue from a permit space.

1. *Self-Rescue*: The individual has the ability to escape from the permit space unaided.
2. *Non-Entry Rescue*: The use of retrieval system including a retrieval line, full body harness or wristlets, if appropriate, and lifting device or anchor so as to not enter the permit space to remove an individual.
3. *Rescue Service*: The personnel designated to enter the permit space to remove an individual.

*Note: In the unlikely event of an emergency and the individual is unable to exit the permit space unaided (self-rescue), the Attendant and responding Rescue Team shall exhaust all efforts to exercise non-entry rescue before subjecting the rescue team to the hazards of the space. Mechanical retrieval equipment is required to retrieve personnel from vertical type spaces more than (5) five feet deep.*

#### G. Alternate Entry Procedures (c)(5)(1)

An employer may use alternate entry procedures if, the employer can demonstrate that the only hazard posed by the space is an actual or potential hazardous atmosphere; and that continuous positive pressure forced air ventilation alone is sufficient to maintain the space safe for entry.

#### H. Reclassification to Non-Permit Required Space (c)(7)(1)

If the permit space poses no actual or potential atmospheric hazards, and if all the hazards within the space are eliminated without entry into the space, the permit space may be reclassified as non-permit required confined space for as long as the non atmospheric hazards remain eliminated.

### III. PREVENTING UNAUTHORIZED ENTRY

To provide a safe work environment and to prevent exposed employees from accidentally entering a permit space, management shall implement procedures to inform all employees of the existence, location, and danger posed by permit spaces. Confined Spaces and their associated hazards are also communicated to employees during safety training.

Each confined space shall be labeled with a sign reading " DANGER PERMIT REQUIRED CONFINED SPACE DO NOT ENTER " or similar language.

When entrance covers are removed, the opening to the space shall be promptly guarded by a railing, temporary cover, barrier tape or other temporary barrier that will prevent an accidental fall through the opening and will protect the employees working in the space from foreign objects entering the space.

#### IV. SAFE PERMIT SPACE ENTRY PROCEDURES

Entry Supervisors will be responsible for issuing entry permits and authorizing entry. The authorized permit must be complete and will remain at the site of entry throughout the duration of the entry. *(Please see Appendix A for a sample Confined Space Entry Permit.)*

Upon cancellation of the permit, the Entry Supervisor will secure the space and forward a copy of the canceled permit and any/all related documents to the main office to be maintained on file.

The Entry Supervisor will be responsible for ensuring that adherence to all provisions for safe entry operations have been met and accurately documented on the entry permit before authorizing entry.

The procedures to be followed for preparing, issuing and canceling entry permits include the following elements:

##### A. Pre-Entry Evaluation and Preparing Entry Permits

Before an entry may be authorized, the permit space must be evaluated to determine if conditions are safe for entry. The entry permit shall be complete and posted at the space opening. The procedures for permit space evaluation and completing the entry permit include, but are not limited to, the following:

1. Implement measures necessary to prevent unauthorized entry. Provide pedestrian, vehicle or other barriers to protect entrants from external hazards.
2. Identify and evaluate the hazards of the space before employees are permitted to enter. [Material Safety Data Sheet (MSDS), work to be performed, etc.]
3. Isolate the space. (Lock Out/Tag Out, etc.)
4. Implement the means, procedures, and practices necessary for safe permit space entry operations including, but not limited to, the following:
  - a. Specify acceptable atmospheric entry conditions before entry is permitted.
  - b. Use a calibrated direct-reading atmospheric monitoring instrument to test all areas of the space. (Note: atmospheric instruments shall detect O<sub>2</sub>, LEL, H<sub>2</sub>S and CO atmospheric hazards simultaneously.)

- c. Oxygen content must be between 19.5 % and 23.5 %
- d. Flammable gas, vapor or mist must be 10 % or less of its Lower Flammable Limit (LFL) or Lower Explosive Limit (LEL)
- e. Presence of Carbon Monoxide and/or Hydrogen Sulfide
- f. Certain operations may require additional atmospheric testing to identify hazards specific to the permit space to be entered.

*Note: Caution should be taken as to the type of work performed in permit spaces. Often the type of work performed in permit spaces promotes the potential to create hazardous atmospheres. (i.e. cleaning, pressure spraying, scraping, grinding, welding operations etc.)*

- g. Verify that acceptable atmospheric conditions are maintained in the permit space throughout the duration of an authorized entry. The Attendant shall be responsible for performing continuous atmospheric monitoring so long as someone remains inside the space. The atmospheric monitoring results shall be documented and recorded on the entry permit.
  - h. Provide each authorized entrant the opportunity to observe the pre-entry and subsequent atmospheric testing results. Re-evaluate the atmospheric test results of the space in the presence of an authorized employee if there is reason to believe that the evaluation of the space may not have been adequate.
  - i. Employees may enter a space that is identified as Immediately Dangerous to Life or Health (IDLH). If such a space is identified, it shall be noted on the entry permit and entry will be authorized only when the necessary provisions have been met for safe entry. Further, the IDLH hazard must be communicated to any contractor hired to perform entry.
5. Purge, inert, flush or ventilate the permit space as necessary to eliminate or control atmospheric hazards. (e.g., positive pressure forced air ventilation from a clean source)
  6. Designate and identify persons who are to have active roles in the entry operations and their assigned duties. Document on the entry permit by name (e.g., Authorized Entrants, Attendants, Entry Supervisor and Rescue Personnel)
  7. Provide at least one Attendant outside the permit space for the duration of the entry operations.
  8. Designate and identify the communication procedures used by authorized entrants and attendants to maintain contact during the entry.

(e.g., audio, visual, radio)

9. Designate and identify procedures for summoning rescue and emergency services personnel. *(Please see Appendix B Emergency/Rescue Procedures)*
10. Implement procedures to coordinate entry operations when contractors will be performing assigned work in the permit space simultaneously. *(Please see Section 11.0 Contractors)*
11. Provide the necessary equipment given the circumstances of the particular confined space in order to ensure employee safety and safe entry operations. *(Please see Section 5.0 Equipment for detailed description.)*
12. Identify any other information necessary for the protection of employees and safe entry operations.
13. Determine if permit space operations will require issuance of any additional permits such as HOT WORK PERMIT. *(Please see Policy for issuance of Hot Work Permit)*

#### B. Issuing Entry Permits

1. Before entry is authorized, preparing the permit space safe for entry shall be complete.
2. The Entry Supervisor identified on the permit shall sign the entry permit to authorize entry.
3. The completed permit shall be made available at the time of entry to all authorized employees by posting the permit at the space opening.
4. The duration of the entry permit may not exceed the time required to complete the job identified on the permit. Permits may be valid for up to twelve hours or shift change, whichever occurs first.

#### C. Canceling Entry Permits

The Entry Supervisor shall terminate entry and cancel the entry permit when:

1. The entry operations covered by the permit have been completed; or
2. A condition that is not allowed under the entry permit arises in or near the permit space.

#### D. Recordkeeping

1. Management shall retain each canceled entry permit for at least one year to facilitate review of the Permit Required Confined Space Program
2. A list of employees who have completed certification for Authorized

Entrant, Attendant, Entry Supervisor and Rescue level training shall be available and maintained on file.

## V. EQUIPMENT

Management will provide the necessary equipment to all employees who work in permit spaces. The equipment provided may include, but is not limited to, the following:

- A. Atmospheric testing and monitoring equipment
- B. Ventilation equipment
- C. Communications equipment
- D. Personal protective equipment
- E. Respiratory protection equipment
- F. Safe lighting equipment
- G. Barriers/shields as required
- H. Retrieval systems, tripod, harnesses, wristlets, ladders for safe ingress/ egress

*Note: A full body harness is required to be worn by all entrants who enter a confined space. A lifeline must be worn by each entrant during all entries into a confined space except where there is equipment or configuration that would entangle the lifeline or where the line creates a greater hazard. This exception must be approved by the Management prior to authorizing entry. Mechanical retrieval equipment is required to retrieve personnel from vertical type spaces more than (5) five feet deep.*

- I. Rescue and emergency equipment
- J. Any other equipment necessary for safe entry.

Management will maintain all equipment in working condition. All defective equipment shall be removed from service and reported to your Supervisor immediately. Training and proficiency drills will ensure that all affected employees obtain the knowledge and skills necessary to properly select and use confined space equipment.

Before entry is authorized, it shall be the responsibility of the Entry Supervisor identified on the permit to ensure that all equipment necessary for safe entry operations and rescue is available, operational and used properly.

## VI. Duties: Authorized Entrants

Employees who have successfully completed training and are authorized to enter permit spaces (Authorized Entrants) are assigned specific duties and responsibilities under the permit space program. Their duties and responsibilities include, but are not limited to, the following:

- A. Know the hazards that may be faced during entry including information on the modes, signs or symptoms and consequences of the exposure. (e.g., MSDS)
- B. Properly use all equipment as necessary for safe permit space operations.
- C. Communicate with the Attendant as necessary to enable the Attendant to monitor Entrant status and to enable the Attendant to alert Entrants of the need to evacuate should they detect a prohibited condition. (e.g., audio, visual, radio)
- D. Alert the Attendant whenever the Entrant recognizes any warning sign or symptom of exposure to a dangerous situation or the Entrant detects a prohibited condition.
- E. Exit from the permit space as quickly as possible whenever:
  - 1. an order is given to evacuate by the Attendant or Entry Supervisor;
  - 2. the Entrant recognizes any warning sign or symptom of exposure;
  - 3. detects a prohibited condition, or;
  - 4. an alarm to evacuate has been activated.
- F. Performs no tasks beyond those covered by the permit.
- G. Participates in the Lock Out/Tag Out Energy Control Program

## VII. DUTIES: AUTHORIZED ATTENDANTS

Employees who have successfully completed training and have been designated as authorized permit space Attendants are assigned specific duties and responsibilities under the permit space program. Their duties and responsibilities include, but are not limited to, the following:

- A. Know the hazards that may be faced during entry including information on the modes, signs or symptoms and consequences of the exposure. (e.g., MSDS)
- B. Is aware of possible behavioral effects of hazard exposure in Authorized Entrants.
- C. Continuously maintains an accurate count of Authorized Entrants.

- D. Remains outside the permit space until relieved by another qualified Attendant.
- E. Communicates with Authorized Entrants as necessary to monitor Entrant status and alarm Entrants of the need to evacuate if they detect a prohibited condition. (e.g., audio, visual, radio)
- F. Alarm Entrants to evacuate the space immediately if:
  - 1. prohibited condition is detected;
  - 2. Entrants show the effects of over exposure;
  - 3. a situation outside the space could endanger the Entrants or;
  - 4. you cannot effectively and safely perform all required duties.
- G. Warn unauthorized persons that they must stay away from the permit space.
- H. Summon Rescue and Emergency Services as soon as the Attendant determines the Authorized Entrants may need assistance to escape the permit space.
- I. Performs non-entry rescue as specified in the rescue emergency plan for that space.
- J. Monitor and record atmospheric testing levels at regular intervals throughout the duration of the entry.
- K. Performs no other duties that might interfere with the primary duty to monitor and protect the Authorized Entrants.
- L. Participates in the Lock Out/Tag Out Energy Control Program

#### VIII. DUTIES: ENTRY SUPERVISORS

Employees who have successfully completed training and have been designated as permit space Entry Supervisors are assigned specific duties and responsibilities under the permit space program. Their duties and responsibilities include, but are not limited to, the following:

- A. Know the hazards that may be faced during entry including information on the mode, signs or symptoms and consequences of the exposure.
- B. Verifies, by checking:
  - 1. that the appropriate entries have been made on the permit,
  - 2. that all tests specified by the permit have been conducted, and

3. that all procedures and equipment specified by the permit are in place before endorsing the permit and authorizing entry.
- C. Terminates the entry and cancels the permit when the task is complete, the entry permit expires or when a prohibited condition is detected.
  - D. Verifies that Rescue Services are available and that the means for summoning them are operable. Assures proper retrieval/rescue equipment is available.
  - E. Removes unauthorized individuals who enter, or attempt to enter, the permit space during entry operations.
  - F. Determines whenever responsibility for a permit space entry operation is transferred that the entry operations remain consistent with the terms of the entry permit.
  - G. As the Entry Supervisor you must vacate the space immediately if there are any prohibited entry conditions detected including, but not limited to:
    1. The diagram and/or procedure do not match the confined space;
    2. Air monitoring device is non-functional;
    3. Required equipment is not present or non-functional;
    4. Air contaminant(s) exceed acceptable entry conditions;
    5. Conditions arise outside the scope of the entry permit;
    6. Failure of Lock Out/Tag Out, Line Breaking etc.;
    7. Attendant is not present;
    8. Entrants show the effects of exposure;
    9. A situation outside the space could endanger the entrants.
  - H. Entry supervisor must ensure that the means for summoning Rescue Services are operable and know the best route for Rescue Services to reach the confined space.

## IX. DUTIES: RESCUE AND EMERGENCY SERVICES

Before entry is authorized, it will be the responsibility of the Entry Supervisor to make all necessary provisions for emergency rescue. Rescue trained employees are assigned specific duties and responsibilities under the permit space program. Their duties and responsibilities include, but are not limited to, the following:

All qualified rescue level employees are trained at a minimum to Authorized

Entrant level. Rescue level employees also have additional knowledge, skills and have developed proficiency in the areas of:

- A. Know the hazards that may be faced during entry including information on the mode, signs or symptoms, and consequences of the exposure. (e.g., MSDS)
- B. Developed rescue plans for specific permit space(s) to enable the rescue team the capability to reach victim(s) within a time frame that is appropriate for the permit space hazard(s). Upon assessing the permit space and developing a rescue plan, the designated Rescue Personnel shall sign the entry permit.
- C. Trained, equipped for and proficient in performing rescue(s) for specific permit spaces.
- D. Provided all necessary Personal Protective Equipment.
- E. Respiratory Protection Certified.
- F. Ambient air instrument testing qualified.
- G. Ventilation training.
- H. Basic First Aid & Cardiopulmonary Resuscitation (CPR) certified. (At least one member of the team holding current certification.)
- I. Rescue Equipment Training (self-rescue, non-entry rescue, rescue team) harnesses, wristlets, lifelines, tripods, mechanical retrieval winches, packaging equipment, etc.
- J. All rescue team employees practice making permit space rescues at least annually from actual permit spaces or representative permit spaces with respect to opening size, configuration and accessibility. Management shall be responsible for providing rescue and emergency training.

Management shall develop specific protocol and procedures for establishing and summoning in-house rescue trained employees in the unlikely event of a confined space emergency/rescue situation. *(Please see Appendix B for a detailed outline of emergency / rescue procedures.)*

#### X. TRAINING PROGRAM

Confined Space Entry training shall be provided to all affected employees. The training program is organized and presented to include lecture, audiovisual and hands-on practical equipment training. To successfully complete training, an employee must acquire the understanding, knowledge and skills necessary for the safe performance of their duties. Upon successful completion of training employees will receive a certificate that will contain the employee's name, signature of the trainer and the expiration date. All training programs shall be documented and remain on file. *(Please contact Management for a list of employee training for Entrant, Attendant, Entry Supervisor and Emergency Rescue*

*level qualification/certification.)*

The level of Confined Space Entry training that an employee receives will be determined by his/her role under the Confined Space Program.

The levels of training are as follows:

- Confined Space Level I (Awareness)
- Confined Space Level II (Entrant, Attendant, Entry Supervisor)
- Confined Space Level III (Rescue)

Note: Certified Level III Rescue training is inclusive of Level II training. *(Please see Section 9.0, Rescue and Emergency Services.)*

Re-training will be provided to all affected employees whenever there is a change in duties or responsibilities that present a new hazard that would render previous training obsolete. Or, if there is reason to believe that an employee does not demonstrate comprehension and understanding from previous training, re-training will be provided.

#### XI. MULTIPLE EMPLOYER ENTRY PROCEDURES (CONTRACTORS)

When outside employers/contractors enter to work in permit spaces, Management will coordinate entry and work operations following these procedures:

- A. When Management arranges to have employees of another employer (contractor) perform work that involves permit space entry, Management will require the contractor, at a minimum, to conform to the policies and procedures outlined in the OSHA 29CFR 1910.146 Confined Space Entry standard.
- B. Management shall inform contractor that permit spaces are present, the hazards associated with these spaces and that entry is allowed only through compliance with the OSHA Permit Required Confined Space Entry standard.
- C. Management shall inform the contractor of any precautions or procedures that have been implemented for the protection of employees in or near permit spaces where contract personnel will be working.
- D. Management shall coordinate entry operations with the contractor when both company employees and contractor employees will be working in or near confined spaces simultaneously.
- E. Contractors shall be responsible for providing provisions for confined space entry including rescue/emergency services for their employees. Provisions for rescue and emergency services must be in place and the means for summoning them available prior to authorizing entry.
- F. Management shall debrief the contractor at the conclusion of the entry

operations regarding the confined space program/procedures followed and communicate any hazards confronted or created in permit spaces during entry operations.

## XII. POST-OPERATIONS PROCEDURES

Upon the completion of work in a permit space, it will be the responsibility of the Entry Supervisor to close off the space and cancel the permit. At that time, he/she will forward a copy of the canceled permit to be maintained on file.

The Entry Supervisor shall debrief the crew at the conclusion of the entry operations regarding the confined space program and procedures followed and communicate any hazards confronted or created in the confined space during entry operations. The debriefing will provide valuable information that will be utilized to further strengthen the Permit Required Confined Space Entry Program.

## XIII. REVIEW-PROCEDURES

To ensure that all employees participating in entry operations are protected from confined space hazards, Management will review the Permit Required Confined Space Entry Program annually. The program review will include an evaluation of canceled permits and any/all related documents from the previous twelve months.

## XIV ENFORCEMENT

Constant awareness and respect for confined space entry hazards and compliance with all safety rules is a condition of employment. Management reserves the right to issue disciplinary warnings up to, and including, termination for failure to follow the guidelines of this policy.

## XV APPENDIX

Appendix A. Sample Entry Permit and Monitor Record

Appendix B. Sample Emergency/Rescue Procedures

# CONFINED SPACE ENTRY PERMIT

Date: \_\_\_/\_\_\_/\_\_\_ Shift Authorized: \_\_\_\_\_ Time: \_\_\_\_\_ AM/PM  
 Purpose of Entry: \_\_\_\_\_ Location: \_\_\_\_\_

Reason Permit was canceled: \_\_\_\_\_ Time: \_\_\_\_\_ AM/PM

## VESSEL PREPARATION:

**COMPLETE ALL OF THE FOLLOWING ITEMS BY CIRCLING: YES, NO, OR NOT APPLY (N/A)**

Work area isolated & secure	Y	N	N/A	All energy sources locked / tagged out	Y	N	N/A
Lines/vessel inert, purge & flush	Y	N	N/A	Continuous forced air ventilation	Y	N	N/A
Temperature below 120 F	Y	N	N/A	All electrical devices safe (GFCI)	Y	N	N/A
All power tools & cords inspected	Y	N	N/A	Intrinsically safe lighting (GFCI)	Y	N	N/A
Harness (wristlets) & lifeline	Y	N	N/A	Mechanical retrieval equipment (> 5 ft.)	Y	N	N/A
MSDS available	Y	N	N/A	Required PPE	Y	N	N/A
Chemical protective clothing	Y	N	N/A	Self contained breathing apparatus on-site	Y	N	N/A
Hot work permit issued	Y	N	N/A	Fire extinguisher on-site	Y	N	N/A
Emergency Rescue Equip. on-site	Y	N	N/A	Other: _____			

Method of communication: \_\_\_\_\_ Nearest Phone: \_\_\_\_\_

## ATMOSPHERIC MONITORING:

Note: Record results of atmospheric monitoring, entry is authorized ONLY if results are within acceptable entry conditions. Continuous air monitoring results are listed on the reverse side. **Continuous air monitoring shall be provided so long as someone remains inside the space to ensure that acceptable entry conditions are maintained. In the event of an alarm, immediately exit the space.**

Instrument used: \_\_\_\_\_ Date last calibrated: \_\_\_\_\_  
 Test taken by: \_\_\_\_\_ Initial test time: \_\_\_\_\_ AM/PM

(O2) OXYGEN CONTENT BETWEEN 19.5% - 23.5%	RESULTS: _____
(LEL) FLAMMABLE GAS, VAPOR OR MIST 10% OR LESS OF LEL	RESULTS: _____
(H2S) HYDROGEN SULFIDE AT LESS THAN 10 PPM (TWA)	RESULTS: _____
(CO) CARBON MONOXIDE AT LESS THAN 35 PPM (TWA)	RESULTS: _____

## ENTRY TEAM MEMBERS:

AUTHORIZED ENTRANTS:	AUTHORIZED ATTENDANTS:	EMERGENCY RESCUE:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Means for summoning Emergency Rescue Personnel: AT SITE / OFF SITE \_\_\_\_\_

**ENTRY SUPERVISOR:** \_\_\_\_\_ EMERGENCY 911  
 \_\_\_\_\_ REPORT FIRE 911  
 Radio Number: \_\_\_\_\_ SAFETY DEPT. 911

Upon completion of work in a permit space the Entry Supervisor shall close off the space and cancel the permit at which time, he/she will forward a copy of the canceled permit to be maintained on file for one (1) year. (Rev.10/00)

<b>Gas Vapor / hour</b>	0	15	30	45	0	15	30	45	0	15	30
O2 OXYGEN (%)											

LEL Flamm/Combustible (%)

CO Carbon Monoxide (ppm)

H2S Hydrogen Sulfide (ppm)

Other

<b>Gas Vapor / hour</b>	0	15	30	45	0	15	30	45	0	15	30
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O2 OXYGEN (%)

LEL Flamm/Combustible (%)

CO Carbon Monoxide (ppm)

H2S Hydrogen Sulfide (ppm)

Other

<b>Gas Vapor / hour</b>	0	15	30	45	0	15	30	45	0	15	30
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O2 OXYGEN (%)

LEL Flamm/Combustible (%)

CO Carbon Monoxide (ppm)

H2S Hydrogen Sulfide (ppm)

Other

## CONFINED SPACE EMERGENCY/RESCUE PROCEDURES

(Sample)

- A. The following procedures are standard protocol for summoning emergency/rescue services personnel.
1. Dial **911** to alert the emergency. Notify the EMS Personnel with your exact location and as detailed information as available.
  2. Upon notification, **All other occupied confined spaces will be immediately vacated.**
  3. Rescue Personnel will immediately respond to the emergency.
  4. EMS will be received upon arrival at the site and escorted to the emergency site.
  5. The Rescue personnel will take all necessary precautions to enact a successful rescue.
  6. The Rescue personnel will be responsible for selection of necessary equipment for rescue.
  7. The Rescue personnel will exercise all provisions to provide for non-entry rescue.
  8. Upon removing the patient from the space, the EMS will take over patient care.
  9. All rescue personnel will be removed from the space. The permit for the space will be cancelled. The space will undergo a complete evaluation and investigation. The space may not be re-entered until the investigation is complete and all hazards have been eliminated.
  10. All required documentation shall be completed immediately following the incident. These documents shall include specific information concerning the patient, the space and rescue procedures.
  11. Management, if not already on-site, will be contacted immediately to ensure that all necessary documentation is being promptly completed.

### III. CONTRACTORS

- A. *Contractors shall be required to provide all provision for confined space rescue for their employees.*
- B. *Understanding and communication of the above procedures must be clearly defined by all affected personnel before entry may be authorized.*