

4123:1-5-22 Appendix

Recommended Procedures for Confined Space Entry

- (1) Designate at least one trained person to be responsible for adherence to entry procedures and require written approval by that person before permitting anyone to enter the confined space;
- (2) Post established entry procedures immediately adjacent to all confined space entry ports; other acceptable areas for posting would include the lid of the storage container or to post requirements for respiratory or testing equipment on crew trucks;
- (3) Provide periodic instruction and training in proper entry procedures to be used;
- (4) Standby personnel where provided shall be required at all times to be in communication with the worker within the confined space; an alarm or two-way radio system for the standby worker will be effective;
- (5) Approved rescue equipment should be available; since entry ports for confined spaces vary in size, precaution should be used in obtaining equipment of a proper size;
- (6) Establish procedures to prevent ignition of combustible atmospheres or re-entry of gases or liquids by locking out switches and blanking off transmission pipes; use nonsparking tools;
- (7) Prevent generation of contaminants by neutralizing or flushing out residual materials;
- (8) In testing for contaminants use only approved instruments maintained in proper working order;
- (9) Continual monitoring of oxygen and contaminant concentrations during occupancy;
- (10) If respiratory equipment is supplied by an air compressor piped system, this system shall meet the specifications of the "Compressed Gas Association," to assure a supply of uncontaminated air;
- (11) When supplied-air or self-contained respiratory apparatus is used, personnel should be trained in the proper use of such apparatus;
- (12) Many employers use tags to show that a confined space may be entered safely. An example of such a tag is as follows:

ENTRY PERMIT

PERMIT VALID FOR 8 HOURS ONLY. ALL COPIES OF PERMIT WILL REMAIN AT JOB SITE UNTIL JOB IS COMPLETED.

DATE: - - SITE LOCATION and DESCRIPTION _____

PURPOSE OF ENTRY _____

SUPERVISOR(S) in charge of crews Type of Crew Phone#

COMMUNICATION PROCEDURES _____

RESCUE PROCEDURES (PHONE NUMBERS AT BOTTOM) _____

*** BOLD DENOTES MINIMUM REQUIREMENTS TO BE COMPLETED AND REVIEWED PRIOR TO ENTRY***

REQUIREMENTS COMPLETED	DATE	TIME
Lock Out/De-energize/Try-out	_____	_____
Line(s) Broken-Capped-Blanked	_____	_____
Purge-Flush and Vent	_____	_____
Ventilation	_____	_____
Secure Area (Post and Flag)	_____	_____
Breathing Apparatus	_____	_____
Resuscitator – Inhalator	_____	_____
Standby Safety Personnel	_____	_____
Full Body Harness w/"D" ring	_____	_____
Emergency Escape Retrieval Equip	_____	_____
Lifelines	_____	_____
Fire Extinguisher	_____	_____
Lighting (Explosive Proof)	_____	_____
Protective Clothing	_____	_____
Respirator(s) (Air Purifying)	_____	_____
Burning and Welding Permit	_____	_____

Note: Items that do not apply enter N/A in the blank.

****RECORD CONTINUOUS MONITORING RESULTS EVERY 2 HOURS**

CONTINUOUS MONITORING** Permissible _____

TEST(S) TO BE TAKEN	Entry Level	
PERCENT OF OXYGEN	19.5% to 23.5%	___ ___ ___ ___ ___ ___ ___
LOWER FLAMMABLE LIMIT	Under 10 %	___ ___ ___ ___ ___ ___ ___
CARBON MONOXIDE	+ 35 PPM	___ ___ ___ ___ ___ ___ ___
Aromatic Hydrocarbon	+ 1 PPM * 5PPM	___ ___ ___ ___ ___ ___ ___
Hydrogen Cyanide	(Skin) * 4PPM	___ ___ ___ ___ ___ ___ ___
Hydrogen Sulfide	+ 10PPM *15PPM	___ ___ ___ ___ ___ ___ ___
Sulfur Dioxide	+ 2PPM * 5PPM	___ ___ ___ ___ ___ ___ ___
Ammonia	*35PPM	___ ___ ___ ___ ___ ___ ___

* Short-term exposure limit: Employee can work in the area up to 15 minutes.
 * 8 hr. Time Weighted Avg.: Employee can work in area 8hrs (longer with appropriate respiratory protection).

REMARKS: _____

GAS TESTER NAME & CHECK #	INSTRUMENTS(S) USED	MODEL &/OR TYPE	SERIAL &/OR UNIT #
_____	_____	_____	_____
_____	_____	_____	_____

SAFETY STANDBY PERSON IS REQUIRED FOR ALL CONFINED SPACE WORK

SAFETY STANDGY PERSON(S)	CHECK #	CONFINED SPACE ENTRANT(S)	CHECK#	CONFINED SPACE ENTRANT(S)	CHECK#
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

SUPERVISOR AUTHORIZING – ALL CONDITIONS SATISFIED _____

DEPARTMENT/PHONE _____

AMBULANCE 2800 FIRE 2900 SAFETY 4901 Gas Coordinator 4529/5387

(13) Emergency rescue procedures.

(a) In all cases when an employee is stationed outside a compartment, tank, or a confined space, as tender or standby person for the employees working inside, the employee shall have immediately available for emergency use all necessary personal protective equipment. The tender or standby person shall wear the personal protective equipment if he is exposed to the hazard.

(b) When an employee enters a toxic or flammable atmosphere, the employee shall be provided with and use an adequate, attended lifeline.