

Revision Responsibility: Director of Facility Services and Safety

Responsible Executive Officer: Vice President for Financial & Administrative Services

Source / Reference: 29 CFR 1910.146

PURPOSE

The purpose of this written program is to establish the Columbia State Community College policies, procedures and responsibilities for the implementation and management of the Confined Space Program for site employees, visitors, and contractors. This program is intended to satisfy the Occupational Safety and Health Administration (OSHA) requirements for a written Confined Space Entry Program as is required in 29 CFR 1910.146.

POLICY

- I. Site Confined Space Evaluation
 - A. The director of Facility Services and Safety shall evaluate all spaces located on all campuses which meet the criteria of confined space to determine if permit-required confined spaces exist.
 - B. A copy of this written hazard evaluation is maintained by the director of Facility Services and Safety.
- II. Preventing Unauthorized Entry
 - A. Columbia State Community College has placarded all permit-required confined spaces except for utility manholes and storm sewers.
 - B. Employees will be informed through additional training that all utility manholes and storm sewers are permit-required confined spaces, which must not be entered without following the established rules found in this procedure.
 - C. All employees and contractors will be informed of the presence of these confined spaces and will be instructed not to enter these spaces without proper training and following site procedures.

III. Safe Permit and Entry Operations

- A. Columbia State has decided that College employees will not enter any permit-required confined spaces unless these spaces are reclassified as non-permit-required confined spaces as is allowed in 29 CFR 1910.146(c)(7).
- B. Acceptable Entry Conditions - acceptable entry conditions for entry into a reclassified confined space is defined in Table 1.

Table 1. Acceptable Entry Conditions

Hazard	Acceptable Entry Parameter
Oxygen	Between 19.5%-23.5%
Flammable gasses	< 10% of lower explosive level (LEL)
Hydrogen sulfide (H ₂ S)	< 10 ppm
Carbon monoxide (CO)	< 35 ppm
Other toxic substances	< PEL for substance
Flammable dusts	Visibility > 5 ft.
Engulfment hazards	None present
Hazardous flows	Secured and locked/tagged out
Hazardous energies	Secured and locked/tagged out
External hazards	Controlled

If minimum conditions are not met, entry is prohibited. If occupied, the space should be immediately evacuated.

- C. Observation of Monitoring - Each authorized entrant or that employee's authorized representative are provided with the opportunity to observe any monitoring or testing of spaces.
- D. Barriers - Columbia State will install barricades or barriers as necessary to protect entrants from external hazards.

IV. Provision of Equipment

In order ensure safe entry into confined spaces, Columbia State will provide the following equipment to allow reclassification of the confined space.

- A. Testing and monitoring equipment.
- B. Radio equipment for communication when necessary.
- C. Personal protective equipment as required by the hazards inside the space.
- D. Lighting equipment.

- E. Barriers and shields to be placed around the space when pedestrian and vehicle hazards exist.
- F. Ladders required for ingress and egress from the space.

V. Evaluating Space Conditions

- A. In order to reclassify a permit-required confined space, the gas detector will be prepared by ensuring the device has been recently calibrated (check manual for frequency) and is in good working order.
- B. Conduct a "bump test" of the gas detector.
- C. Sample the air quality of the space by slightly moving the lid, or by testing the space through the hole in the lid (if available) before completely opening the space.
- D. Lower the probe slowly, allowing time for the instrument to detect atmospheric changes at different vertical heights within the space.
- E. Measure in the following order:
 - 1. Oxygen
 - 2. Lower Explosive Limit (LEL)
 - 3. Hydrogen Sulfide (H₂S)
 - 4. Carbon Monoxide (CO)
- F. Record the results on the Declassification of Permit-Required Confined Space Form.
- G. The gas detector shall remain on during the entire entry operation and shall be regularly inspected by the Attendant. The Attendant shall also record the gas readings on the permit at a minimum of one (1) hour intervals.
- H. The entry shall be immediately terminated if any of the parameters listed in Table 1 of this document are not maintained.

VI. Provision of Attendant

- A. Columbia State will provide at least one attendant outside the reclassified space into which entry is authorized for the duration of entry operations.
- B. Columbia State will not allow an attendant to monitor multiple spaces for each space entered by Columbia State employees.

VII. Identification of Entrants, Attendants, and Supervisors

- A. Columbia State has identified the following personnel as employees requiring training as an Entrant.
 - 1. Facility Services and Safety Director
 - 2. Maintenance Director
 - 3. Chief of Security
 - 4. Maintenance Utility Worker
 - 5. Utility/Grounds Worker
 - 6. Maintenance Mechanic

- B. Columbia State has identified the following personnel as employees requiring training as an Attendant.
 - 1. Facility Services and Safety Director
 - 2. Maintenance Director
 - 3. Chief of Security
 - 4. Maintenance Utility Worker
 - 5. Utility/Grounds Worker
 - 6. Maintenance Mechanic

- C. Columbia State has identified the following personnel as employees requiring training as an Entry Supervisor.
 - 1. Facility Services and Safety Director
 - 2. Maintenance Director
 - 3. Chief of Security

VIII. Preparation, Issuance, Use & Cancellation of Reclassification Forms

- A. A review of all of the hazards of the space identified in the confined space evaluation shall be conducted by the Entry Supervisor.

- B. The Entry Supervisor shall determine if additional hazards not identified in the confined space evaluation exists. If additional hazards exist, the Entry Supervisor shall notify the director of Facility Services and Safety to have the evaluation updated.

- C. The Entry Supervisor shall determine if the hazards can be eliminated without entry into the space.

- D. If all hazards cannot be eliminated without entry into the space, the space must be treated as a permit-required confined space entry and the space cannot be entered by Columbia State employees.

- E. Once all steps have been successfully implemented, the Entry Supervisor shall document the declassification on a Certification of Declassification of Permit-Required Confined Space Form, which is included as Appendix A to this document.
- F. A copy of the Declassification of Permit-Required Confined Space Form shall be posted on site to document that the space is being entered as a confined space, and a copy of the form shall be submitted to the director of Facility Services and Safety for retention.
- G. Each entry will require an Entry Supervisor, Attendant, and Entrant.
- H. When a potential atmospheric hazard exists, monitoring must be conducted in the confined space prior to entry.
- I. After completion of the entry, the Attendant shall submit this declassification form to the director of Facility Services and Safety.
- J. A confined space can only be reclassified for one shift maximum. Following the one shift, a reevaluation must be conducted to ensure that the reclassification is still correct.
- K. If during the entry a hazard arises within the reclassified space, each Entrant shall exit the space, and the Entry Supervisor shall reevaluate the space and determine whether it must be reclassified as a permit-required space.

IX. Coordination of Entry Operations Between Employers

The Entry Supervisor will coordinate with any contractors onsite if any contractor employees shall enter the confined space with Columbia State employees to ensure that the contractor's employees shall not perform any work exercises which would preclude the space from being reclassified as a non-permit-required confined space.

X. Concluding the Entry

- A. Once the entry is completed, the Entry Supervisor shall verify that all Entrants have left the space and that all equipment and supplies are accounted for. The Entry Supervisor shall also check any gaskets or seals for damage and secure all openings.
- B. Use the Certification of Declassification of Permit-Required Confined Space Form to identify any locked-out/tagged-out or isolated equipment and return it to its normal operating condition.
- C. Clean and inspect all entry equipment. Any items that were damaged during entry should be removed from service and repaired or replaced.
- D. Return equipment to its proper storage place.

- E. Make notes on the Certification of Declassification of Permit-Required Confined Space Form concerning any problems encountered during entry, or suggestions that would improve the program.
- F. Close and properly file the entry permit.
- G. Completed permits must be kept for one year and used to evaluate this program.

XI. Review of Entry Procedures

- A. To ensure that all employees participating in entry operations are protected from permit-required space hazards, Columbia State will review the Certification of Declassification of Permit-Required Confined Space forms on a regular basis.
- B. The retained canceled permits from the past twelve months will be used to revise the program as necessary.
- C. Columbia State will perform a single annual review covering all entries performed during a twelve-month period.
- D. This review will be documented by the director of Facility Services and Safety on the Confined Space Audit Form, which is provided in Appendix B.
- E. If no entry is performed during a twelve-month period, no review will be performed.

XII. Contractor Confined Space Work

- A. Columbia State will provide all contractors with general safety information including information about the campus containing permit-required spaces and that permit-required space entry is allowed only through compliance with a permit-required space program meeting the requirements of this section and the OSHA requirements.
- B. The contractor will be required to provide Columbia State with proof that they have received proper training and have a written program prior to entering a confined space.
- C. At the contractor's request Columbia State will inform the contractor of the elements that make the space in question a permit-required space, including the hazards identified and Columbia State's experience with the space.
- D. Columbia State will inform the contractor of any precautions or procedures that Columbia State has implemented for the protection of employees in or near permit-required spaces where contractor personnel will be working.
- E. Columbia State will debrief the contractor at the conclusion of the entry operations regarding the permit-required space program followed and regarding any hazards confronted or created in permit-required spaces during entry operations.

XIII. Training Program

- A. Every employee at Columbia State who faces the risk of confined space entry will be provided with training so that each designated employee acquires the understanding, knowledge and skills necessary for the safe performance of the duties assigned to them.
- B. The director of Facility Services and Safety shall conduct confined space training.
- C. All training related materials and documents shall be kept by the director of Facility Services and Safety.
- D. Training will be conducted:
 - 1. Before the employee is first assigned to duties covered under this procedure;
 - 2. Before there is a change in assigned duties;
 - 3. Whenever there is a change in permit-required space operations that presents a hazard about which an employee has not previously been trained;
 - 4. Whenever the Entry Supervisor or director of Facility Services and Safety believes that there are deviations from the entry procedures;
 - 5. Retraining will be conducted at a minimum every three years.