



UNIVERSITY OF VIRGINIA

**OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY**

5255 Hampton Blvd. Spong Hall, suite 2501 Norfolk, Virginia 23529

Phone: (757) 683-4495 Fax: (757) 683-6025

*Occupational Safety & Health Environmental Health Laboratory Safety Industrial  
Hygiene Radiation Safety Hazardous Waste Pollution Prevention*

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# Confined Space Entry Program

Environmental Health and Safety Office

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# Responsibilities

## **The Administration will:**

- Support the requirements of this program
- Ensure funding is available for the administration, implementation, operation, and maintenance of this program

## **The Environmental Health and Safety Office will:**

- Oversee this program
- In cooperation with the departments, assist in the identification of confined spaces
- In cooperation with the departments, assist in the evaluation of confined space hazards
- In the event of a disagreement in classifying a confined space, be the final authority in determining which confined spaces will be designated as permit-required confined spaces
- Post danger signs on permit spaces
- Maintain records according to **Section XIII** of this program
- Coordinate and supervise annual training of all employees involved in confined space work
- Oversee and spot check entry conditions and ensure hazards are properly controlled
- Designate entry supervisors and arrange training to certify them
- Coordinate with the Norfolk Fire Department for provision of confined space rescue services
- Ensure testing equipment is calibrated according to the manufacturer's recommended calibration schedule
- Review terminated entry permits and debriefs from permit-required confined space entries.
- Review and update this program as necessary

## **The Department will:**

- Identify, in writing to the EHSO, employees authorized to work in confined spaces
- Ensure all employees involved in confined space work attend initial training and annual refresher training
- Maintain University's and contractor's terminated entry permits for review by the EHSO
- In cooperation with the EHSO, assist in the identification of confined spaces
- In cooperation with the EHSO, assist in the evaluation of confined space hazards
- Notify the EHSO when work is being conducted in a permit-required confined space
- Ensure the proper equipment (PPE, testing, retrieval, etc.) is available for employees working in permit-required confined spaces
- Coordinate with contractors as specified in **Section V**

**The Entry Supervisor will:**

- Attend initial training and annual refresher training
- Ensure that all entrants and attendants have received training prior to assigning duties in permitted spaces
- Ensure that the appropriate information is included on the entry permit
- Ensure all tests specified by the permit have been conducted
- Ensure that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin
- Terminate entries and cancel the permit when either the entry operations have been completed or a condition that is not allowed under the entry permit arises
- Remove unauthorized entrants
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- Attend initial training and annual refresher training
- Maintain communication with the attendant as necessary during a permit entry
- Alert the attendant when a dangerous or prohibited condition exist
- Evacuate a permit-required confined space when ordered to do so by the entry supervisor or attendant
- Review work procedures, that will take place in a non-permit required confined space, with the entry supervisor before entry
- Properly use assigned PPE

**The Contractor working in a University permit-required confined space will:**

- Request written information from the department regarding permit-required confined space hazards in and about their intended work area and provide the department written acknowledgment of the information provided
- Coordinate entry operations with the department when they are working with University employees in or near permit-required confined spaces
- Inform the department of the provisions of the permit-required confined space program that they will follow
- Inform the department of any hazards that they will confront or create in the permit-required confined space
- Provide the department with a copy of all entry permits the contractor issues

## Definitions

**Acceptable entry conditions** means the conditions that must exist in a confined space to allow entry to and ensure that employees involved with confined space entry can safely enter into and work within the space.

**Attendant** means an individual stationed immediately outside one or more permit-required confined spaces who monitors the authorized entrants and who performs all attendant's duties assigned in this program.

**Authorized entrant** means an employee who is authorized by the Environmental Health and Safety Office to enter a permit-required confined space.

**Combustible dust** means solid particles that if in sufficient concentration will ignite and burn rapidly.

**Confined space** means a space that meets the following criteria:

- Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- Has limited or restricted means for entry or exit; and
- Is not designed for continuous employee occupancy

Examples

**Isolation** means the process by which a permit-required confined space is removed from service and completely protected against the release of energy and material into the space by such means as blanking or blinding, misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

**Line breaking** means the intentional opening of a pipe, line or duct that is or has been carrying flammable, corrosive or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.

**Lockout / tagout** means placing locks or tags on the energy isolating device to prevent the unauthorized re-energizing of the device or circuit while work is being performed by personnel.

**Zero mechanical state**

**Entry Supervisor** means an employee from the Environmental Health and Safety Office (EHSO),





## **I. Introduction**

The principal objective of this program is to implement practices and procedures that will protect employees from hazards that may exist in permit-required confined spaces. This objective is met by:

- The survey, inventory and evaluation of the workplace to determine if any spaces are permit-required confined spaces.
- Posting appropriate signs and providing training to employees so that they recognize and will not enter permit-required confined spaces unless authorized.
- Training employees who will enter permit-required confined spaces.
- Developing written entry practices and procedures, and by establishing atmospheric testing requirements.
- Implementing a permit system to control and monitor entry into permit-required confined spaces.

This program is designed to comply with the Virginia Occupational Safety and Health (VOSH) standard 1910.146. All University employees assigned to work in confined spaces will be affected by this program. The EHSO, in cooperation with University departments, will inventory and evaluate University confined spaces to determine if any of the spaces are permit-required confined spaces.

## **II. Training**

All employees involved in confined space entry work shall be trained and become proficient in the knowledge and skills necessary for the safe performances of their assigned duties. Training will include, but is not limited to: hazard recognition, personal protective equipment (PPE), safety equipment, communication but, s i, commu3nt s igpm nty

trained. **Appendix A** contains a copy of a blank training record.

### **III. Training Program Requirements**

All employees involved in entry into confined spaces shall receive appropriate training which shall include, at a minimum:

- The requirements of VOSH standard 1910.146
- The requirements of this program and the conditions that must be met for entry into a confined space.
- The identity of confined spaces and permit-required confined spaces within the boundaries of the University.
- The means of marking and identifying permit-required confined spaces within the boundaries of the University.
- The conditions or work practices that may produce a hazard in a non-permit confined space that may require the space to be reevaluated by the entry supervisor prior to entry.
- Hazard recognition, including information on the mode, signs and symptoms, and consequences of an exposure..
- The use of PPE and non-entry rescue equipment.
- The use of atmosphere testing (monitoring) equipment.
- The use of hazard control measures (e.g., ventilation, isolation).
- Entry procedures and precautions to include:
  - Maintaining communication 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 the space;
  - Alerting the attendant whenever warning signs or symptoms of exposure to a dangerous situation exist, or a prohibited condition exists.
- Requirements to evacuate whenever so ordered by the entry supervisor or attendant, whenever a dangerous or prohibited condition is recognized or an evacuation alarm is activated.
- Emergency and non-entry rescue methods (including hands-on rehearsal of such methods), and procedures for calling rescue services.

**Note:** The entry supervisor shall receive the training detailed above plus any additional training required to evaluate confined space hazards and complete entry permits.

#### **IV. Training and Duties of Rescue and Emergency Services**

Rescue services will be provided by the City of Norfolk Fire Department. Rescue workers shall, through their own organization, receive appropriate training in confined space rescue. Rescue workers will be invited to attend our training and review our confined space entry program.

## **VI. Identification of Permit-required confined spaces**

A survey of the University will be conducted by the EHSO in cooperation with the departments to identify, inventory and assess all potential permit-required confined spaces. The inventory will be maintained and update as needed. It shall include an assessment of the hazard(s) associated with each permit-required confined space. The inventory will be included in **Appendix B** of this written program.

A permit-required confined space which could be inadvertently entered will be labeled as a permit-required confined space. Obvious permit-required confined spaces, such as manhole, or non-permit-required confined spaces will not be labeled. The signs will read as follows:

**DANGER  
PERMIT-REQUIRED CONFINED SPACE  
DO NOT ENTER**

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development of a hazardous atmosphere exists. The potential for a hazardous atmosphere to

The attendants shall be equipped with a communications radio and know who to contact in an emergency. The attendant will not enter the confined space for rescue purposes or for any other reason until properly relieved by another qualified attendant.







