Environmental Health and Safety Manual (EHS)

EHS 121: Utility Tunnel Access and Control of Hazardous Conditions

Effective: 10/31/2008 **Revised**:

Purpose

To control access to utility tunnels in order to address security and health and safety risks

Source

29 *Code of Federal Regulations* §§ 1910.146-147, -1001, and 1926.1101

Applicability

All university employees, contractors, and vendors who enter any university utility tunnel system

Policy

Access to or within all ASU utility and service tunnel systems must be controlled to secure utility systems and to control potential exposure to hazardous conditions. Hazardous conditions such as confined spaces and the presence of asbestos-containing materials or exposed sources of potentially hazardous energy must be clearly identified and communicated to personnel authorized to enter any university utility tunnel system.

Definitions

For the purposes of this policy, the following definitions apply:

Access Control

> The practice of restricting entrance to the tunnel system, including any room that has access points leading to the tunnel system, to authorized personnel. Physical access control includes human monitoring (by a guard or other attendant), through mechanical means such as locks and keys, or through technological means such as access control systems.

Confined Space

> A space that has limited or restricted means for entry or exit and is not designed for continuous employee occupancy. Confined spaces include, but are not limited to, underground vaults, tanks, storage bins, manholes, pits, silos, process vessels, and pipelines.

Potentially Hazardous Sources of Energy

> Exposed electrical parts (as applied to live electrical parts) capable of being inadvertently touched or approached nearer than a safe distance by a person; pressurized chemical or steam systems; and sources of kinetic energy such as water or chemical storage tanks.

Utility Tunnel

A space for wires, conduits, pipes, and other conveyances used in the delivery of utilities with enough room for a human to enter.

Procedures

1. The facilities management organization of each ASU facility identifies to EH&S any system that could be considered a utility tunnel for hazard evaluation.
2. EH&S surveys the tunnel, identifies potential hazards to the facilities management organization, and recommends control measures to address potential hazards.
3. Each facilities management organization establishes access control requirements to each utility tunnel system to ensure that only trained and authorized employees or approved contractors and vendors may enter the system.
4. The facilities management organization's managers and supervisors notifies all employees, contractors, and vendors who request or require access to the utility tunnel system of all known, identified hazards and the requirements for accessing and working safely in the utility tunnel area assigned.
5. When tunnels have not been surveyed to verify they are asbestos-free, specific procedures for worker protection shall be developed and include the use of respiratory protection and/or air sampling consistent with the appropriate OSHA standard. At a minimum, personnel must wear respiratory protection when entering tunnels where the potential exists to disturb asbestos.
6. ASU employees whose duties require entering the tunnel system are to receive appropriate training identified by EH&S, which may include:

    a. Asbestos Awareness
    b. respiratory protection

    and

    c. confined space entry.

7. ASU employees required to wear respiratory protection shall be provided required medical examinations to determine ability to wear respirators.
8. Hiring managers or project managers of vendors or contractors proposing to perform work in any utility tunnel system shall provide written disclosure of the potential hazards present, including asbestos hazards within each utility tunnel system. Standard disclosure letters may be developed and approved by contacting EH&S and are provided with purchase orders and/or request for proposals.

Responsibilities

Deans, directors, and chairs are responsible for:

1. notifying all personnel under their control not to enter any utility tunnel without contacting Facilities Management to determine the access requirements and procedures

    and

2. ensuring that all personnel under their control who are assigned to work in a university utility tunnel system complete all training requirements and utilize all personal protective equipment required for access.

The Capital Projects Management Group project managers and all other university departmental managers are responsible for providing a full disclosure of known hazards in the tunnel system to outside contractors and vendors.

Cross-Reference

For more information, see:

1. EHS 102, “Confined Space Entry”
2. EHS 105, “Personal Protective Equipment”
3. EHS 107, “Respiratory Protection”
4. EHS 108, “Environmental Health and Safety Training”
5. EHS 117, “Lockout/Tagout”

   and

6. the *Capital Programs Management Group Policies and Procedures Manual*—CPM 301–05, “Asbestos Abatement.”

Additional Information

Federal regulations pertaining to occupational exposure to asbestos and respiratory protection may be accessed through the U.S. Occupational Safety and Health Administration Web site: www.osha.gov.