## **Trenching and Excavation**



Keene State College Policies and Procedures

# **Trenching and Excavation**

#### Section Menu

#### **Overview**

Keene State College is committed to providing a safe work environment for its employees, and recognizes the hazards associated with trenching and excavation.

### Purpose

This plan was created to eliminate or reduce the hazards associated with trenching and excavation. Typically, KSC employees do not dig below 4 feet as part of any excavation work. However, all people working in or around trenches or excavations must be trained about the hazards associated with them on an annual basis.

### Guidelines

The following list is some guidelines that should be used when working in or around trenches or excavations.

- Contact Dig Safe before commencing work (routine 3 working days notice) 1 (888) 344-7233. In many cases, Dig Safe will reroute the call to Physical Plant for on campus jobs.
- Each excavation or trench that has a potential for cave-in or is above 5' must be sloped or shored accordingly. Excavations greater than 5 feet in depth must be fully evaluated by a competent person so that appropriate protective measures are followed.
- Excavations or trenches less than 5 feet in depth must still be evaluated for potential cave in hazards by a competent person, and should be sloped to protect any affected workers. A slope of 1.5 feet out (horizontal) for

every foot of depth is recommended.

- All soils must be considered unstable unless tested by an authorized person
- A means of exit must be provided in all trenches and excavation, and at least one every 25'
- Hard hats are required at all excavation sites
- Safety toed shoes are required at all excavation sites
- Additional PPE must be worn accordingly
- All trenches and excavations greater than 4' in depth that have a potential for a hazardous atmosphere must be tested before entry per Confined Space Entry procedures.
- A competent person with appropriate training should be able to answer the following questions at all times for trenches greater than 5 feet in depth:
  - $\circ\,$  What classification of soil do you have (A, B, C)
  - $\circ\,$  What protective means have been used (sloping, shoring)
  - $\circ~$  What other hazards are in the trench
- The trench or excavation must be barricaded to protect passers-by.
- Extreme caution must be used where underground facilities are located
- Materials and equipment must be located at least two feet away from the edge of the trench, unless extra precautions are used (sloping, higher shoring)
- No smoking is allowed in or around trenches, excavations, or tunnels

This is by no means an extensive list, but is a good general checklist to use to begin to evaluate the hazards of the job. Trenches and excavations contain many hazards, and should be continually evaluated. For example, if an employee is welding, a hot work permit is required; if entering the space, then confined space permit procedures are required. Finally, if likely to come across known utilities, lockout/tagout may be also required. Any questions about this plan can be directed to either your supervisor or the EHS Coordinator.