## ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY

**DATE:** March 9, 2022

**SUBJECT:** Trenching and Excavation

**PURPOSE:** The purpose of the Trenching and Excavation Policy is to help

ensure that trenching and excavation operations are performed in a

safe manner and in accordance with industry best practices.

**SCOPE:** This policy applies to all Arkansas Tech University employees who

are involved in trenching and excavation operations, as well as, all

contractors who may be involved in trenching and excavation

operations on the Arkansas Tech University campus.

**RESPONSIBILITY:** It shall be the responsibility of all employees involved in trenching

and excavation operations to be familiar with and abide by the provisions of this policy and any other standards or regulations

pertinent to safe trenching and excavation operations.

Definition of the Trenching and Excavation Competent Person

A trenching/excavation competent person is an employee who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has the authority to take prompt corrective measures to eliminate those conditions.

### Duties of the Competent Person

- 1. Maintain a copy of this policy and have a comprehensive knowledge of both. In addition, the competent person(s) must have a general knowledge of all applicable safety standards.
- 2. Conduct pre-job site review to develop a written job safety analysis that will ensure a safe and efficient job process. A competent person will evaluate all sloping and/or shoring prior to commencing the work.
- 3. Perform inspections of equipment and trench conditions at the start of each shift and periodically during the shift or as needed by changing conditions.
- 4. The competent person has the duty and responsibility to remove all employees from hazardous conditions and effect all changes necessary to ensure employee safety.
- 5. Maintain on-site records of protection systems and inspection reports.
- 6. If mechanical protection is used, the competent person will oversee the installation of such system.
- 7. Verify that ramps and walkways for employee use are constructed in compliance with industry best practices.
- 8. Hold safety meetings with all crew members prior to trenching/excavation operations beginning and during operations as needed.

## ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY

- A competent person must be on-site at all times during trenching or excavation operations.
- 10. Assure that appropriate emergency rescue is available to meet existing or potential conditions.
- 11. Monitor use of water removal equipment.
- 12. Ensure that the air quality in the trench or excavation is safe and free of flammable, combustible, or toxic gases ensuring the air is neither oxygen deficient or enriched.
- 13. The competent person must consult with a Registered Professional Engineer (RPE) if the trench or excavation is over 20' deep. Specifically with regards to designed shoring, bracing or when the excavation could endanger a nearby structure. This consultation must include written instructions or opinions from the RPE.

## Competent Person Documentation

The competent person must maintain the Daily Trench/Excavation Inspection Form at the work-site and it must be readily available for review by a supervisor or the Occupational Safety Coordinator.

#### Soil Classifications

All soil on the Arkansas Tech University campus will be classified as "C" and all precautions, i.e. shoring, benching, sloping, employee walkways, etc. will be designed accordingly.

### **Training**

The competent person for trenching and excavation work must be trained in and knowledgeable in the following areas:

Selected Terminology:

Support systems Trench

Excavation Registered Professional Engineer (RPE)

Trench shield/box Failure Sloping Uprights

Hydraulic shoring Protective System

- Duties of the competent person:
  - How to document the trench/excavation using the Daily Trench/Excavation Inspection Form.
  - Identify causes of trench cave-ins i.e. inadequate support systems, inadequate sloping, surcharge loading, etc.
  - Be knowledgeable in the use of manufactures tabulated data. A competent person must be able to identify proper installation techniques and limitations of hydraulic shoring.
  - A competent person must be able to identify when end plates on a trench shield are required, how to safely stack shield sections, access and egress

#### APPENDIX H

# ARKANSAS TECH UNIVERSITY HEALTH & SAFETY POLICY

- requirements, material handling requirements (tag lines, sling safety, etc.) shield construction requirements, and lateral support requirements.
- At the completion of the above training, the competent person will demonstrate their proficiency under the supervision of a competent supervisor or person conducting the training prior to being designated as a "competent person" for trenching and excavation work.