

Winter Weather Slowdown? Take Advantage of Safety Classes

TrenchSafety and Supply offers invaluable safety training on a variety of topics... all of which can make your job sites more productive, can reduce worker injuries, and can increase overall productivity and efficiency.

Our most popular class is the "Competent Person" training. It will provide your employees with a thorough review of the General Requirements, an in-depth look at the OSHA Standard, other vital information from OSHA, as well as numerous documents with helpful information on a wide range of issues regarding excavation safety.

TrenchSafety also offers the "Confined Space Entry" class.

Plus, we are now teaching "Refresher Courses" for both the "Competent Person" and the "Confined Space Entry."

Class Schedule

See the back page for the complete schedule of upcoming "Competent Person" and "Confined Space Entry" classes throughout the Mid-South. Or contact us: **(800) 865-5801** or www.TrenchSafety.com

14 Common Sense Steps for Worker Safety In & Around Trenches

The General Requirements Section of OSHA's Subpart P provides a number of common-sense steps to help insure worker safety. As with any OSHA Standard or other safety procedure, it's important to always remember that these are the *minimum* requirements, to insure safe job sites.

These 14 steps — and much more — are covered in TrenchSafety's "Competent Person" training course. The take-home course manual is shown here.

1. Surface Encumbrances

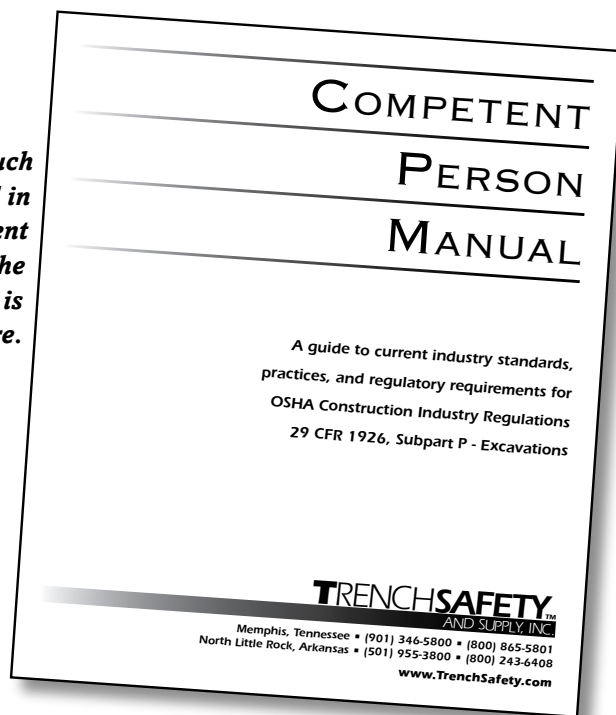
Examples include rocks, trees, telephone and utility poles, fire hydrants, etc.

To insure their stability and integrity, they need to be removed or supported while an excavation is open.

2. Underground Installations

Examples include gas, electrical, water, sewer lines, etc. They must be:

- > Located and marked before beginning work. Property owners and/or utility companies should be notified at least 24 hours prior to digging, unless a longer time is required by local law. For example, Tennessee requires 72 hours advance notice. Most other states, including Arkansas and Mississippi require 48 hours notice.
- > Protected, supported, or removed while the trench is open.



“COMMON SENSE” FROM PAGE 1

Most states have so-called “One-Call” laws. Tennessee, Arkansas, Mississippi, and the surrounding states are no exception. (Refer to the April 2007 issue of **EXCAVATION SAFETY NEWS** for a complete list of the One-Call numbers across the U.S. The newsletter is available for free download at www.TrenchSafety.com)

3. Access and Egress

These are fancy words for entering and exiting a trench. The requirements are:

- > In trenches that are 4 feet or more in deep, provide a means of access and egress.
- > Spacing between ladders, stairs, or ramps should not be more than 50 feet.
- > No worker should not have to travel more than 25 feet laterally to reach a means of egress (exit).
- > Ladders must be secured, and extend 36 inches above the landing.

In addition, it is important to use wood or fiberglass ladders where there is a possibility of electric shock. Many utility companies and contractors always use wood or fiberglass ladders to insure there is never a problem.

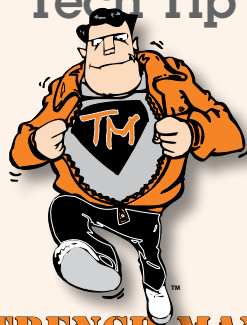
A “Competent Person” must design all structural ramps used solely by employees. (See article at right for OSHA’s definition of a “Competent Person.”) Further, a Competent Person qualified in structural design must design all structural ramps used for equipment. Usually this person will be a registered professional engineer.

Finally, the components used in structural ramps must be connected, be of uniform thickness, be constructed so that cleats and other connectors do not create a tripping hazard, and, if ramps are used instead of steps, they must be provided with cleats or other surface treatments to prevent slipping.

4. Exposure to Vehicular Traffic

Employees must be protected from being struck by motor vehicles. Also, employees must be provided with — and must wear — warning vests or other highly visible garments when exposed to traffic. Generally, employees are considered “exposed”

Trench Man’s Tech Tip



TRENCH MAN

He saves lives... and money!

In the Trenches, What is a “Competent Person?”

OSHA defines a “Competent Person” as “one who is capable of identifying existing or predictable hazards

in surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. When applied to trenching or excavation operations, the Competent Person must have specific training in, and be knowledgeable about, soil analysis, the use of protective systems, and requirements of the standards.” Note that a Competent Person must be on every job site when workers are exposed in a trench or excavation.

Responsibilities

- Authority to stop work – [1926-651(k)(2)].
- Inspections of excavations for indications of possible cave-ins, failure of protective systems, hazardous atmospheres, and other hazardous conditions – [1926.651(k)(1)].

SEE “TRENCH MAN TECH TIP” ON PAGE 4...

Excavation Safety News

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This newsletter provides a brief overview of safety regulations and systems. It is not intended to provide specific legal or engineering advice. Please refer to OSHA CFR29, Part 1926, Subpart P, “Excavation and Trenches,” and to other governmental regulations, and to manufacturers’ instructions for specific information.

Construction techniques and equipment usage must be in accordance with all governmental regulations and manufacturers’ instruction. All orders placed with TrenchSafety are subject to the terms, conditions, and warranty limitations contained in TrenchSafety’s Rental and Sales Agreements.

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SEE “COMMON SENSE” ON NEXT PAGE...

“COMMON SENSE” FROM PAGE 2

when they are within the right-of-way. Signs, signals, barricades, and/or flagmen may be required.

5. Exposure to Falling Loads

The law is simple. The objective is to protect employees from being struck by falling objects.

- > Employees are not permitted underneath raised loads.
- > Employees are required to stand away from equipment that is being loaded or unloaded.
- > Equipment operators or truck drivers may stay in equipment if it is properly equipped with a cab shield or adequate canopy.

6. Warning System for Mobile Equipment

Preventing vehicles from falling or backing into a trench can be accomplished by providing:

- > Barricades
- > Hand or mechanical signals
- > Stop logs
- > Grading away from the excavation

Equipment with an obstructed view is required to have working back-up alarms, or observers must be assigned when backing up. Suggestion: Caution your employees not to be complacent around back-up alarms. On some projects, there are so many back-up alarms, employees may ignore them.

7. Hazardous Atmospheres

One of the Competent Person's responsibilities is to prevent employees from being exposed to hazardous atmospheres in the air or dangerous environments.

- > **OXYGEN-DEFICIENT ATMOSPHERE** – Normal air

is 20.9% oxygen. An oxygen-deficient atmosphere has less than 19.5% oxygen.

- > **OXYGEN-ENRICHED ATMOSPHERE** – It has 23.5% or more oxygen.
- > **CARBON MONOXIDE** causes oxygen starvation, and can be fatal at a concentration of just 1.0% for one minute.
- > **HYDROGEN SULFIDE** is a very common toxic gas, and **METHANE** is a very common flammable gas. Both are regularly found in underground construction, particularly around sewers.

If there is a possibility that a hazardous atmosphere exists, or could reasonably be expected to exist, the air should be tested before employees enter a trench or manhole. Provide respirators or ventilation when needed. And retest the air often to insure that the trench remains safe.

8. Emergency

Rescue Equipment

Such equipment must be available when a hazardous atmosphere exists or could reasonably be expected to exist. Employees entering confined spaces must be properly trained.

Harnesses and life lines are required whenever employees enter bell-bottom pier holes and other deep confined spaces. Life lines must be attended at all times.

9. Water Accumulation

Water must be controlled to prevent cave-ins. Methods for controlling water vary with each situation. Employees are not permitted to work in trenches where accumulation exists unless:

- > Special support systems or shields are used to protect employees from cave-ins,
- > Water removal equipment is used and monitored by the Competent Person to prevent water accumulation,
- > Safety harnesses and life lines are used to protect employees.

Surface water must be diverted or controlled. The Competent Person must inspect the trench after each rain storm.

10. Stability of Adjacent Structures

The objective is to protect employees from cave-ins.

- > A support system, such as shoring, bracing, or underpinning, must be used to support structures that may be unstable due to excavation operations.
- > Excavating below the base or footing of a foundation or wall is not permitted unless:
 - A support system is provided to ensure the stability of the structure or
 - The excavation is in stable rock (*this is very rare*), or
 - The operation is approved by a registered professional engineer.
- > Support systems must be provided for sidewalks, pavements, and other structures that may be affected by excavation operations.

11. Protection of Employees from Loose Rock or Soil

Employees must be protected from being struck by soil or rocks that are falling or rolling from the

SEE “COMMON SENSE” ON PAGE 4...

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"TRENCH MAN TECH TIP" FROM PAGE 2

- Inspections should be prior to the start of work, as needed throughout the shift, after rainstorms, and after other hazard-increasing occurrences – [1926.651(k)(1)].
- Testing for hazardous atmospheres when such atmospheres exist or are reasonably likely to exist – [1926.651(g)(1)(i)].
- Inspections of material or equipment, if damaged, to determine if usable – [1926.652(d)(3)].
- Monitoring of water removal equipment and operations – [1926.651(h)(2)].
- Visual and manual tests of soils to determine type – [1926 Appendix A section (d)(1)(i)-(vii)].

Any way you look at it, being a Competent Person is a big responsibility.

"COMMON SENSE" FROM PAGE 3

edge and face of a trench. Spoils and equipment must be set back at least 2 feet from the edge of a trench.

12. Fall Protection

It is required that walkways and bridges be provided over trenches that are least 6 feet above lower levels and are greater than 30 inches wide. Bridges and walkways must be equipped with standard guard rails and toe boards. Additional fall protection may also be required.

13. Remotely Located Excavations

Examples are wells, pits, shafts, trenches, other excavations, etc. They must be backfilled, covered, or barricaded.

14. Inspections

A Competent Person (*see sidebar on page 2*) must make all inspections.

At the beginning of this article, we said that these were all "common sense" items. But keep in mind, **they are also the law.**



Safety Class Schedule

Injuries and deaths from trench cave-ins and "bad air" in confined spaces are senseless. Such tragedies can be avoided.

Take advantage of TrenchSafety's safety training courses. Real-life examples. Practical safety techniques. The OSHA standards. All presented in a clear, easy-to-understand format.

The one-day courses are \$95 each, and include lunch and a valuable take-home Training Manual, which will serve as an indispensable reference source. It will get used over and over to help stay up on best practices...and the law.

"Competent Person" Classes

- Tuesday, Jan. 22 North Little Rock
- Tuesday, Feb. 12 Memphis
- Tuesday, Feb. 19 North Little Rock
- Thursday, Feb. 28 Jackson, Miss. **
- Tuesday, Mar. 4 Memphis
- Tuesday, Mar. 18 North Little Rock
- Tuesday, Apr. 8 Memphis
- Tuesday, Apr. 15 North Little Rock
- Tuesday, Apr. 22 Ft. Smith

"Confined Space Entry" Classes

- Tuesday, Feb. 5 North Little Rock
- Friday, Feb. 29 Jackson, Miss. **
- Tuesday, Mar. 25 Memphis

** These classes are sponsored by Mississippi AGC. Fees are different. Contact Mississippi AGC at (601)981-1144 for details and registration.

A FREE pad of "Competent Person" Checklists to each participant!

Two easy ways to enroll your crews:

Online: www.TrenchSafety.com

Call: (901) 346-5800 ▪ (800) 865-5801