

Job Name: \_\_\_\_\_ Job Site Location: \_\_\_\_\_

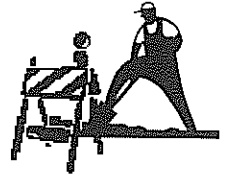
Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_ Foreman/Supervisor: \_\_\_\_\_

## Topic 236: Safe Operation of Trenchers

**Introduction:** Trenchers are the fastest way to excavate a trench for relatively shallow and narrow trenches. However the trenchers speed and method of excavating pose many hazards to operators and associated personnel. Following these safety rules will greatly reduce the chance of death, amputation, or serious injury.

**Before operating a trencher:**

- **Always check for** underground utilities before digging, call utility locators and the utility company at least 48 hours before beginning an excavation.
- **Read the operators manual.** Be sure personnel are competent to operate the machine, and familiar with all controls, design limits, and operating characteristics of the machine.
- **Inspect equipment** for loose, missing or broken parts, and fluid leaks; make sure all safety devices are in place and operable.
- **Fuel the machine** with engine stopped and cool.
- **Dress properly for the job:** avoid loose clothing; wear safety boots, hard hat, gloves, and eye protection.
- **Be aware that** hydraulic oil is hot and under extreme pressure and may be forced under the skin causing burns and severe injury. Use a piece of wood or cardboard to check for pinhole hydraulic leaks while the machine is running.



**Operating the trencher:**

- **Use hand and foot holds** when mounting or dismounting a riding trencher.
- **Always check the controls** to ensure they are in the neutral or "off" position before starting the machine.
- **Use the seat belt** and adjust the seat to a comfortable position. Never allow riders on the trencher. Start and operate trenchers only from the operator's seat.
- **Warn all personnel** near the trencher before starting the machine.
- **Lower the trencher boom** to within a few inches of the soil before engaging the chain. Engage the chain at a slow speed, lower the boom slowly and steadily to correct digging depth.
- **Keep clear of the digging chain** and augers at all times. Never attempt to adjust or free a jammed chain while the machine is running, stop the engine first.
- **Use caution while operating** on slopes; the machine will want to move downhill and downward pressure on the boom may lift the machine clear of the ground.
- **Augers can easily** draw in feet or loose clothing. Do not allow personnel other than the operator and trained workers in the immediate vicinity of an operating trencher.
- **Do not attempt to make sharp turns** while digging; lift the boom free of soil, make the turn, then resume digging.
- **When raising the boom,** disengage the chain as it clears the soil.
- **When approaching underground utilities** stop the trencher and locate utilities by hand, make sure you are well clear of all lines before resuming digging with the machine.
- **When shutting down the machine,** lower boom and all implements to the ground, stop engine, and cycle all hydraulic controls to relieve any pressure in lines.
- **Do not leave the machine** unattended while the engine is running.
- **Operate trenchers only** in well ventilated areas; exhaust fumes can be deadly.



**Conclusion:** Trenchers use a chain to cut soil on the same principle as a chain saw cutting wood. Trenchers will easily saw through most utility lines and pipes, as well as any body part exposed to contact with the chain. Follow the manufacturer's guidelines and safety rules, and use common sense while operating trenchers and your job will be quick and safe.

### Worksite Review

Work-Site Hazards and Safety Suggestions: \_\_\_\_\_

Personnel Safety Violations: \_\_\_\_\_

**Employee Signatures:**

*(My signature attests and verifies my understanding of and agreement to comply with, all company safety policies and regulations, and that I have not suffered, experienced, or sustained any recent job-related injury or illness.)*


*City of San Angelo Foreman/Supervisor's Signature:* \_\_\_\_\_

*These guidelines do not supercede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.*