Trench Shields

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Discussion Date: _____

Employee Participants:

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TOPIC: Trench boxes/shields are the most common form of trench protection. When used properly they provide a safe area to work during trenching operations. Training your employees on proper handling and assembly is crucial to being safe. Here are some useful tips on trench boxes/shields.

Sizing A Trench Shield

- Know the job – Use a trench shield that is large enough for the job but light enough to be handled by the equipment you are using.
- Know how deep the cut is going to be?
- What type of soil are you digging in and what is the condition?
- What is the outside pipe diameter?
- What is the length of the pipe you are using? – The box should be 2 to 4 feet longer than a joint of pipe.
- What is the size of Excavator and what is the lift capacity? – Minimum capacity should be 1.5 times the shield weight at 20 foot radius.

Handling and Assembling

- Determine the weight of the load and be sure the equipment being used to handle the shield or components is capable
- If using a crane, be sure the rigging is properly sized and in good condition before lifting anything
- Always assemble the shield per manufacturers directions
- Always use the components and spreader pins that are supplied by the manufacturer
- Never substitute rebar, bolts, pipe, or other materials in place or the spreader pins
- Always install the keepers
- If using a tag line, be sure the line is long enough to keep the worker a safe distance from the shield

Trench Shield Tips

- Never lift a shield by the spreaders
- Always install all the spreaders and NEVER remove spreaders from a shield
- Never substitute any material for the spreader pins
- Always use stacking pins when stacking shields, chaining them together is unacceptable

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