



## ***SAFETY ALERT # 3***



*Week of August 22nd, 2005*

*In the interest of keeping everyone safe CAMSAFETY will be sharing injury information with preliminary root cause analysis. This information is intended to make you think not assess blame. If you have an incident that you would like to share send us the information and we will pass it along.*

### **What Happened**

Plumbers, a father and son team, were repairing a residential sanitary sewer line through the back yard of a residence in Detroit. They excavated a trench measuring 8' deep, 6' wide and 30' long. The trench ran along the foundation of a detached garage. All indications are that no attempts were made to shore-up or support the trench walls. The trench walls collapsed killing one worker (son) and seriously injuring the other (dad). The deceased worker was 24 years old. It took firefighters from Detroit and Pontiac nearly 8 hours to safely remove the victim from the trench. The Detroit Free Press reported that "the walls were straight down, not tapered, and dirt was piled high right next to the trench."

### **Best Practices**

In 2003 MIOSHA wrote 231 excavation related violations, all but 10 were "serious". They did this for a reason, since 1994, 18 people have been killed in trench collapses. That's almost 2 per year. Companies who do excavation and trench work must insure that the side of an excavation more than 5' deep is sloped as prescribed by the standard. **Rule 941(1)** Also that spoils and other material be stored and retained not less than 2' from the excavation edge. **Rule 933(2)** If the excavation is a trench, as it was in this case, a trench shoring system shall be used or the sides shall be properly sloped to protect against a cave-in. **Rule 931(2)** These are just a few provisions of MIOSHA Part 9. It is crucial that a qualified person be involved in all aspects of excavation and trenching work to insure that conditions are safe and that proper protection is in place before workers enter an excavation.

### **Standards**

MIOSHA Part 9. Excavation, Trenching and Shoring  
OSHA 1926.650 Subpart P

### **Helpful websites**

<http://www.cdc.gov/niosh/topics/trenching/>

<http://www.nahb.org/page.aspx/category/sectionID=619>

<http://www.afscme.org/health/excavtc.htm>

<http://www.osha.gov/SLTC/constructiontrenching/index.html>

<http://www.osha.gov/SLTC/etools/construction/trenching/mainpage.html>

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