Case 15. 43-year old male plumber died when trench walls collapsed while locating the tap into the mainline sewer.

On January 7, 2003, a 43-year-old male plumber was killed when the walls of the trench he was standing in collapsed while making a sewer and water tap for a home under construction. He was a member of a 3-person crew. This was only the second time the company had done an excavation. The company had been contracted to install the plumbing for the home. A rubber-tired backhoe with an extendable bucket was used to dig the trench. The trench began at the basement and was approximately 40-50 feet in length. The trench was excavated the day before the incident. All along the trench, the walls were in a near vertical position; they were not sloped, shored or otherwise protected. Near the home, the trench was approximately ten feet deep and two feet wide. Company personnel had to hand-dig around utilities that were buried four feet underground to lay the sewer pipe near the home. Near the road, the trench was 12-13 feet deep, wider than the 2-foot width of the rest of the trench, and had near-vertical sides. At the time of the incident, the owner was backfilling the trench near the house. The victim was in the trench attempting to locate the tap into the mainline sewer. The other coworker was handing the victim material. The victim was kneeling down when one of the trench walls collapsed, covering him under three feet of clay. 911 was called while his coworkers tried to dig him out of the trench, but soil was falling in faster than they could remove it. When emergency response personnel arrived they ordered the coworkers out of the trench, and a rescue team that had the proper equipment stabilized the trench walls so the rescuers could safely dig down to the victim. After approximately three hours, the victim was uncovered and declared dead at the scene.

MIOSHA issued the following serious citations to the employer:

- 1. No accident prevention program was developed, maintained or coordinated with employees doing plumbing work, including work in an excavation to tap sewer and water for the construction of a new house. (General Rules, Part 1, Rule R408.40114(1)).
- 2. The employer did not have a ladder or other type of proper access or egress provided to employees required to enter the excavation ranging approximately 10-13 feet deep to make the sewer and water tap for the construction of a new house. (Excavation, Trenching, and Shoring, Part 9, Rule R408.40933(5)).
- 3. The excavation was not properly sloped or otherwise protected. The excavation was approximately 12-13 feet deep at the sewer tap with a trench to the north side of the house that was approximately 10 feet deep with the sides of the excavation in a near vertical position. The soil consisted of mostly a medium brown clay with some signs of gray clay and sand seams. (Excavation, Trenching, and Shoring, Part 9, Rule R408.40941(1)).
- 4. The employer failed to notify MIOSHA of a work-related fatality within the required 8-hour notification period. (Administrative Rule R408.22139, Reporting to MIOSHA, Rule 1139(1)).