Falling Steel Pipe Kills Worker



Many fatalities are caused by cave-ins of trenches that have not been shored up. This case report is about a fatality that occurred because shoring had been put in place but not braced.

The victim was a pipe welder with close to 20 years of experience. He was working inside an excavation on a project to lay pipe. He and three co-workers had been boring a hole under a road and pushing a 20-inch (50.8-centimeter) pipe casing into the hole. The trench they were standing in was about nine feet (2.74 meters) wide, 32 feet (9.75 meters) long and seven feet (2.13 meters) deep.

Two steel plates had been propped against two walls of the excavation in an attempt to protect the workers from a cave-in. Each plate measured about eight feet (2.44 meters) by 15 feet (4.57 meters), and about three-quarters of an inch (1.9 centimeters) thick.

The problem was that these plates were not braced. Instead, they were just leaned vertically against two walls of the excavation at about a 30-degree angle.

A backhoe was working near the edge of the excavation. The steel plate covering one wall tipped over, pinning the victim against the steel pipe and pipe casing.

Half measures are worth less than nothing. This unsupported wall would not have been effective in a cave-in, and in fact became a lethal hazard.

Remember the safety guidelines for trench work. You need an adequately constructed and braced shoring system for anyone working in an excavation and possibly exposed to the danger of moving ground. In a case where heavy equipment is operated near an excavation, stronger support is required to resist the extra pressure of the heavy load and vibration.