Transformer Topples Into Excavation

Poor supervision and poor planning were to blame for a fatality that occurred when a trench caved in and crushed an electrician.

He was part of a crew working on construction of a shopping center. He had been digging a trench to place electrical cables for connection to a transformer.

The transformer had been put into position on a concrete block foundation. The workers began digging the trench within two feet (less than a meter) of the concrete.

As they progressed, they did not notice the sandy soil sliding from the sides to the base of the trench, nor did they notice movement of the soil undermining the base of the transformer.

The transformer (weighing about 1.5 tons) and the concrete foundation slid into the trench, trapping and crushing the electrician. Investigators looking into this fatality found inadequate supervision. This had resulted in failure to check the compaction of the ground before installing the concrete foundation and before digging. They noted that unless workers are trained they cannot be expected to foresee every hazard they might face if they are not part of the original planning process. Faulty planning was also found in the digging of a trench beside the heavy object. Excavation beside a foundation, wall or structure is always unsafe.

On any job, it is vital that the risks be identified and steps taken to control the risk prior to the start of work. Employees must learn correct procedures, such as shoring up or otherwise securing the sides of an excavation.