INCIDENT ALERT

A concrete demolition worker was in the process of cutting concrete flooring in a hallway at the basement level of a building. The floor was installed as a slab-on-grade, and was approximately 5 inches thick. The worker had completed several cuts on the floor in the previous days and moved to a new location. He initiated the first cut and was progressing across the slab when he noticed the concrete saw “felt different”. At the same time he noticed a hot metal smell. He immediately stopped the process and removed the saw, then informed his supervisor of the incident. A decision was made to chip concrete away from the obstruction to see what he had hit. They discovered 6 four inch conduits buried under the floor. Inspections showed one conduit had been partially cut but no conductors had been damaged. Further investigation showed that the conductors were carrying 480 volt, 600 amp electrical energy.

LESSONS LEARNED

A meeting was quickly gathered to identify the issues surrounding the event. The building had been built in the 40’s and had been upgraded and renovated several times since. No plans, drawings, or prints had shown the presence of the conduits. The concrete hallway had been covered with vinyl tile so the work was not obvious. The group presumed that at some time a power upgrade project for the building had been initiated but the building plans had not been updated. It was decided that since they could no longer be assured there were no utilities present in the areas where concrete cutting would occur on the basement level they would hire a utilities locator to explore the areas that were identified for demolition.

Working in existing facilities presents unique challenges. The possibility of damaging previously unidentified utilities is an ever present danger. The expertise and awareness of the concrete saw operator prevented a potentially disastrous event.

ACTION ITEMS

1. Discuss this event with your contractors, and ask what approach they will be using in the future to assure a similar event does not occur.

2. Closely check for visible signs of previous work prior to concrete demolition. Look for uneven floors, cracks of deformation of floor covering materials, wear lines in floor coverings that may indicate previous work, differences in floor tile, etc.

2. Share this Incident Alert with your contractor and ask them to share it with their workers.

Distribution:
All CPO Staff