



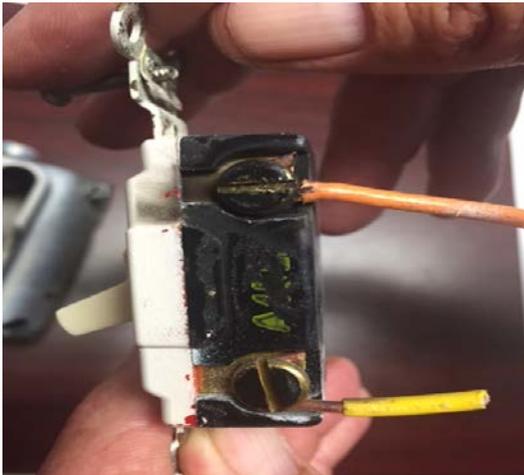
**US Army Corps
of Engineers®**
Engineering and Support Center,
Huntsville

Safety Office

Mishap Lessons Learned



Subject: Electrical – Near Miss



Event:

The employee was removing a diamond steel plate, light switch and receptacle. These items were being removed so that a new door and frame could be installed. The employee removed the light switch cover then proceeded to remove the light switch which was on top of the diamond plate. The employee removed the switch by pulling it from the box. He then was able to remove the diamond plate and reinstall the light switch. While attempting to reinstall the switch, the employee touched the side of the junction box with either the switch or the wire coming from the switch causing an electrical short and a breaker to trip. The emergency generators started to provide power as designed, so there was no loss of power to facility operations. The employee was working alone and was not injured.

Root Cause(s):

- The employee was not qualified to remove the light switch from the junction box, nor did he follow prime contractor's safety procedures.
- LO/TO was not used nor did the employee check for power.
- A qualified electrician should have been called to implement LO/TO and verify the system was not energized.
- The employee took it upon himself to remove the light switch. This caused an electrical short and the breaker to trip affecting the 1st thru 4th floor of the facility.
- After further investigation it was found that the light switch the employee was removing was powered by a 277 volt circuit.

Recommendations:

Isolation in accordance with EM 385-1-1 is required to be accomplished by a qualified person before work begins.