

1. Change behaviors.
2. Challenge ourselves to re-think how we work.
3. Certify the results on a daily basis.



Tool Box Talk

Week of April 26th, 2010

OSHA's Focus Four Inspections

April's safety topic is "OSHA's Focus Four Inspections." We will conclude our discussion of Focus Four hazards via a review of various electrical hazards and provide insight on prevention at JJ White work sites.

Electrical hazards can be the most difficult to identify because unlike fall hazards – we can see a missing guard rail or see a worker with no fall protection – we can't see electricity. We will see the unwanted effects of an electrical hazard. Therefore, how do we and OSHA identify these hazards to prevent injuries?

How many times have you found the ground prong missing from an electrical tool or extension cord? The electrical path to ground, the green wire, also known as the 'grounding conductor', is provided to transfer the 'fault current' to ground in the event that an exposed part of equipment or tool becomes energized. If this happens and the equipment ground was not continuous, the path of least resistance from a drill to the ground would be through the user's body resulting in electrical shock. The value of inspecting our electrical equipment daily prior to use for defects, such as ground prongs, frayed cords, cracked tool casings, allows us to eliminate hazards. Tools taken out of service should be marked with a "defective tool tag" and returned for repair.

Electricity, water and metal do not mix. The human body is 62% water. A worker sweating generates even more water on the exterior of their body, will be exposed to nearly 10 times the amps vs. a person not sweating. A worker standing in water is exposed to nearly 100 times the amperage. Besides eliminating hazards i.e. frayed cord, we need to use a GFCI protection when using extension cords. The GFCI will trip in 1/40 of a second at .005 amps (or 5 milliamps) vs. depending on a circuit breaker which will trip at 20 amps and take 47 seconds to trip. Obviously the GFCI is significantly more effective and specifically designed to save a life. This why we should always test GFCI's to ensure they work properly. GFCI's protect us from both double insulated and 3-wire tool hazards.

Overhead hazards include cranes, hoisting equipment and dump trucks with raised beds contacting overhead lines. This most often happens when the equipment is moved and the line of fire is not identified. Also proper clearance is needed when moving long sections of pipe to prevent electrical contact when working from scaffolds. Underground electrical contact is made when utilities are not marked out or the locations are miss-marked.

As we seek to become the first OSHA Region III VPP contractor we need to continue our efforts, every day, to eliminate or best control falls, struck-by, caught between, and electrical hazards. Effective JSA's, identifying the line of fire hazards, and your crew's teamwork is the keys to preventing injuries and ensuring our success.