Lesson Learned Briefing

No.: LL13-0006

Title: Unplugging an Electrical Cord Can Be Hazardous

Event: LBNL Event

Event Date: 09/18/2012

Category: ES&H - Electrical

Lesson Learned Statement:

An employee received a minor electrical shock when her fingers contacted the exposed prongs of a stuck plug she was trying to remove. This lessons learned highlights the importance of replacing worn or damaged electrical receptacles. In addition, it illustrates that employees should be cautious and avoid contact with exposed prongs when unplugging electrical cords.

Discussion:

An employee, while sitting at a table, was unable to unplug her laptop computer battery charger from the power strip; the power strip was located in the center of the table. The employee stood up to get a better grip on the battery charger plug to unplug it, and while she was attempting to unplug the battery charger plug, the plug became stuck, halfway removed from the receptacle of the power strip. The employee's fingers made contact with the exposed prongs of the plug, which resulted in a minor electrical shock.

During a reenactment of the incident, the employee could not remove the battery charger plug while sitting at the table, making it necessary for her to stand up to obtain sufficient grip and leverage. Also during the reenactment, the battery charger plug became stuck again when it was removed about halfway out of the power strip receptacle. When the battery charger was plugged into other receptacles in the same room, the battery charger plug did not get stuck when removing.

The primary reason for this incident was a defective, damage or worn receptacle in the power strip, which made it difficult to remove the electrical plug. The employee could only remove the battery charger plug from the power strip with significant effort.

A contributing factor was the location of the power strip in the center

of the table, approximately 30 inches from the edge of the table. Removing the electrical plug with arms fully extended made the electrical plug more difficult to grasp, pull out, and visually check hand position to ensure that there was no contact with the exposed prongs.

Lessons Learned are part of the ISM Core Function 5, Feedback and Improvement. Applicable Lessons Learned are to be considered during working planning activities and incorporated in work processes, prior to performing work.

Please contact the following subject matter experts if you have any questions regarding this briefing.

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