

LOTO

Practices

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BROOKHAVEN NATIONAL LABORATORY

LOTO NEWSLETTER

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LOTO OBSERVATIONS

In the first three month of the calendar year, BNL performed fifty LOTO observations. Forty-six had no issues — GOOD JOB! The remaining four pointed towards the following areas for improvement.

Number of noted items for improvement by LOTO sub-process January, February, March—2015

LOTO Training	0
LOTO Planning	1
LOTO Application	2
LOTO Removal	1

LOTO Surveillance Analysis Noted items for improvement—January, February, and March, 2015

- LOTO lock was not personally identifiable
- LOTO of 2-way wall switches not identified as complex LOTO
- Legacy LOTO tag used for out of service equipment
- Lock not challenged

Lessons Learned

At another lab, an employee was performing maintenance on two fan coil units. Prior to working on the equipment, the employee concurrently de-energized and locked out the disconnect points for both units and audibly confirmed the units had stopped running. Upon completion of work on one unit, the employee removed his lock and flipped the switch to power that unit on. The other unit unexpectedly powered on. It was later discovered that the equipment labels had been reversed. It was also found that the equipment is secondarily controlled when there is a demand for cooling. Had there not been that demand for cooling at the time the employee threw the switch, they may not have realized that the equipment labels were wrong. Work could have unknowingly been performed on the second system without it being properly locked out.

Remember:

- 1) If you are working on multiple pieces of equipment, shutting them down at the same time does not ensure that you know which disconnect controls the equipment.
- 2) Legacy problems with equipment labeling do exist.
- 3) Always check to see if your equipment can be re-energized by computer, interlock, or other remote control.

OSHA ACCIDENT SUMMARIES

These two OSHA accident investigations show the importance of following proper LOTO procedures. Both involve servicing equipment without securing all energy sources associated with the equipment, without applying a lock, and without considering surrounding equipment (a crane) prior to starting work. Please take a minute to look them over and discuss them with your co-workers

1) Employees #1 and #2 were in an aerial lift installing bird deterrents on steel roof beams inside a building when a double overhead bridge crane collided with the aerial lift's platform. Employee #1 was killed. The bridge crane operator did not see the lift in the path of the crane. The company had a lockout/tagout policy that required the bridge crane to be shut down whenever work was done using an aerial lift.

2) An electrician and a coworker were relocating a 480-volt transformer. The coworker had opened the circuit breaker that morning before they started the job, but did not lock it out. After returning from purchasing materials, the electrician climbed onto a metal storage rack approximately 3 meters above the ground. As he was pulling conductors from an existing conduit, he touched exposed, energized conductors and was electrocuted. The circuit had apparently been reenergized.