



FERMILAB'S LESSONS LEARNED PROGRAM



Event: Iron pipes fall from trailer bed. The packing list that came with the pipes indicated the total weight of the pipes was 4200 lbs. Somebody at the vendor's facility wrote a location code in the weight column of the packing list. The pipes actually weighed over 15,000 lbs. The cargo strap used to hold the pipes on the trailer was insufficient to secure the pipes.

Lessons Learned: Employees need to thoroughly evaluate the information provided and that the information is reflective of the actual load.



Event: Crane Comes Too Close to 13.8 kVA Overhead Power Line. While loading the drilling machine, the boom of the crane came in close proximity of the overhead power line, causing an arc to the cable of the crane and grounded out through one of the out-riggers. The line did not trip and damage was minor.

Lessons Learned: Just because the job went well ten times before does not guarantee it will continue to go smoothly. Job conditions are continually changing and must be recognized and analyzed.



Event: One end of a Large Hadron Collider magnet fell approximately 4½ feet to a concrete floor at Brookhaven National Laboratory when one of two lifting slings failed. The riggers had used material that did not provide adequate chafing protection, which allowed a sharp corner of the magnet support casting to cut through the sling.

Lessons Learned: Hoisting and rigging issues need to be addressed as part of the work planning process. The work plan should eliminate, if possible, or minimize the need for chafing protection.

“Mistakes are the portals of discovery.” – James Joyce

This statement is true for incidents that occur at Fermilab. Whether the incident resulted in an injury or damage to property, or whether it was a close call, there is some “portal of discovery” that can be explored. These are called lessons learned.

Fermilab has an active process for investigating incidents and “near-misses”, determining the cause, and identifying lessons learned. The process description can be found in FESHM 3020 (<http://www-esh.fnal.gov/FESHM/3000/3020.htm>). The supervisor is required to work with the Senior Safety Officer to identify any lessons learned that may be worth sharing with the rest of the Laboratory. The Senior Safety Officer will prepare the lessons learned document and send it to the ESH Section for dissemination amongst Laboratory employees. If the lessons learned are applicable to our subcontractors, ESH will forward it onto the Task Managers and Construction Coordinators for further distribution.

If you wish to view our most recently published lessons learned reports, including the two pictured above, you can view them on the Lessons Learned Web Page at: http://www-esh.fnal.gov/owa_user/esh_home_page.page?this_page=500. If you wish to be notified when new lessons learned reports are developed and posted on the web, you can subscribe to the Lessons Learned e-mail notification list at: http://www-esh.fnal.gov/owa_user/esh_mailing_lists.html.

There are lessons learned reports available from agencies outside of Fermilab. The Department of Energy supports the Society for Effective Lessons Learned Sharing (SELLS). As other Laboratories develop lessons learned reports that they believe might be of value across the DOE complex, they are submitted to SELLS. They are then distributed to those who have subscribed to SELLS. The ESH Section reviews the reports received from SELLS and determines whether they have applicability to other parts of the Laboratory. The reports are then forwarded to the appropriate individuals for dissemination.