

Lesson Learned Briefing

No.: LL16-0029

Title: Hazardous Waste Management Violations at Oregon State University Result in a \$275,000 Penalty

Event: Other Facility Event

Event Date:

Category: ES&H - Waste Management

Summary:

An EPA inspection at the Oregon State University (OSU) identified multiple violations of federal hazardous waste regulations resulting in a \$275,000 penalty. The violations related to incorrectly storing hazardous wastes (solvents and other flammable liquids, acids and other caustics, toxic and reactive chemicals, and used oil). In addition, OSU did not have the required permits to manage and store the hazardous wastes. Hazardous waste that is not managed or stored compliantly in accordance to applicable regulations is in violation of Local, State and Federal laws and has the potential of resulting in costly fines from governing agencies and harming the institution's credibility. Here at Lawrence Berkeley National Laboratory (LBNL), the EHS Waste Management Group has resources to assist divisions with waste handling, storage and disposal; refer below and to the attachment for more information.

Discussion:

A key point made by the EPA was that the University was negligent in knowing what its hazardous wastes were and thus it was impossible for OSU to ensure its chemicals were handled safely. This puts students, faculty and first responders at significant risk. A description of the violations that resulted in a harsh penalty of \$275,000 are described below:

- 1) Failure to characterize hazardous wastes/make a waste determination (liquid residues from containers).
- 2) Illegal storage (exceeded maximum storage time limits).
- 3) Failure to keep containers closed when not in use.
- 4) Failure to inspect hazardous waste storage areas at least weekly. (Note: The Waste Services inspects all 90-day waste accumulation areas (WAAs) weekly. Some LBNL generators have adopted the practice of regularly inspecting satellite inspection areas (SAAs) as a

- best management practice, but this is not required by law.)
- 5) Containers holding hazardous wastes were not in good condition.
 - 6) Failure to clearly mark containers with the accumulation start date and/or the words "Hazardous Waste." (There are SIX required pieces of information on a hazardous waste label. Each missing piece equals one count so a missing label equals six violations.)
 - 7) Failure to properly label and contain Universal Wastes (batteries, lamps, electronic wastes and non-empty aerosol cans).
 - 8) Failure to clearly label used oil storage units with the words "used oil" (up to \$37,500 per day may be assessed for this).

LBNL's Waste Services Team is available to assist with the proper management of your hazardous, radioactive/mixed, universal and medical/biohazardous wastes.

Resources: (See Attachment for active links)

1. EHS Training for Generators of Hazardous Waste (EHS0604).
2. The Environmental Health and Safety Manual (Publication 3000), Chapter 20, provides detailed guidance on the characterization, handling and storage of hazardous waste.
3. EHS Waste Management web site:
http://www2.lbl.gov/ehs/waste/wm_pub_3092.shtml
4. Generator Assistant Assignments (Division Lookup).

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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Uploaded documents/attachments:

[LBNL-Waste Management Resources.pdf](#)

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