

Los Alamos National Laboratory

Environment, Safety, and Health Division

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Date: May 11, 1998
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LANSCE:98-037

Mr. John Tymkowych, Program Manager
RCRA Inspections and Enforcement
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo St., Bldg. A
P.O. Box 26110
Santa Fe, New Mexico 87505

Dear Mr. Tymkowych:

SUBJECT: Notification Regarding Hazardous Wastes

This letter provides official information to the Hazardous and Radioactive Materials Bureau (HRMB) regarding four waste items recently identified at Technical Area (TA) 53 as constituting hazardous wastes that prior to the identification had not been managed as hazardous wastes. Specifically, three (3) resin columns and one (1) fifty-five gallon drum containing waste solvents were determined to be hazardous wastes and were subsequently transported to the hazardous waste permitted storage area located at TA 54. A description of the background to the identification of these wastes and their subsequent management as waste is described below.

Resin Columns

In January 1997, prior to the start-up of the particle accelerator beam at TA-53, it was learned that waters at Cooling Towers 62 and 64 could not be released through NPDES Permitted Outfalls 03A048 and 03A049, as they would likely exceed the NPDES limits for arsenic due to contact with treated wood present in the cooling tower system. The resin columns were then installed to filter sufficient quantities of arsenic out of the water to meet NPDES outfall permit requirements, until a more permanent solution could be devised. The Laboratory purchased eight (8) of these resin columns, which are six feet tall, two feet in diameter and contain about ten cubic feet each of resin. Three of the eight (8) resin columns became spent during the period February 2 -7, 1997, and contained levels of total arsenic that may have exceeded TCLP limits. These columns were removed from service with the intent of returning them to the manufacturer for recycling.

In a further evaluation of the three spent resin columns in February of this year, it was decided that they would not be returned to the manufacturer for recycling, due to nanerwork



and transportation issues. Rather, they have been determined to be waste and are to be disposed of as hazardous waste at a permitted hazardous waste disposal facility. They have been packaged and transported to the TA-54 permitted hazardous waste storage facility, where they are being stored as hazardous waste. They were transported to TA-54 on April 24, 1998. Prior to their shipment to TA-54, these resin columns were not managed in a regulated hazardous waste unit, as TA-53 has no permitted storage area, they did not qualify for satellite accumulation storage due to exceedence of volume restrictions, and they would have already exceeded the allowed timeframe for a less than 90-day storage area. Instead, they were kept in a secured storage building until they were transported to TA-54. While the storage of these columns, once they were determined to be waste, did not meet Hazardous Waste Act regulatory requirements for storage, they were secured in a safe storage area until they could be properly dispositioned. We are, therefore, notifying HRMB that the three (3) fully-spent resin columns were not managed in a regulated hazardous waste unit until their transport to TA-54.

Of the five (5) remaining resin columns, two (2) have been only partially used and thus are not being managed as waste. Three (3) resin columns are unused and are being kept for future use. TA-53 personnel have been instructed that once the two partially spent resin columns become fully used and require disposition as waste, they are to immediately set up a less than 90-day storage area and prepare the paperwork for transportation to TA-54. This should avoid a repeat of the situation involving the initial three resin columns.

Drum of Waste Solvents

During the period July 1997 through December 1997, TA-53 personnel evaluated approximately 130 fifty-five gallon drums of used scintillation oils to determine whether they were spent. These oils can typically be used a number of times until they reach a level of impurity where their use is no longer effective for neutrino detection in nuclear physics experiments. In December 1997 the contents of approximately 100 of these drums were bulked into a single tank, on the basis that the oil was still useful and could be more efficiently managed in a single container. Based on visual examination during the bulking process, it was determined that thirty (30) of the drums had either water or rust in the oil which would make their contents unsuitable for re-use. These drums were segregated and determined to be waste. Full characterization of the contents of these drums was postponed until winter weather and temperature conditions were no longer present.

On the basis of external labels, two (2) of the 30 drums appeared to have contents different from the other 28. Upon opening, one of these two drums had a strong solvent smell; the other appeared to contain transformer oil. A full chemical analysis was run on these two drums in April 1998. The analytical results demonstrated that the drum containing what appeared to be solvents was indeed a hazardous waste (ignitable) and should be managed as such. The drum containing what appeared to be transformer oil had no detectable levels of PCBs and was added to the group of 28, to be managed as used oil under 40 C.F.R. Part 279.

In addition, of the group of 28 drums of used scintillation oils, five (5) were randomly sampled and TCLP levels for mercury and/or lead were exceeded for three (3) of the five (5) drums. The 29 drums were taken by Mesa Oil for recycling on April 29, 1998.

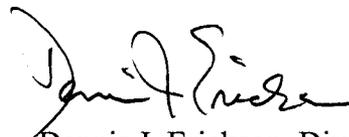
We are, therefore, notifying HRMB that the one drum containing solvent wastes was not managed as a hazardous waste prior to receipt of the initial set of analytical results. Upon learning of its nature as a hazardous waste, it was labeled and prepared for shipping to TA-54. Due to equipment problems at the analytical laboratory, the full characterization of the hazardous constituents, which would allow receipt of the waste by TA-54, was not completed until April 28, 1998. Upon receipt of the full characterization results, the paperwork for the drum was completed and the drum was shipped to TA-54 on Wednesday, April 29, 1998.

We regret that the incidents that we are self-identifying in this letter occurred. TA-53 has a facility management team that is taking aggressive steps to identify any waste management problems that might exist and to correct them. We will continue to work with the TA-53 facility personnel on the need to immediately identify, characterize and, where appropriate, manage as hazardous, those materials/items determined to be hazardous wastes. If you have any questions regarding the matters addressed in this letter, please contact Alex Puglisi, the ESH-19 person assigned to assist TA-53 facility management team in hazardous and solid waste compliance, at (505) 667-4882.

Sincerely,



Roger Pynn, Division Director
Los Alamos Neutron Science Center (LANSCE)



Dennis J. Erickson, Division Director
Environment, Safety, and Health (ESH)

DJE/JR/dis

cc: Mr. Benito Garcia, NMED-HRMB
LANSCE-DO, H814
ESH-DO, K491
CIC-4, A150

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