



Department of Energy

Albuquerque Operations Office
Los Alamos Area Office
Los Alamos, New Mexico 87544

OCT 31 1997

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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Benito Garcia, Bureau Chief
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo St., Bldg. A
P. O. Box 26110
Santa Fe, NM 87505

Dear Mr. Garcia

Subject: Notification of Drum Puncture

The purpose of this letter is to provide written notification of a potential release from a bulging 14-gallon poly drum. The initial notification was made to Mr. John Kieling of your staff by Loren Abercrombie for the Los Alamos National Laboratory (LANL) on October 27, 1997, at 16:50 hours.

On October 27, 1997, personnel from Rollins Environmental and the Chemical, Science, and Technology (CST) Division, CST-25 were packaging mixed waste for disposal at Technical Area (TA) 21. The shipping manifest called for placing three bottles of hydrogen peroxide 30 percent solution along with two bottles of perchloric acid in the same shipping container. The hydrogen peroxide waste consisted of a total of 8 liters - two bottles contained 3 liters and one bottle contained 2 liters. The perchloric acid waste consisted of .6 liters - one bottle contained .5 liters and the second bottle contained .1 liters. Both the hydrogen peroxide and the perchloric acid were considered suspect radioactive contaminated with non-detectable amounts of Uranium 238, thorium 232, and technetium 99. These items were placed in a 14-gallon poly drum with vermiculite prior to noon on October 27, 1997.

At approximately 15:45, Rollins employees noticed that one of the packed drums was bulging. The shipping manifest was retrieved for that drum and a call was made to LANL's EM&R office. The duty officer notified LANL's Hazardous Materials Team (HAZMAT) team and all were on site by 16:30. HAZMAT evaluated the situation and decided to puncture the drum using one of their devices. HAZMAT would capture the gas for analyses.



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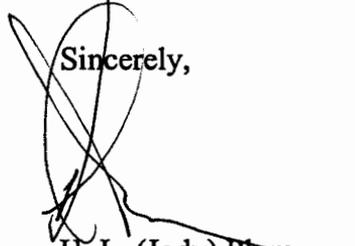
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Once NMED-HRMB was notified, HAZMAT commenced with the operation. The lid of the drum was punctured at approximately 17:30 and the gas was captured for analyses. The gas contained 28 percent oxygen and none of the suspected radioisotopes were present in the captured gas.

The drum was opened to identify the cause of the gas buildup. The gas buildup was caused by the rupture of one of the hydrogen peroxide bottles mixing with the vermiculite. The hydrogen peroxide and vermiculite mixture resulted in a reaction, which caused the vermiculite to decompose, resulting in an off gas which could not vent through the drum. The waste items were segregated and repackaged in separate containers later that evening and sent to the treatment, storage and disposal facility at TA-54. A written report will follow within five working days.

Should you have any questions, please call me at (505) 665-5042.

Sincerely,



H. L. (Jody) Plum
Office of Environment

LAAMEP:6JP-042

cc:

Dr. Robert S. Dinwiddie
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo St. Bldg. A
P. O. Box 26110
Santa Fe, NM 87505