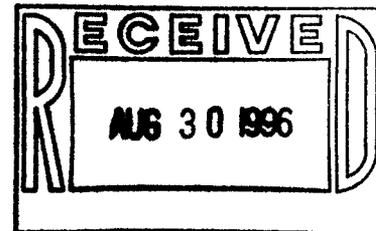




Department of Energy

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



AUG 30 1996

HAND DELIVERED

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, New Mexico 87505

Dear Mr. Garcia:

This written report notifying you of the emergency puncturing of a bottle containing a treatability study sample is submitted pursuant to your request. This activity occurred after Barbara Hoditschek's discussion with Alice Barr of Los Alamos National Laboratory's (LANL) Hazardous and Solid Waste Group via telephone on August 26, 1996.

On this date, an overpack drum containing two glass bottles of samples to be used in an ongoing mixed waste treatability study at Technical Area 48, Building RC-1, Room 423, was opened. After placing one of the bottles in the secondary containment tray in the walk-in hood, it ruptured due to a suspected overpressurization of the bottle. Because the second bottle contained the same material, it was believed to represent a similar potential hazard for overpressurization. After consultation with Ms. Hoditschek, the second bottle's cap was remotely punctured to address this threat. The mechanism used to perform this operation was equipped with secondary containment for liquids and any energetic release of material during puncturing. However, no evidence of overpressurization was noted and the solution remained in the bottle.

While the cause of the rupture is still under investigation, it is believed to be a result of a slow gas build-up due to a chemical reaction occurring in the bottle. The material in the container was identified as laboratory glass cleaning solution that was a mixture of Nochromix and sulfuric acid. The solution also contained chromium and low levels of radioactive contamination. It is suspected that the solution was used to clean glassware containing organic residuals that were slowly oxidized by the solution forming carbon dioxide. LANL is currently pursuing an alternative management practice for this type of material to ensure safe handling will occur.



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The spilled material from the ruptured bottle was neutralized effectively using calcium hydroxide and sodium hydroxide. The remaining material is currently being managed as mixed waste. The solution in the second bottle will be recontainerized in a manner that precludes any unsafe generation of gas.

If you should have any questions regarding this matter, please feel free to contact me at (505) 665-5042, or Alice Barr at (505) 667-0820.

Sincerely,



H. L. "Jody" Plum
Office of Environment and Projects

LAAMEP:6JP-015

for

cc:

Barbara Hoditschek, Program Manager
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