



Department of Energy

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

AUG 04 1999

HAND DELIVERED

CERTIFIED MAIL - RETURN RECEIPT REQUESTED



RED LANL G/P '99

Mr. John Kieling
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo St., Building A
P. O. Box 26110
Santa Fe, NM 87505

Dear Mr. Kieling:

Subject: Incident Involving Treatability Study Residues at Los Alamos National Laboratory (LANL) Chemistry and Metallurgy Research (CMR) Building, Technical Area 3.

The purpose of this letter is to provide you with additional information regarding the above-referenced incident at the CMR building. The Department of Energy (DOE) and the University of California (UC) agreed to inform you of any determinations made regarding the issues surrounding this incident in a letter to you dated July 9, 1999. During DOE and UC's continuing investigation, some issues have arisen that necessitate supplementing our earlier timely notification regarding statements made in correspondence and analytical results recently received.

With regard to the correspondence, some inaccuracies exist in letters provided to the New Mexico Environment Department (NMED) on two separate occasions. In a letter to Mr. James Bearzi, NMED, dated June 2, 1999, a statement was made that the Portsmouth treatability studies were discontinued on April 22, 1999. To be more accurate, the *decision* to discontinue the treatability studies was made on April 22, 1999. The treatability studies themselves were completed prior to the required end date of June 3, 1999. Additionally, while the actual sample materials were returned to the Portsmouth Gaseous Diffusion Facility (Portsmouth), the residues generated from the treatability studies were not returned to Portsmouth. UC has taken responsibility for the management of these residues. In a second letter to you dated July 9, 1999, DOE/UC indicated that no liquid remained to characterize the material involved in the incident. It was subsequently discovered that a small amount of liquid similar to that which was being evaporated on the hotplate did exist. It has since been sampled and analyzed.

Analytical results from the remaining liquid indicate higher than anticipated concentrations of some metals. Specifically, the level of chromium was reported to be 26 +/-3 parts per million (ppm). The concentration of chromium that would cause a material to exhibit a toxic characteristic is 5 ppm. The concentrations of cadmium and selenium were reported to be 1.6 and 1.5 +/- .2 ppm, respectively. The toxic characteristic concentration is 1 ppm for both these metals.



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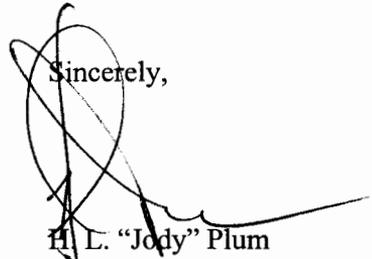
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As was previously indicated in the July 9, 1999 letter, the hazardous waste codes associated with the study samples and the procedures performed on the liquid as part of the study caused the researchers to believe that this liquid would not likely be mixed waste. However, since the chromium, cadmium, and selenium concentrations exceeded the toxicity characteristic limit, the reduction of the liquid volume could be construed as "treatment" under the regulations. The researchers involved in the evaporative process were trying to reduce the volume of liquid, estimated to be approximately 25 liters, so as to concentrate the radionuclide technetium remaining in solution – not to treat mixed waste.

An internal, Type-B-like investigation has been conducted by LANL (with DOE oversight) to evaluate the glovebox incident in its entirety. The investigation was completed on July 30, 1999. A report is being developed describing the findings of the investigation and will be furnished to you upon its completion.

We apologize for the incorrect information that we have previously provided you, and would welcome the opportunity to discuss this matter further with you, should you so desire. Please feel free to contact me or Jack Ellvinger at (505) 665-5042 or (505) 667-0633, respectively, if you have any questions or concerns.

Sincerely,



H. L. "Jody" Plum
Office of Environment

LAAME:6JP-146

cc:

J. Bearzi, Chief

Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo St., Building A
P. O. Box 26110
Santa Fe, NM 87505

S. Dinwiddie

Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo St., Building A
P. O. Box 26110
Santa Fe, NM 87505

J. Tymkowych

Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo St., Building A
P. O. Box 26110
Santa Fe, NM 87505