



Department of Energy
 Albuquerque Operations Office
 Los Alamos Area Office
 Los Alamos, New Mexico 87544

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 a response w John T -
 for my signature - Benito*



MAY 26 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Garcia:

Subject: Resource Conservation and Recovery Act (RCRA) Regulated Waste at Los Alamos National Laboratory's (LANL) Chemistry and Metallurgy (CMR) Facility

The purpose of this letter is to provide you with information regarding LANL's management of fifty-six mixed transuranic (MTRU) waste drums that were recently identified at LANL's CMR facility, located in Technical Area 3. All fifty-six drums have now been shipped to Technical Area (TA) 54 and placed into interim status storage. Forty-five of the waste drums presently are covered waste subject to LANL's Site Treatment Plan requirements, and all fifty-six of the waste drums will be included in the next annual STP update.

On March 13, 1998, we notified the Hazardous and Radioactive Materials Bureau (HRMB) by telephone that LANL had identified three waste streams that were suspected of containing RCRA regulated wastes. LANL then followed up the telephone notification with a letter dated March 26, 1998. In this letter we are describing the actions taken subsequent to the notifications in managing this MTRU waste.

As we indicated in our previous notifications, LANL has recently placed the management of the CMR Facility under the Nuclear Materials Technology Division (NMT-DO). The Waste Management and Environmental Compliance Group (NMT-7) took over all waste management activities at the CMR Facility on March 1, 1998. On March 4, 1998, the first indication of a potential waste characterization problem at the CMR Facility was identified during a walk-through of waste generating locations by NMT-7 personnel. The individuals performing the walk-through became concerned that drums identified as receiving only TRU waste may have been receiving items subject to RCRA waste management requirements. Interviews with waste generators were initiated, and the logs itemizing the contents of each drum for all TRU waste drums that might have received RCRA wastes were reviewed. Out of this effort, fifty-six drums (earlier identified as fifty-five drums), all having a fifty-five gallon capacity, were identified as potentially containing items of mixed waste.

Initially, LANL identified three waste streams suspected of being subject to RCRA regulation. However, for the purposes of this letter, these three waste streams have now been combined into two groups, with Group 1 consisting of forty-nine drums and Group 2 consisting of seven drums.

Group 1 is composed of forty-nine drums that contain what we now believe to be MTRU waste, which was generated from March 1, 1994 through February 28, 1998. All forty-nine of these drums contain small silver filter cartridges and analytical process debris (paper, Kim Wipes, gloves). The small silver filter cartridges have passed the Toxicity Characteristic Leaching



MAY 26 1998

Procedure with 2.7 ppm of silver leached by the test. However, these cartridges and the analytical process debris have been in contact with solutions that have carried wastes that bear the F code listing, specifically waste codes F001, F002, and F005. As we understand the application of the debris rule, these cartridges, when dispositioned as waste, must be managed as the wastes they were in contact with, unless they meet debris rule clean up levels. In the case of the CMR Facility, the cartridges were dispositioned as waste without any prior clean up occurring.

For Group 1, our examination of the waste generation process reveals the following specific information: In the CMR Facility's Room 9010, which is an interim status storage unit, LANL has been conducting the Source Term Test Project (STTP), which is designed to evaluate the leachability of actinides from cemented mixed waste, pyrochemical salts, and heterogeneous combustible waste (paper, plastic, etc.). The cemented mixed waste and the heterogeneous combustible waste typically contain the F codes listed above. These wastes are placed into a brine solution, which is periodically collected and analyzed for actinides and other elemental analytes. This brine solution comes in contact with the filter cartridges and analytical process debris as part of the analytical process for measuring anions in the brine. When the cartridges and debris are dispositioned as waste, they would, under our understanding of the debris rule, become regulated as the F code wastes with which they were in contact. We should also point out that in reaching an understanding of this process, we conducted interviews with the waste generators and learned that some of the drums might also contain characteristic hazardous (mixed) wastes. Consequently, we assigned a number of EPA characteristic waste codes to specific drums of waste. (See the enclosed EXCEL spreadsheet for specific drum numbers and associated waste codes.)

In addition to the above waste characterization information, we also identified four of the drums (initially identified as Group One in LANL's March 26, 1998 letter) out of the group of forty-nine drums as containing equipment that held printed circuit boards. These drums also contain cartridges and process debris. Out of concern for radiological exposure, LANL has determined that it would be better not to remove the equipment portion of the waste from these four drums.

Group 2 is composed of seven drums containing MTRU waste generated from March 6, 1996 through February 18, 1998. These drums contain filter cups of diatomaceous earth that have had methylene chloride passed through them. After reviewing what we believe to be the applicable regulations, we have determined that the diatomaceous earth and the filter cups, when disposed, should bear the F002 waste code listing.

Immediately after the potential waste characterization problem was recognized, all drums potentially containing the suspect waste streams were marked "Potentially Hazardous Waste Pending Final Verification." After the waste logs were checked, the waste generation processes examined, potentially applicable regulations reviewed, and the waste generators interviewed, each drum that was determined to contain hazardous waste was marked as hazardous waste and managed as MTRU waste. Each drum was determined to be in good condition, and was secured in a fenced area within CMR Room 5072 under the control of NMT-7. All drums were maintained in an inspectable array and were kept closed while in storage. Daily inspection of the drums was performed. Finally, a sign reading "Danger - Unauthorized Personnel Keep Out" in English and Spanish was posted on the storage area fence.

All fifty-six of the MTRU waste drums have now been shipped to TA-54 and placed into interim status storage. The first shipment took place on April 17, 1998, when four of the fifty-six drums were shipped. On April 29, 1998, thirty of the fifty-six drums were shipped, with the remaining twenty-two drums being shipped on May 7, 1998. All drums could not be sent immediately in a single shipment due to a number of needed preliminary activities. These included: (1) assaying the drums for radioisotope content, (2) completing waste profile forms for the waste,

MAY 26 1998

Benito J. Garcia

3

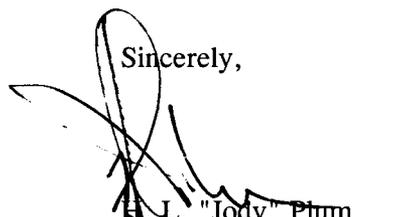
(3) verifying packaging configuration (confinement layers), (4) documenting conformance with the TA-54 Safe Storage Criteria, and (5) completing the hazardous waste transportation documentation required for shipping.

The enclosed EXCEL spreadsheet identifies the specifics of each MTRU waste drum. The spreadsheet includes drum numbers, generation dates, EPA waste codes, and associated group number.

We should inform you that as soon as NMT learned of the existence of the potential waste characterization problem, its management declared a moratorium on all waste collection activities and required that all prospective waste generators take an intensive four-hour training class at the CMR Facility on waste generator obligations and responsibilities. This effort, along with more stringent operational guidelines directed at safety and environmental responsibilities, will improve waste management practices at the CMR Facility.

Please let me know if you wish any further information regarding the identification and management of the fifty-six drums that we are now managing as mixed waste. If you have questions regarding this letter or need any additional information, please call me at (505) 665-5042.

Sincerely,



E.L. "Jody" Plum
Office of Environment

LAAME:3JP-084

Enclosure

cc w/enclosure:
Janice Archuleta
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo Street, Building A
P. O. Box 26110
Santa Fe, NM 87505

John Tymkowych
RCRA Inspection and Enforcement
Program Manager
Hazardous and Radioactive Materials Bureau
New Mexico Environment Department
2044 Galisteo Street, Building A
P. O. Box 26110
Santa Fe, NM 87505

**LOS ALAMOS NATIONAL LABORATORY
CMR TRANSURANIC MIXED WASTE**

DRUM NUMBERS	DATE GENERATED	EPA WASTE CODES	MIXED TRU WASTE DESCRIPTION
55061	3/1/94	F001, F002, F005, D006, D011, D022, D043	Group One Equip. + Printed Circuit Boards STTP Brine Derived From Waste
55704	10/16/95	F001, F002, F005, D006, D011, D022, D043	
55742	10/5/96	F001, F002, F005, D006, D008, D011, D022, D043	
55764	7/21/97	F001, F002, F005, D006, D008, D011, D022, D043	
55038	12/13/95	F001, F002, F005, D022, D043	Group One STTP Brine Derived From Waste
55041	7/6/95	F001, F002, F005, D008, D022, D043	
55044	9/19/95	F001, F002, F005, D008, D022, D043	
55062	6/1/94	F001, F002, F005, D022, D043	
55075	4/18/95	F001, F002, F005, D008, D022, D043	
55091	4/27/95	F001, F002, F005, D008, D022, D043	
55092	5/23/95	F001, F002, F005, D008, D022, D043	
55093	5/24/95	F001, F002, F005, D008, D022, D043	
55094	5/25/95	F001, F002, F005, D008, D022, D043	
55099	8/11/95	F001, F002, F005, D008, D022, D043	
55705	12/4/95	F001, F002, F005, D008, D022, D043	
55706	10/31/95	F001, F002, F005, D022, D043	
55707	10/20/95	F001, F002, F005, D008, D022, D043	
55708	10/25/95	F001, F002, F005, D008, D022, D043	
55717	2/15/96	F001, F002, F005, D008, D022, D043	
55718	12/22/95	F001, F002, F005, D008, D022, D043	
55719	1/11/96	F001, F002, F005, D008, D022, D043	
55724	3/8/96	F001, F002, F005, D008, D022, D043	
55725	3/12/96	F001, F002, F005, D008, D022, D043	
55726	4/19/96	F001, F002, F005, D008, D022, D043	
55729	5/7/96	F001, F002, F005, D008, D022, D043	
55730	5/15/95	F001, F002, F005, D022, D043	
55731	5/28/96	F001, F002, F005, D008, D022, D043	
55733	5/31/96	F001, F002, F005, D022, D043	

55735	7/3/96	F001, F002, F005, D008, D022, D043
55736	5/29/96	F001, F002, F005, D008, D022, D043
55737	7/3/96	F001, F002, F005, D008, D022, D043
55738	1/2/96	F001, F002, F005, D008, D022, D043
55741	8/15/96	F001, F002, F005, D008, D022, D043
55751	10/9/96	F001, F002, F005, D022, D043
55752	11/18/96	F001, F002, F005, D022, D043
55754	9/9/96	F001, F002, F005, D008, D022, D043
55759	11/22/96	F001, F002, F005, D008, D022, D043
55760	12/17/96	F001, F002, F005, D008, D022, D043
55761	1/16/97	F001, F002, F005, D008, D022, D043
55762	2/27/97	F001, F002, F005, D022, D043
55763	12/23/96	F001, F002, F005, D008, D022, D043
55770	7/28/97	F001, F002, F005, D008, D022, D043
55771	3/28/97	F001, F002, F005, D008, D022, D043
55775	3/21/97	F001, F002, F005, D008, D022, D043
55787	2/28/98	F001, F002, F005, D008, D022, D043
55788	8/5/97	F001, F002, F005, D008, D022, D043
55789	8/5/97	F001, F002, F005, D022, D043
55790	10/8/97	F001, F002, F005, D008, D022, D043
55713	12/12/95	F001, F002, F005, D008, D022, D043

Group One Continued
STTP Brine Derived From Waste

55727	3/6/96	F002
55744	2/18/98	F002
55755	7/14/97	F002
55791	7/31/97	F002
55792	7/15/97	F002
55793	8/28/97	F002
55798	4/11/97	F002

Group Two
Methylene Chloride Contaminated Waste