

Entered



State of New Mexico  
ENVIRONMENT DEPARTMENT  
Hazardous & Radioactive Materials Bureau  
2044 Galisteo  
P.O. Box 26110  
Santa Fe, New Mexico 87502  
(505) 827-1557  
Fax (505) 827-1544



GARY E. JOHNSON  
GOVERNOR

MARK E. WEIDLER  
SECRETARY

EDGAR T. THORNTON, III  
DEPUTY SECRETARY

Red LANL FFCO/96

October 7, 1996

H. L. Plum  
STP Project Manager  
Office of Environments and Projects  
Albuquerque Operations Office  
Los Alamos Area Office  
Los Alamos, NM 87544

Micheline Devaurs  
STP Project Manager  
Los Alamos National Laboratory  
Los Alamos, NM 87445

RE: Los Alamos National Laboratory (LANL) TA-50-1 Wastewater Treatment Sludge  
Reclassification

Dear Mr. Plum and Ms. Devaurs:

New Mexico Environment Department (NMED) received a letter from the Department of Energy (DOE) and University of California at Los Alamos National Laboratory (UC/LANL) on January 12, 1996 which stated that 1228 of a total of 1288 drums of sludge currently stored as low-level mixed waste were recharacterized, determined to be low-level radioactive waste not subject to Resource Conservation and Recovery Act (RCRA) requirements for hazardous waste, and should be classified as low-level radioactive waste. The sludges were considered to be, and were listed as mixed (radioactive and hazardous) wastes or "covered wastes" in the *FFCO Site Treatment Plan Compliance Plan Volume (STP/CPV), Exhibit A*, submitted for LANL as defined by the Federal Facility Compliance Order (FFCO) that NMED issued to DOE and UC (Respondents) in October 4, 1995. The drums of sludge are listed in the *STP/CPV* under **Section 3.3 Mixed Waste Requiring Further Characterization or for Which Technology Assessment Has Not Been Done as dewatered treatment sludge (MWIR waste ID [identification]: LA-W928)**. The request from DOE and UC at LANL is within the scope of the FFCO. Under **Section V.B. of the FFCO, Other Matters Covered in this Order**, it is stated "Respondents anticipate that as they characterize, sort, and survey mixed waste currently in storage at LANL, they will determine that certain waste previously identified as mixed waste is actually hazardous waste without a radioactive component or radioactive waste without a hazardous component. In those cases where the waste is determined to be a radioactive waste without a hazardous component, Respondents shall provide to NMED all information required for deleted waste under Section IX.C. (Deletion of Waste)."



H. L. Plum  
M. E. Devaurs  
October 7, 1996  
page 2

The January 12, 1996 letter from DOE and UC/LANL to NMED, mentioned above, and subsequent letters and meetings on this subject have satisfied the requirements of Section IX.C. In addition to satisfying the requirements of Section IX.C., the letters from LANL supplied much more information about how the sludge was generated, including the process in the Radioactive Liquid Waste Treatment Facility, Technical Area 50, Building 1 (TA-50-1). The letters also contained many lists or tables of data collected from the sludge batches. The sludges were generated and sampled by batches which were then processed and containerized at the same time. This method produced a well-mixed, and representative sample of the contents of each batch sampled. The letters also included influent data, explanations of the data, and answers to questions that the personnel from the Hazardous and Radioactive Materials Bureau (HRMB) had concerning the sludge. A list of the letters and their attachments are included in Table 1 below.

Table 1: Correspondence from LANL with the subject of the TA-50-1 Sludges

Date of Correspondence from LANL	List of Attachments
January 12, 1996	<ul style="list-style-type: none"> <li>A. Excerpt from LANL Chemical and Mixed Waste. Database Listing 1288 drums of TA-50-1 Sludge.</li> <li>B. Summaries of Analytical Results, Target Organic Compounds Detected in TA-50-1 Influent.</li> <li>C. Summaries of Analytical Results, Toxic Metals detected in TA-50-1 Sludge.</li> <li>D. Excerpts from LANL Administrative Requirements (ARs) 10-1 and 10-3.</li> </ul>
April 1, 1996	<ul style="list-style-type: none"> <li>A. Sludge Drums - Generation, Sampling, and Storage.</li> <li>B. Analytical Data for 20 Sludge Samples.</li> <li>C. Analytical Methods, QA/QC Procedures for Sludge Samples.</li> <li>D. R.M. Parsons Report, <i>Study for Radioactive Wastewater Treatment Sludges at the Los Alamos National Laboratory</i>.</li> </ul>
August 14, 1996	<ul style="list-style-type: none"> <li>A. <b>Table A-1:</b> Available Volatile and Semivolatile Organics Data for TA-50-1 Influent and Sludge. <b>Table A-2:</b> Organic Compounds Detected in TA-50-1 Sludge. <b>Table A-3:</b> Toxic Organic Compounds listed in 20 NMAC 4.1.201 at 40 CFR 261.3(a)(2)(iv)(A) and (B) [never found in the sludges].</li> <li>B. Summaries of Analytical Results, Target Organic Compounds Detected in TA-50-1 Influent.</li> <li>C. Available Total Toxic Organics Data for TA-50-1 Effluent.</li> <li>D. Examples of Volatile and Semivolatile Organics Analyzed in TA-50-1 Sludge.</li> </ul>

H. L. Plum  
M. E. Devaurs  
October 7, 1996  
page 3

DOE and UC/LANL, provided data as requested by HRMB and in addition those data which DOE and UC/LANL believed essential to the recharacterization request. In some instances, HRMB reviewed a representative subset of the data available on the sludges. In other situations, a complete set of data was not available for each batch of sludge because all sample analyses were not required by regulations at the time. HRMB reviewed all analytical data that was accessible. HRMB evaluated the sludge analytical data for metal components, volatile organics, semi-volatile organics, and hazardous characteristics. All of the data reviewed from 1228 of the 1288 drums did indicate that the dewatered sludge did **not** contain RCRA regulated wastes. (Sixty of the drums in this treatment category were still considered to be classified as mixed waste.)

Reclassification of the drums of sludge is covered within Section V.B. of the FFCO and it is stated in Section I.X. that waste addressed pursuant to Section V.B. is excepted from the requirements of the revision process. Although this is true, NMED does have the option to require a revision should they feel that the subject warrants public comment. Due to the significance of the amount of waste proposed to be reclassified, NMED believes that a revision is proper. A revision process will allow the public the opportunity to review, ask questions and make comments on the determination of 1228 drums of dewatered sludge that would no longer be determined to be mixed waste and classified only as radioactive waste. The period for public comment required by the revision process is thirty (30) days.

This revision, initiated by NMED would read as follows: In the first table listed in Section 3.3, labeled Treatability Groups, that line item labeled "dewatered treatment sludge, MWIR waste ID : LA-W928" be reduced from "1288 number of items" (drums) to *sixty (60) number of items* and to reduce the net volume in cubic meters accordingly. (This volume would be provided by DOE and UC/LANL).

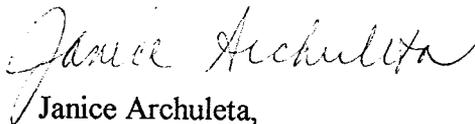
NMED requires that DOE and UC/LANL submit to NMED the final disposition methodologies and a unique number or sequence for identification purposes for each drum that would be considered to be radioactive waste only (no longer mixed). Specific identity of each drum of dewatered sludges that has been recharacterized to be low-level radioactive waste would ensure that none of the 60 barrels still considered mixed waste would be disposed in violation of RCRA

H. L. Plum  
M. E. Devaurs  
October 7, 1996  
page 4

standards. The submittal for the identification records by DOE and UC/LANL would make the records for the dewatered sludges complete. NMED requests that the drum identification submittal be provided within thirty (30) days of receipt of this letter.

If you have any questions about this letter or the FFCO, please call me at (505) 827-1558.

Sincerely,



Janice Archuleta,  
FFCO Project Manager

ja

cc: Benito J. Garcia, Chief  
Susan McMichael, OGC  
Coby Muckelroy, Program Manager Inspection/Enforcement Section  
Barbara Hoditschek, RCRA Permits Management Section (RPMS), Program Manager  
Stu Dinwiddie, Supervisor, DOE Team, RPMS

## Public Notice

On October 4, 1995, the New Mexico Environment Department (NMED) issued a Federal Facility Compliance Order (FFCO) requiring compliance by the United States Department of Energy (DOE) and Sandia Corporation (Sandia) with a Site Treatment Plan (STP) Compliance Plan Volume (CPV) for the treatment of mixed waste at the Sandia National Laboratory, New Mexico (SNL/NM) pursuant to the New Mexico Hazardous Waste Act (HWA), NMSA 1978, §§ 74-4-1 et seq. (Repl. Pamp. 1993) and Section 3021(b) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6939 (c), as amended by the Federal Facility Compliance Act of 1992, Pub. L. 102-386, 106 Stat. 1505 (1992) (FFC Act). Under Section X. "Revisions" of the FFCO, all proposed or required revisions shall be available for public review and comment.

Department of Energy (DOE) and University of California at Los Alamos National Laboratory (UC/LANL) has recharacterized 1228 of a total of 1288 drums of sludge currently stored as low-level mixed waste. These drums of sludge were determined to be only low-level radioactive waste not subject to Resource Conservation and Recovery Act (RCRA) requirements for hazardous waste and were requested that they be classified as low-level radioactive waste. The sludges were considered to be, and were listed as mixed (radioactive and hazardous) wastes or "covered wastes" in the *FFCO Site Treatment Plan Compliance Plan Volume (STP/CPV), Exhibit A*, submitted for LANL as defined by the Federal Facility Compliance Order (FFCO) that NMED issued to DOE and UC/LANL (Respondents) in October 4, 1995. The drums of sludge are listed in the STP/CPV under **Section 3.3 Mixed Waste Requiring Further Characterization or for Which Technology Assessment Has Not Been Done** as *dewatered treatment sludge*. The request from DOE and UC at LANL is within the scope of the FFCO. Under **Section V.B. of the FFCO, Other Matters Covered in this Order**, it is stated "Respondents anticipate that as they characterize, sort, and survey mixed waste currently in storage at LANL, they will determine that certain waste previously identified as mixed waste is actually hazardous waste without a radioactive component or radioactive waste without a hazardous component. In those cases where the waste is determined to be a radioactive waste without a hazardous component, Respondents shall provide to NMED [New Mexico Environment Department] all information required for deleted waste under Section IX.C (Deletion of Waste)." DOE and UC/LANL have satisfied the requirements of Section IX.C. NMED has concurred with DOE and UC/LANL after data analysis review.

The revision proposed by NMED is, in the first table listed in Section 3.3, labeled Treatability Groups, that line item labeled "dewatered treatment sludge, MWIR waste ID [identification]: LA-W928", be reduced from "1288 number of items" (drums) to sixty (60) number of items and to reduce the net volume in cubic meters accordingly.

A copy of the proposed revisions will be made available for public review and written comment for thirty (30) days from the date of this publication at the following location:

Hazardous and Radioactive Materials Bureau  
2044 Galisteo, Building A  
Santa Fe, New Mexico 87505  
Contact: Stella Montoya (505) 827-1558