



Report

*Ideas That Change the World*  
**Solid Waste Regulatory Compliance**  
P.O. Box 1663, Mail Stop K490  
Los Alamos, New Mexico 87545  
(505) 667-0666/Fax (505) 667-5224

Date: March 11, 2004  
Refer To: SWRC:04-022

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. Carl Will  
RCRA Permits Management Program  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303



**Subject: 2003 ANNUAL HAZARDOUS WASTE TREATABILITY  
REPORT**

The purpose of this letter is to submit the hazardous waste treatability study report required by New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20.4.1 NMAC), as revised October 1, 2003, (incorporating 40 CFR 261.4 (f)(9)).

Los Alamos National Laboratory (LANL) had two treatability studies that were concluded in calendar year (CY) 2003 and one study that will continue into CY 2004. The document attached gives information on the nature, status, and close out information of these studies. Currently, there are no new treatability studies planned for CY 2004. In the event that treatability studies are proposed for this year, a notice of intent to conduct the study will be prepared and be submitted to your office as required by 20.4.1 NMAC, (incorporating 40 CFR 261.4 (f)(1)).

If you have any questions regarding the hazardous waste treatability study reporting documents contained in this report, please contact Luciana Vigil-Holterman at 505-665-3435.

Sincerely,

Tony Grieggs  
Acting Group Leader

TG:LH:vc

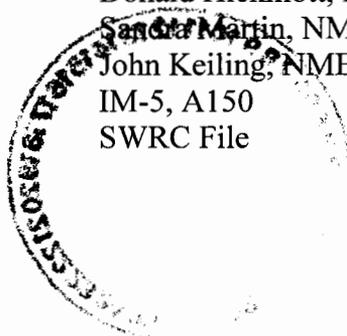


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Enc. (1) 2003 Treatability Study Information For Los Alamos National Laboratory  
(LANL) EPA I.D. No. NM0890010515

Cy: Gene Turner, DOE/OLASO, w/enc., MS A316  
Jack Ellvinger, RRES-SWRC, w/enc., MS K490  
Jeff Carmichael, RRES-SWRC/NMT-7, w/enc., MS E501  
Egan McCormick, NMT-7, w/enc., MS E501  
Maureen McGraw, EES-6, w/enc., MS D469  
Donald Hickmott, EES-6, w/enc., MS D462  
Sandra Martin, NMED, w/o enc.  
John Keiling, NMED, w/o enc.  
IM-5, A150  
SWRC File



**2003 TREATABILITY STUDY INFORMATION FOR**  
**LOS ALAMOS NATIONAL LABORATORY (LANL)**  
**EPA I.D. NO. NM 0890010515**

***Treatability Study Description:*** Treatability Study of Barium Contaminated Soils

**Type (by process) of treatability study conducted:**

Assess the effectiveness of aqueous sodium sulfate (NA<sub>2</sub>SO<sub>4</sub>) solutions at reducing barium solubility in soils and sediments.

**Person conducting the treatability study:**

Maureen McGraw and Donald Hickmott, EES-6

**Type of waste subject to the treatability study:**

Barium contaminated soils

**Date the shipment of waste for the treatability study was received:**

October 2, 2002

**Quantity of waste in storage and subjected to treatment each day:**

<b>Date of Treatment</b>	<b>Amount of Waste Treated</b>
2/27/2003	40 grams
3/5/2003	80 grams
3/13/2003	40 grams

Waste was removed from storage when treatment began for each sample. All solid treatment residues passed Toxicity Characteristic Leaching Procedure (TCLP) for barium.

**Date the treatability study was concluded:**

March 31, 2003

**Final disposition of residues:**

The waste is composed of approximately 90% solution and 10% soil sediment contaminated with barium. No unused samples removed from storage or returned to generator or sample collector. Residues are stored pending disposal.

***Treatability Study Description:*** Nochar Petro Bond Polymer Waste Oil Absorption

**Type (by process) of treatability study conducted:**

Nochar Petro Bond

**Person conducting the treatability study:**

Egan McCormick, NMT-7

**Type of waste subject to the treatability study:**

Used oil with low-level radioactive contamination.

**Date the shipment of waste for the treatability study was received:**

October 7, 2002 and May 30, 2003

**Quantity of waste in storage and subjected to treatment each day:**

A total of 8.3 liters of used oil waste transferred from the Technical Area 55, Building PF4, Room B40 container storage unit.

**Date the treatability study was concluded:**

May 30, 2003

**Final disposition of residues:**

All waste evaluated was consumed in the study, and no sample residues were returned from the analytical laboratory.

***Treatability Study Description:*** Filtering Organic Solutions to Reduce Actinide Concentration

**Type (by process) of treatability study conducted:**

This project consists of using several filtering technologies that are designed to reduce spent trichloroethylene's (TCE) actinide concentration to below 50 nanocuries per gram (hereafter referred to as low-level).

**Person conducting the treatability study:**

Debra Johnson, NMT-7

**Type of waste subject to the treatability study:**

Radioactive contaminated spent TCE at transuranic levels

**Date the shipment of waste for the treatability study was received:**

June 2, 2003

**Quantity of waste in storage and subjected to treatment each day:**

A total of 62 kg has been accepted and treated to date.

**Date the treatability study was concluded:**

Study will continue to May 2004.

**Final disposition of residues:**

No unused sample was generated. The filtered TCE (62 kg in a 30 gallon drum), which is now a low-level mixed waste, was shipped to TA-54 for further waste management on September 25, 2003.