

Report



**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 12, 2003  
Refer To: SWRC:03-012

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

Mr. Carl Will  
RCRA Permits Management Program  
Hazardous Waste Bureau  
New Mexico Environment Department  
2044-A Galisteo Street  
P.O. Box 26110  
Santa Fe, New Mexico 87502-6110



**SUBJECT: 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 June 14, 2000 [06-14-00], Subpart II, 261.4 (f)(9).

Los Alamos National Laboratory (LANL) has two treatability studies that are in progress and began in 2002. The document attached gives information on the nature and status of these studies. Currently, there is only one study being planned for a start later this year. In the event that other treatability studies are proposed, a notice of intent to conduct the study will be prepared and be submitted to your office as required by 20.4.1 NMAC, Subpart II, 261.4 (f)(1).

The proposed treatability study for this year will deal with filtration. This technology will be used to reduce the actinide concentration within two wastes to leave only low-level radioactive waste. Wastes to be treated are: 200 kilograms of mixed waste trichloroethylene and 200 kilograms of mixed waste bromobenzene. More detail on the study will be provided with the 45-day notification required for treatability studies.

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

Sincerely,

A handwritten signature in cursive script that reads 'Jack Ellvinger'.  
Jack Ellvinger  
Deputy Group Leader



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Mr. Carl Will  
SWRC:03-012

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March 12, 2002

JE:LH:vc

Enc. 1) 2002 Treatability Study Information for Los Alamos National Laboratory (LANL) EPA  
I.D. No. NM0890010515

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J. Carmichael, RRES-SWRC/NMT-7, E501  
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w/o enc:  
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IM-5, A150  
Author File  
SWRC File

**2002 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 ( $\text{Na}_2\text{SO}_4$ ) 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:**

Less than 40 grams of contaminated soil have been treated on any single day, and a total of 450 grams of soil has been treated as part of this study.

**Date the treatability study was concluded:**

This treatability study is still in progress. Completion date is approximated to be April 30, 2003.

**Final disposition of residues:**

This treatability study is still in progress. The waste is composed of approximately 90% solution and 10% soil sediment contaminated with barium. The solution contains sodium sulfate, deionized water, acetic acid, sodium hydroxide, and barium derived from the soil. To date approximately 9 liters of the solution has been generated, and it is anticipated that an additional 2-3 liters will be generated by April 30, 2003 when the study is complete.

***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:**

Mixed waste used vacuum pump oil

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

October 7, 2002

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

A total of 0.875 kg was received and subjected to treatment on the same day. There have been no other receipts of wastes for treatment. The total amount of waste that may be treated is 5 kilograms.

**Date the treatability study was concluded:**

This treatability study is still in progress.

**Final disposition of residues:**

This treatability study is still in progress, however, no residue has been returned from the analytical laboratory.