

TA 21

*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**



**GARY E. JOHNSON**  
GOVERNOR

*Hazardous Waste Bureau*  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Telephone (505) 428-2500  
Fax (505) 428-2567  
[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)



**JOHN R. D'ANTONIO, Jr.**  
SECRETARY

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

November 25, 2002

Dr. John Browne, Director  
Los Alamos National Laboratory  
P.O. Box 1663, Mail Stop A100  
Los Alamos, New Mexico 87545

Mr. Everett Trollinger, Project Manager  
Office of Los Alamos Site Operations  
Department of Energy  
528 35<sup>th</sup> Street, Mail Stop A316  
Los Alamos, New Mexico 87544

**RE: "CONTAINED-IN" DETERMINATION FOR SOLID WASTE MANAGEMENT  
UNIT (SWMU) 21-011(k), TECHNICAL AREA 21**

Dear Dr. Browne and Mr. Trollinger:

The Hazardous Waste Bureau of the New Mexico Environment Department (NMED) is in receipt of "Request for 'No Longer Contained In' Determination for Soil, Tuff, and Sediment at Solid Waste Management Unit 21-011(k), at Technical Area (TA) 21," dated November 5, 2002 and referenced by ER2002-0749. The "contained-in" determination is being requested by Los Alamos National and the Department of Energy for environmental media contaminated with low concentrations of F-listed hazardous waste: acetone, methylene chloride, toluene, and trichloroethylene. The environmental media consist primarily of soil, sediment, and tuff that will be excavated during implementation of voluntary corrective measures (VCM) activities proposed for SWMU 21-011(k). NMED is in receipt of the VCM Plan for SWMU 21-011(k) at Technical Area 21, Revision 2 (LA-UR-02-6797 and ER2002-0745); however, NMED has not conducted technical review or issued approval of the VCM Plan. NMED evaluated the analytical and risk assessment data in accordance with current "contained-in" guidance to determine whether the environmental media to be excavated must be managed as F-listed hazardous waste.

The "contained-in" determination is based on conservative, health-based soil concentrations (i.e., US EPA Region 6 Human Health Medium-Specific Screening Levels) for direct exposure to an industrial receptor using a reasonable maximum exposure scenario. An industrial worker scenario is appropriate for this determination because the environmental media to be excavated will be properly disposed of in an appropriate landfill, further reducing the risk to human health and the environment. Based on the information provided, NMED believes that the media to be

10671



Dr. Browne and Mr. Trollinger

November 25, 2002

Page 2 of 2

excavated during implementation of proposed VCM activities at 21-011(k), which contain acetone, methylene chloride, toluene, and trichloroethylene at concentrations below the health-based screening levels, will not need to be managed as F-listed hazardous waste. In order to account for simultaneous exposure to two carcinogens the health-based concentration for methylene chloride and trichloroethylene are each one-half of the value proposed in LANL's request. The requested approval is granted if the excavated material (i.e., environmental media) is managed as solid waste that will be properly disposed in an appropriate facility. Any material with hazardous constituents in concentrations equal to or greater than the proposed health-based concentrations specified above and meet land disposal restrictions (LDRs), shall be managed as F-listed hazardous waste.

Waste characterization samples must be collected from the waste generated at a rate of one (1) sample per 100 cubic yards (yd<sup>3</sup>). Each sample collected must be analyzed for total Appendix VIII (40 CFR Part 261) volatile organic compounds (VOCs), and the results submitted to NMED in the VCM Completion Report for 21-011(k). In order for the waste to be disposed, all sample results must meet LDRs and be less than health-based (industrial) concentrations for detected VOCs. Should any detected VOC not meet LDRs and industrial health-based screening levels, NMED must be immediately notified and the waste must be managed appropriately.

This "contained-in" determination is limited to only the four (4) contaminants mentioned; the contaminated environmental media for which the data and assessment were submitted and reviewed; and the activities conducted during this activity. The waste must be managed in the manner described above.

If you have any questions regarding this "contained-in" determination, please contact me at (505) 428-2546 or John Young at (505) 428-2538.

Sincerely,



Vickie Maranville  
Project Leader  
Permits Management Program

Dr. Browne and Mr. Trollinger

November 25, 2002

Page 3 of 2

Cc: J. Bearzi, NMED HWB  
D. Cobrain, NMED HWB  
J. Young, NMED HWB  
J. Davis, NMED SWQB  
J. Parker, NMED DOE OB  
S. Yanicak, NMED DOE OB, MS J993  
L. King, EPA 6PD-N  
W. Woodworth, DOE OLASO, MS A316  
D. McInroy, LANL RRES/ER, MS M992  
N. Quintana, LANL RRES/ER, MS M992  
B. Ramsey, LANL RRES/DO, MS J591  
File: Reading and LANL TA-21 (21-011(k) Outfall)