



BILL RICHARDSON
GOVERNOR

Permit (TA-55)
State of New Mexico
ENVIRONMENT DEPARTMENT

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

April 21, 2003

Mr. G. Pete Nanos
Interim Director
Los Alamos National Laboratory
Post Office Box 1663, MS A 100
Los Alamos, NM 87545

Mr. Ralph Erickson, Area Manager
Office of Los Alamos Site Operations
Department of Energy
528 35th Street, MS A316
Los Alamos, NM 87544

SUBJECT: VITRIFICATION UNIT, TECHNICAL AREA-55
LOS ALAMOS NATIONAL LABORATORY EPA ID# NM 00890010515
HWB-LANL-03-001

Dear Messrs. Nanos and Erickson:

The New Mexico Environment Department (NMED) has reviewed the Technical Area (TA)-55 Resource Conservation and Recovery Act (RCRA) Part B Permit Application (Application), Revision 1.0, dated January 2002, and the Response to NMED's Notice of Deficiency for the Application, dated August 2002. Both documents were submitted to NMED by Los Alamos National Laboratory (LANL) and the U.S. Department of Energy (DOE) (collectively the Permittees). NMED has determined that the information provided in the Application is insufficient to issue a draft RCRA Permit for the proposed Vitrification Unit (VU) at TA-55. The Permittees have informed NMED that information required by NMED to issue a draft Permit, including information regarding potential air emissions from the VU, will be known only after trial operation of the VU.

Based on NMED review and subsequent meetings between NMED and the Permittees, NMED has determined that procedures equivalent to those used for permitting RCRA hazardous waste incinerators, pursuant to 40 C.F.R. Part 264, Subpart O and Subpart X, would be appropriate in issuing a RCRA permit for the VU. The permit would authorize VU operation in two stages: a



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trial operation period and final operation contingent on attainment of performance standards during the trial operation. The proposed procedure is outlined as follows:

- Permittees submit a RCRA permit application for TA-55 VU that includes a performance test plan with the following information:
 1. Full-size (36X24) Detailed Engineering Drawings/Description of the proposed Vitrification Unit to be located in TA-55-4, Room 434A as well as the prototype unit located in PF-5, including but not limited to:
 - Any components that have been built to date
 - Waste Feed subsystems
 - Melter subsystem
 - Off-gas subsystem
 - Support Subsystems
 2. Waste Analysis, including but not limited to:
 - Description of physical form of waste
 - Identification of any hazardous organic constituents listed in Part 261, Appendix VIII, which are present in the waste to be vitrified
 - Identification of any constituents listed in Part 261, Appendix VIII which are excluded from analysis and the basis for the exclusion
 - Waste analysis must rely on analytical techniques specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods"
 - Approximate quantification of hazardous constituents identified in the waste.
 3. Sampling and Monitoring, including but not limited to:
 - Process Operation Monitoring
 - Sampling procedures, location, equipment, and frequency
 - Analysis procedures
 - Quality Assurance/Quality Control
 4. Performance Test Schedule, including but not limited to:
 - Start Date
 - Duration
 - Quantity of waste to be vitrified

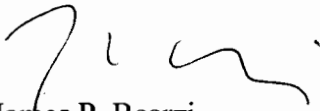
- Completion Date
5. Test Protocols, including but not limited to:
- Surrogate selection to include rationale for choosing such surrogates
 - Operating conditions
 - Calibration schedule
 - Waste feed limitations
 - Treatment effectiveness
6. Start up, Operation and Shutdown Procedures, including but not limited to:
- System start-up
 - Waste processing mode
 - System shutdown
 - Automatic shut-off system
 - Emission controls
- NMED will review the aforementioned documentation after its submission, and send notice to all interested individuals regarding the anticipated performance test;
 - Upon approval, NMED will issue a permit authorizing a trial operation of the VU to conduct the performance test and operation of the VU for the term of the permit only if performance standards are met as specified in the permit;
 - Permittees conduct the specified performance test at TA-55;
 - Permittees submit a performance test report to NMED;
 - If performance measures are met, the VU is authorized to operate for the term of the permit, with ongoing monitoring, so long as the performance standards continue to be met.

NMED believes that permitting the VU in this manner would provide NMED and the public with vital information on the design, off-gas system, treatment effectiveness, and air emissions prior to authorizing long-term operation of the unit.

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If you have questions or concerns, please contact Sandra Gabaldón of my staff at (505) 428-2543.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

JPB:sg

cc: J. Kieling, NMED HWB
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file: Reading and ~~LANL Permit~~