



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

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



PETER MAGGIORE
SECRETARY

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**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

December 24, 2001

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

David A. Gurulé, Area Manager
Department of Energy
Los Alamos Area Office
528 35th Street, Mail Stop A316
Los Alamos, New Mexico 87544

**SUBJECT: NOTICE OF DEFICIENCY:
TECHNICAL REVIEW OF THE JANUARY 31, 2000, TA-16 PART B
RCRA PERMIT APPLICATION, REVISION 3.0
LOS ALAMOS NATIONAL LABORATORY (LANL)
EPA ID# NM 0890010515
HWB-LANL-00-002**

Dear Dr. Browne and Mr. Gurulé:

The New Mexico Environment Department (NMED) has reviewed the above-referenced document submitted by LANL and the United States Department of Energy (the Permittee) for technical adequacy as required under NMAC 20.4.2.201.3.2. NMED issued a draft Request for Supplemental Information (RSI), dated July 5, 2000 to the Permittee as part of informal permit application discussions. The Permittee responded to the RSI with a draft "Subject Matter Clarification Technical Area (TA) 16 Part B Permit Renewal Document, Revision 3.0" in September of 2000.

Based on our review of the original submittal and the subsequent discussions, NMED has determined that the Permit Application is deficient. NMED requires that the issues described in Attachment A of this letter be resolved in order for the Permit Application to be evaluated for technical adequacy. Any remaining outstanding items from NMED's July 5, 2000 draft RSI not addressed in this Notice must be addressed by facility-wide requirements in the General Permit Chapter.



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You are required to respond to this Notice within thirty days of receipt of this letter. If the receipt is not signed, you must respond within thirty days of the date of this letter. Please submit your response electronically using Microsoft Word 2000 or earlier version and also in hard copy.

If you have questions regarding this letter, please contact Lee Winn of my staff at 505-428-2533.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

JPB:lw

cc: J. Kieling, NMED HWB
D. Cobrain, NMED HWB
C. Will, NMED HWB
P. Allen, NMED HWB
L. Winn, NMED HWB
A. Ortiz, NMED OGC
D. Neleigh, EPA, 6PD-N
J. Ellvinger, LANL ESH-19, MS K490
G. Bacigalupa, LANL ESH-19, MS K490
G. Turner, DOE LAAO, MS A316

File: Reading and Red LANL TA-16 2001

ATTACHMENT A
Notice of Deficiency
TA-16 Part B Application Revision 3.0, January 31, 2000

December 21, 2001

1. Submit the following information to document compliance with 20.4.1.700 NMAC (incorporating 40 CFR Part 265, Subpart P):
 - a. information regarding the quantity and physical and chemical characteristics specific to TA-16 waste treated at Open Burn units sufficient to determine risk from deposition of air emissions and ash. This information must contain significantly more detail on the waste than that included in the General Part B Permit Application Waste Analysis Plan. Include the halogen content in the waste and concentrations of lead and mercury in the waste [20.4.1.700 NMAC (incorporating 40 CFR. § 265.375)];
 - b. information documenting that the Permittee will remove all hazardous waste and hazardous waste residues (including but not limited to ash) from the thermal treatment process area or equipment at closure [20.4.1.700 NMAC (incorporating 40 CFR § 265.381)];
 - c. evidence that all hazardous waste burned at TA-16 has the potential to detonate (including waste with low levels, i.e., less than 10 percent, of high explosives). Acceptable evidence includes test results such as EPA Publication SW 846, Test Method for Evaluating Solid Waste, Subsection 6-2, Definition of Explosive Material, or the Bureau of Mines Gap Test or Deflagration/Detonation Transition Test. RCRA precludes open burning of hazardous waste that is not detonable. [20.4.1.700 NMAC (incorporating 40 CFR § 265.382), 52 FR 46946, 46952 (12/10/87)]; and
 - d. documentation assuring compliance with the requirements for minimum distance from open burning to the property of others [20.4.1.700 NMAC (incorporating 40 CFR § 265.382)].
2. Submit an explanation of why the wastes treated or disposed of by open burning at TA-16 cannot be treated or disposed of by other methods more protective of human health and the environment. Open burning should be used for treatment only when no other option is available that is more protective of human health and the environment [20.4.1.500 NMAC (incorporating 40 CFR § 264.601)].
3. Submit documentation that the sand filters, unit numbers 401 and 406, meet the regulatory requirements for tanks under 20.4.1.500 NMAC (incorporating 40 CFR Part 264, Subpart J), or submit an explanation of why the sand filters do not meet the definition of a tank at 40 CFR § 260.10.

4. Submit the Stormwater Pollution Prevention Plan for TA-16, including details of stormwater sampling conducted at the burn ground.
5. Submit a proposal for remediating groundwater at the site where contaminants have been detected above New Mexico Water Quality Standards, specifically the barium and HE detected at well R-25.
6. Submit data and analysis that demonstrates compliance with performance standards under 20.4.1.500 NMAC (incorporating 40 CFR §§ 264.601(a)(7), (a)(8), (a)(9), (b)(10), (b)(11), (c)(1), (c)(2), (c)(6), and (c)(7)) for deposition of contaminants to soil at the site from ash or entrained particles resulting from the burning of hazardous waste. This submittal shall include submittal of the following information:
 - a. summaries of ash sampling results, conducted for the purpose of waste disposal characterization, and an assessment of the potential risk from ash deposition to soil;
 - b. analysis of possible degradation products of HE that may be generated and the potential risk from levels of the degradation products likely to be found in soil around the burn areas;
 - c. information on whether volatile organic compounds (VOCs) are released during burning and the potential quantities of VOCs released;
 - d. comparison of potential levels of contaminants in soil from ash to HWB human health soil screening levels and LANL ecological screening levels; and
 - e. verification that the open burn units are kept covered when not in use.
7. Move the Application Attachment G, "Container Management," and Attachment H, "TA-16 Burn Ground Unit Management," to the body of the Application, Section 2.0, "Storage and Treatment at Technical Area 16."
8. Combine and revise Table 1-1, Application page 1-3, and Table H-1, Application page H-21, to accurately and specifically indicate where in the Application 40 CFR § 264.601 performance standards are addressed. For example, Tables 1-1 and H-1 do not include § 270.23, Part B Information requirements for Miscellaneous Units. Table 1-1 indicates that § 264.601 is addressed in the Application Attachment F.2; however § 264.601 describes environmental performance standards for operations, and Attachment F.2 addresses closure only. Table 1-1 states that § 264.602 is addressed in Attachment C, but § 264.602 includes monitoring, analysis, corrective action, and reporting requirements for miscellaneous units, and Attachment C only references facility-wide inspection of operations information included in the General Application. Table H-1 only references Attachment H as addressing all of §§ 264.601 and 602, and should indicate by Application section the location in the Application where specific requirements of § 264.601 are addressed.

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9. Responses in the draft September 2000 "Subject Matter Clarification" reference Closure Plans in Attachments E-1 and E-2 of the draft June 2000 LANL Hazardous Waste Facility Permit, Chapter 5, submitted by the Permittee to NMED in June 2000. If the Permittee intends those Closure Plans to be the TA-16 specific Closure Plans then the Application must be revised to include those Closure Plans.

10. In the Closure Plan for the open burn (OB) units, the Permittee shall provide a sampling and analysis plan (SAP) including sampling locations, number of samples, depths and analytes for each OB unit. In the SAP, include analyses for VOCs, semivolatile organic compounds (SVOCs), perchlorate, and all explosives compounds treated at the OB units during closure, including the following compounds, unless a demonstration can be made that these compounds were not treated at the OB units:

RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine), HMX (Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine), TNT (2,4,6-Trinitrotoluene), DNT (2,4- and 2,6-Dinitrotoluene), DNB (1,3-Dinitrobenzene), HCE (Hexachloroethane), Teteryl (Methyl-2,4,6-trinitrophenylnitramine), TNB (1,3,5-Trinitrobenzene), Nitrocellulose, TNG (Trinitroglycerol [nitroglycerin]), PETN (Pentaerythritol tetranitrate), Nitroglycerin, NQ (Nitroguanidine), WP (White phosphorus) and EGDN (Ethylene glycoldinitrate).

11. The Closure Plan for the OB units shall describe what measures will be taken if a closed OB unit is impacted by an active OB unit.

12. Revise the Closure Plan for the closure of container storage units to include the sampling of potential contaminated areas using swipe sampling rather than sampling the rinse water to determine if a release has occurred and to determine if contamination has been remediated.