

RED LANL GIP101



GARY E. JOHNSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2044 A Galisteo Street
Santa Fe, New Mexico 87505
Telephone (505) 827-1557
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PETER MAGGIORE
SECRETARY

PAUL R. RITZMA
DEPUTY SECRETARY

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

February 12, 2001

Dr. John Browne, Director
Los Alamos National Laboratory
c/o University of California
Post Office Box 1663, MS A100
Los Alamos, New Mexico 87545

Mr. David A. Gurule, Area Manager
Los Alamos Area Office
Department of Energy
528 35th Street, MS A316
Los Alamos, New Mexico 87544

**RE: REQUEST FOR INFORMATION PURSUANT TO THE NEW MEXICO
HAZARDOUS WASTE ACT AND THE RESOURCE CONSERVATION AND
RECOVERY ACT
LOS ALAMOS NATIONAL LABORATORY
EPA ID NO. 0890010515**

Dear Dr. Browne and Mr. Gurule:

The New Mexico Environment Department ("NMED") Hazardous Waste Bureau ("HWB") is preparing corrective action requirements for the Los Alamos National Laboratory facility ("LANL Facility") in Los Alamos, New Mexico pursuant to the New Mexico Hazardous Waste Act ("HWA"), NMSA 1978, §§ 74-4-1 through 74-4-14, and the federal Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §§ 6901 through 6992k, in conjunction with reissuance of the RCRA hazardous waste management Permit ("Permit") for the LANL Facility. The corrective action will address releases of hazardous wastes and hazardous constituents into the environment from the LANL Facility. Preparation of these requirements necessitates inquiry into the identification, nature, and quantity of waste materials that are or have been generated, treated, stored, disposed of, or otherwise managed at, or transported to, the LANL Facility. Inquiry into the nature, size, and location of waste disposal areas at the LANL Facility, and the release or potential for release of hazardous waste or hazardous constituents from such disposal areas, is also necessary.



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Los Alamos National Laboratory ("LANL") is a national laboratory owned and operated by the United States Department of Energy ("DOE"), and DOE is an agency of the United States. LANL is also operated by the University of California ("UC"). Each of these entities, DOE and UC, is a person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous wastes within the meaning of the HWA and RCRA. NMSA 1978, § 74-4-3.K; 42 U.S.C. § 6903(15).

Section 74-4-4.3.A(1) of the HWA provides that "For the purposes of taking any corrective action or enforcing the provisions of the [HWA], . . . upon request of [NMED] any person who generates, stores, treats, transports, disposes of or otherwise handles or has handled hazardous wastes shall furnish information relating to such hazardous wastes." Likewise, section 3007(a) of RCRA provides that "For purposes of enforcing the provisions of [RCRA], any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous wastes shall, upon request of . . . any duly designated officer, employee, or representative of a State having an authorized hazardous waste program, furnish information relating to such wastes." 42 U.S.C. § 6927(a).

In accordance with these provisions, compliance with this information request by you is mandatory. Failure to respond fully and truthfully to this information request within the time specified herein, or adequately justify such failure to respond, may result in an enforcement action by NMED pursuant to section 74-4-10 of the HWA, or section 7002(a)(1)(A) of RCRA, 42 U.S.C. § 6972(a)(1)(A), or both. Both the HWA and RCRA provide for the imposition of civil penalties for noncompliance. Section 74-4-12 of the HWA provides that any person who violates any provision of the HWA "may be assessed a civil penalty not to exceed ten thousand dollars (\$10,000) for each day during any portion of which a violation occurs." *See also* NMSA 1978, § 74-4-10.A and B. Section 3008(g) of RCRA provides that any person who violates any requirement of RCRA shall be liable for a civil penalty not to exceed \$27,500¹ for each such violation. 42 U.S.C. § 6928(g). Both the HWA and RCRA also provide for criminal fines and imprisonment for knowingly omitting material information or making a false statement or representation in any document used for compliance with the HWA or RCRA. NMSA 1978, § 74-4-11.A(3); 42 U.S.C. § 6928(d)(3).

INSTRUCTIONS

The following instructions shall apply to your response to these information requests:

¹ Although this provision of RCRA on its face provides for a civil penalty not to exceed \$25,000, the maximum penalty has been increased to \$27,500 to account for inflation pursuant to the Debt Collection Improvement Act of 1996, 31 U.S.C. § 3107 note. 40 C.F.R. § 19.4, Table 1.

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1. Provide a separate narrative response to each information request, and to each subpart.
2. Precede each response with the number of the information request to which it responds.
3. In responding to these information requests, every source of information to which DOE or UC has access shall be consulted, regardless of whether the source is in the immediate possession or control of DOE or UC. All documents or other information in the possession of experts, consultants, attorneys, or agents shall be consulted.
4. If any information request cannot be fully responded to, as full a response as is possible shall be provided. The response shall state the reason for the inability to respond fully, and provide any available information, knowledge, or belief regarding the portion not responded to.
5. If information that is not known or not available as of the date of the submission of a response to these information requests subsequently becomes known or available, the response must be supplemented to include such newly found or available information. Moreover, if any information in a response is subsequently found to be false or inaccurate, the response must be supplemented to correct the falsity or inaccuracy.
6. If information requested herein has already been supplied to NMED, for example, in response to the November 20, 2000 "Request for Additional Information" attached to the administrative completeness determination, your response may reference that submission in lieu of a duplicative submission, provided that the referenced submission satisfies these instructions.
7. The information requested in Requests #1 through #17, inclusive, shall be submitted to NMED within sixty (60) days of your receipt of this letter. The information requested in #18, #19, #22, and #23 shall be submitted within fifteen (15) days of your receipt of this letter. The identification of persons and documents requested in Requests #20 and #21 shall be submitted with the corresponding responses to the other requests.

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8. Responses shall be submitted to:

Carl Will
LANL Permits Project Leader
New Mexico Environment Department
Hazardous Waste Bureau
2044-A Galisteo Street
Santa Fe, New Mexico 87505

DEFINITIONS

Terms used in these information requests shall have the following definitions:

1. Except as otherwise specifically provided herein, any terms defined in section 74-4-3 of the HWA, section 1004 of RCRA, 42 U.S.C. § 6903, or the hazardous waste regulations at 40 C.F.R. § 260.10, have the meanings provided therein.
2. The term "document" means any object that records, stores, or presents information, and includes writings, memoranda, records, charts, tables, computer printouts, data, or information of any kind, formal or informal, whether wholly or partially handwritten or typed, whether in computer format, memory, or storage device, or in hard copy, including any form or format of these.
3. The term "hazardous waste" has the meaning provided in section 1004(5) of RCRA, 42 U.S.C. § 6903(5).
4. The term "Site" means any solid waste management unit, area of concern, "potential release site," or other place or area where hazardous wastes or hazardous constituents have come to be located as specifically listed in Attachment 1 hereto.
5. The terms "and" and "or" shall be construed either disjunctively or conjunctively as necessary to make the request inclusive rather than exclusive.
6. Words in the singular shall be construed in the plural, and vice versa as necessary to make the request inclusive rather than exclusive.

INFORMATION REQUESTS

NMED hereby requests that DOE and UC jointly furnish to NMED the following information relating to the LANL Facility:

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1. Please identify each radionuclide waste or waste stream, including mixed and non-mixed wastes, that is currently or has been at any time generated, treated, stored, disposed of, otherwise managed at, or transported to the LANL Facility, and that meets the statutory definition of "hazardous waste" in section 1004(5) of RCRA, 42 U.S.C. § 6903(5). (Please note that the statutory definition is broader than the regulatory definition.)
2. Please identify each radionuclide waste or waste stream, including mixed and non-mixed wastes, that is currently or has been at any time generated, treated, stored, disposed of, otherwise managed at, or transported to the LANL Facility, and that meets the following criteria: **a)** LANL claims the waste to be exempt from regulation as a solid waste under section 1004(27) of RCRA, 42 U.S.C. § 6903(27), because such waste meets the definition of source, special nuclear, or by-product material as defined by the Atomic Energy Act, 42 U.S.C. §§ 2011 *et seq.*; and **b)** the waste would meet the statutory definition of "hazardous waste" in section 1004(5) of RCRA, 42 U.S.C. § 6903(5), but for such exemption.
3. For each waste and waste stream identified in response to Request #1 and #2, please provide a detailed description of the radioactive, chemical, and physical properties of the waste. Include in your response a description of all radionuclides, all radioactive decay chains, and the half-lives of both the radionuclides and their daughter products.
4. For each waste and waste stream identified in response to Request #1 and #2, please state whether or not the waste exhibits any of the characteristics of a hazardous waste under 40 C.F.R. pt. 261, subpt. C:
 - a. Ignitability under 40 C.F.R. § 261.21;
 - b. Corrosivity under 40 C.F.R. § 261.22;
 - c. Reactivity under 40 C.F.R. § 261.23;
 - d. Toxicity under 40 C.F.R. § 261.24.
5. For each waste and waste stream identified in response to Request #1 and #2, please state whether or not the waste contains any hazardous constituents listed under 40 C.F.R. pt. 261, Appendix VIII and name the specific constituent or constituents.

6. For each waste and waste stream identified in response to Request #1 and #2, please provide a detailed description of the generation of the waste, including the location of its generation, the date of its generation, the process or processes by which it was generated, and the volume of waste that was generated.
7. For each waste and waste stream identified in response to Request #1 and #2 that was transported to the LANL Facility from elsewhere, please state the origin of the waste, the volume of the waste transported to the LANL Facility, broken down by shipment if possible, and the date or dates the waste was received at the LANL Facility.
8. For each waste and waste stream identified in response to Request #1 and #2 that was treated at the LANL Facility, please provide a detailed description of the treatment, including the method or process of treatment, the effectiveness of the treatment in reducing the hazardous properties of the waste, and the volume of waste treated.
9. For each waste and waste stream identified in response to Request #1 and #2 that was stored at the LANL Facility, please state the location of such storage at the LANL Facility, the method of storage, the volume of waste stored, and the dates during which each volume of such waste was stored at each such location.
10. For each waste and waste stream identified in response to Request #1 and #2 that was disposed of at the LANL Facility, please provide a detailed description of the disposal, including the method of disposal, the location of disposal, the dates of disposal, and the volume of waste disposed of at each such location.
11. For each waste and waste stream identified in response to Request #2, please state the basis for LANL's claim that the waste is exempt from regulation as a solid waste under RCRA because such waste is source, special nuclear, or by-product material as defined by the Atomic Energy Act.
12. For each Site listed in Part 1 of Attachment A, please identify each waste or waste stream that is currently or has been at any time disposed of at the Site.
13. For each waste and waste stream identified in response to Request #12, please provide a detailed description of the radioactive, chemical, and physical properties of the waste. Include in your response a description of all radionuclides, all radioactive decay chains, and the half-lives of both the radionuclides and their daughter products.

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14. For each waste and waste stream identified in response to Request #12, please state whether or not the waste is a listed hazardous waste under 40 C.F.R. pt. 261, subpt. D and indicate the specific listing or listings.
15. For each waste and waste stream identified in response to Request #12, please state whether or not the waste meets any of the characteristics of a hazardous waste under 40 C.F.R. pt. 261, subpt. C:
 - a. Ignitability under 40 C.F.R. § 261.21;
 - b. Corrosivity under 40 C.F.R. § 261.22;
 - c. Reactivity under 40 C.F.R. § 261.23;
 - d. Toxicity under 40 C.F.R. § 261.24.
16. For each waste and waste stream identified in response to Request #12, please state whether or not the waste contains any hazardous constituents listed under 40 C.F.R. pt. 261, Appendix VIII and name the specific constituent or constituents.
17. For each waste and waste stream identified in response to Request #12, please provide a detailed description of the disposal, including the method of disposal, the location of disposal, the dates of disposal, and the volume of waste disposed of at each such location.
18. For each Site listed in Part 1 of Attachment A, please submit all analytical data in LANL's possession that has not been previously submitted to NMED. Include data that was obtained under a RCRA Facility Investigation for the Site and for which an RFI Report has not been submitted to NMED. Submit the data in compliance with the format and content requirements set forth in Part 2 of Attachment A.
19. Please submit a detailed description of Material Disposal Area "S" (MDA-S), a Site listed in Part 1 of Attachment A. Include in the Site description the following information:
 - a. The purpose for which the Site was created;
 - b. A description of Site operations;
 - c. The dates of operation of the Site;

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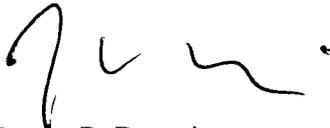
- d. A list of all materials, including solid waste, disposed of or otherwise placed at the Site, both above and below the ground surface, and their quantities and locations;
 - e. A list of all high explosives ("HE") disposed of or otherwise placed at the Site, both above and below the ground surface, stating the type of HE, the original quantity of HE, the number of tubes containing HE, the volume of each tube, and the quantity of HE originally in each tube;
 - f. The frequency of inspection of the Site, including the inspection of HE tubes;
 - g. The results of each inspection, including reports on the integrity of HE tubes;
 - h. A statement or conclusion as to whether water can infiltrate the hardware cloth tops of the HE tubes, and the basis of such statement or conclusion;
 - i. An identification of each and every person responsible for operation of the Site, by name, title or job description, employer, and current or last known address;
 - j. A description of any known or suspected release of hazardous waste or hazardous constituents from the Site, including releases from mesh screen bottoms;
 - k. Any other present or future threats to human health or the environment posed by the Site;
 - l. Any and all data collected since the beginning of the Site study.
20. For each Request #1 through #19, inclusive, identify each and every person who provided information that was used to prepare the response. Identify each such person by name, title or job description, employer, and current or last known address.
21. For each Request #1 through #19, inclusive, identify each and every document that provided information that was used to prepare your response. Identify each such document by type of document, title or description, author, and date.

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22. Please submit the document in which the MDA-S experiment is described, entitled "Effect of Soil and Weather on the Decomposition of Explosives," LASL Report, LA-4943.
23. Please submit the schedule of Environmental Restoration activities contained in the "FY2000 Environmental Restoration (ER) Project Lifecycle Baseline Requirements Document."

Thank you for your cooperation in this matter. If you have any questions please contact Carl Will of my staff at 505-827-1557, extension 1031.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

cc: G. Lewis, NMED W&WMD
J. Kieling, NMED HWB
J. Young, NMED HWB
C. Will, NMED HWB
~~P. Allen~~, NMED HWB
J. Parker, NMED DOE OB
S. Yanicak, NMED DOE OB
J. Davis, NMED SWQB
M. Leavitt, NMED GWQB
C. de Saillan, NMED OGC
D. Neleigh, EPA 6PD-N

J. Vozella, DOE LAAO, MS A316
G. Turner, DOE LAAO, MS A316
J. Canepa, LANL EM/ER, MS M992
M. Kirsch, LANL EM/ER, MS M992
D. McInroy, LANL EM/ER, MS M992
D. Erickson, LANL ESH-DO, MS K491
J. Ellvinger, LANL ESH-19, MS K490
G. Bacigalupa, LANL, ESH-19, MS K490

ATTACHMENT A

PART 1

PRS NAME	TA	SWMU NUMBER
MDA-A	21	21-014
MDA-B	21	21-015
MDA-C	50	50-009
MDA-D	33	33-003(a)-99
MDA-E	33	33-001(a)-99
MDA-F	6	6-007(a)-99
MDA-K	33	33-002(a)-99
MDA-M	9	9-013
MDA-N	15	15-007(a)
MDA-P	16	16-018
MDA-Q	8	8-006(a)
MDA-R	16	16-019
MDA-S	11	11-009
MDA-T	21	21-016(a)-99
MDA-U	21	21-017(a)-99
MDA-V	21	21-018(a)-99
MDA-W	35	35-001
MDA-X	35	35-002
MDA-Y	39	39-001(b)
MDA-Z	15	15-007(b)
MDA-AA	36	36-001
MDA-AB	49	49-001(a-g)
90's Line	16	16-008(a)
Firing Sites	39	39-004(a-e), 39-008
Firing Sites	15	15-004(f); 15-006(a, c, d); 15-008(a)
Townsite PRS's	0, 1	0-010(b), 1-001(a-w), 1-002, 1-003(a-e)
Outfall	21	21-011(k)
Surface Impoundments	35	35-003(d, r), 35-010(a-e)
Outfalls	46	46-004(g, h, m, q, s, u, v, x, y, z, a2, b2, c2)
Bayo Canyon Sites	10	10-003(a-o), 10-007
Fish Ladder	16	16-003(o)

PART 2

Present separate tables for each Site. All analytical data must be provided in both electronic and hard-copy formats.

Include the following items in the hard-copy submittal:

- Present field and fixed-laboratory analytical data in separate tables. Different sample matrixes and analytical suites may also be presented in separate tables.
- Indicate when data are not available or not applicable (i.e., do not leave any table cells blank). If a data qualifier field is blank because no qualifier flag is required, write "None" in the cell.
- Include all chemical results (even nondetected values) for both field and fixed-laboratory measurements.
- Include all data that are not available in electronic form (e.g., non-FIMAD data).
- Include all results for measured physical or physiochemical parameters (e.g., grain size, turbidity, suspended solids, etc.).
- Include all groundwater analytical data collected during the RFI for the Site in areas down-gradient from the Site.
- Include a map of the Site with sample locations and sample ID's.
- Include the following fields in the hard copy data:
 1. Name of unit;
 2. SWMU number;
 3. Location ID;
 4. Sample ID;
 5. Depth and units;
 6. Sample medium (as defined in FIMAD);
 7. Analyte name;
 8. Sample results and units (use consistent units for all results); and
 9. Data validation qualifiers (i.e., the qualifier flag that appears on the data in the tables based on the analytical laboratory data qualifier, the LANL data qualifier, and/or the results of focused data validation).

Include the following items in the electronic data submittal:

- Present field and fixed-laboratory analytical data in separate electronic files. Different sample matrixes and analytical suites may also be presented in separate files.

- Indicate when data are not available or not applicable (i.e., do not leave any table cells blank). If a data qualifier field is blank because no qualifier flag is required, write "None" in the cell.
- Include all chemical results (even nondetected values) for both field and fixed-laboratory measurements.
- Include all quality control (QC) data (e.g., results from matrix spike samples, surrogate compounds, etc.).
- Include all results for measured physical or physiochemical parameters (e.g., grain size, turbidity, suspended solids, etc.).
- Include all groundwater analytical data collected for the Site investigation down-gradient from the Site.
- Include the following fields in the electronic data:
 1. Name of unit;
 2. SWMU number;
 3. Location ID;
 4. Sample ID;
 5. Collection date for each sample;
 6. Depth and units;
 7. Sample matrix (as defined in FIMAD);
 8. Sample medium (as defined in FIMAD);
 9. Request number;
 10. Date of submittal to the analytical laboratory for each sample (if available in FIMAD);
 11. Date of analysis (if available in FIMAD);
 12. Analytical suite;
 13. Analytical laboratory name;
 14. Analyte name;
 15. Sample results and units (use consistent units for all results);
 16. Analytical laboratory data qualifiers;
 17. LANL data validation qualifiers; and
 18. Data validation qualifiers (i.e., the qualifier flag that appears on the data in the tables based on the analytical laboratory data qualifier, the LANL data qualifier, and/or the results of focused data validation).

Other applicable data results to be provided include core logs, flow rates, geophysical reconstructions, foot-by-foot geophysical logging results, fracture density calculations, daily flow rates, raw geophysical data, etc.