LIBRARY COPY

Permit

LA-UR-04-6714

September 2004

# September 2004 Class 1 Permit Modifications Los Alamos National Laboratory Hazardous Waste Facility Permit

Prepared by:

*Los Alamos National Laboratory*
*Risk Reduction and Environmental Stewardship Division*
*Solid Waste Regulatory Compliance Group (RRES-SWRC)*
*Los Alamos, New Mexico 87545*

16242

**Department of Energy**
National Nuclear Security Administration
Los Alamos Site Office
Los Alamos, New Mexico 87544

OCT 0 4 2004

RECEIVED
OCT 2004
NMED Hazardous
Waste Bureau

John Kieling, Manager
RCRA Permits Management Program
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Dear Mr. Kieling:

Subject: Transmittal of the U.S. Department of Energy-National Nuclear Security Administration (DOE-NNSA)/University of California (UC) September 2004 Class 1 Permit Modifications, Los Alamos National Laboratory (LANL) Hazardous Waste Facility Permit

The purpose of this letter is to transmit to the New Mexico Environment Department (NMED), the DOE-NNSA/UC September 2004 Class 1 Permit Modifications (LA-UR-04-6714) to the Hazardous Waste Facility Permit. These modifications have been previously discussed with you and your staff on September 22, 2004.

The 78 modifications included in this submittal have been grouped into 18 categories of like changes. Brief descriptions of the groups are outlined as follows:

1. Authorization change
2. Method reference updates
3. Addition of waste definition
4. Permit language simplifications
5. Incorporation of hazardous waste streams to description as they are allowed within the fence line of Area L
6. Administrative consolidation
7. Incorporation of Appendix D-1
8. Figure updates
9. Editorial changes
10. Module II editorial change
11. Responsible organization editorial change
12. Editorial changes to remove extraneous information
13. Minor inspection table change
14. Procedure information change
15. Typographical error
16. Removal of incorrect information
17. Addition of functionally equivalent equipment option
18. Training plan informational change

Included herein are three hard copies and one electronic copy of this submittal. The submittal also includes a table outlining the specific changes made to the permit. The electronic copy includes files containing editing marks as well as a clean version of each of the sections modified. If you have any comments or questions regarding this submittal, please contact Gene Turner at (505) 667-5794 or Jack Ellvinger, UC, at (505) 667-0633.

Sincerely,

Edwin L. Wilmot
Manager

EM:GT-013

cc w/enclosure:
Laurie King, Chief (6PD-N)
New Mexico/Federal Facilities Section
Environmental Protection Agency
Region 6 1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

cc w/o enclosure:
James Bearzi, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

G. Turner, EM, LASO
J. Ordaz, EM, LASO
J. Stetson. PWT, LASO
D. Christensen, FWO-SWO, MS-J595
D. McLain, FWO-WFM, LANL, MS-J593
E. Louderbough, LC-ESH, LANL, MS-A187
R. Lechel, FWO-WFM, LANL, MS-J593
J. Ellvinger, RRES-SWRC, LANL, MS-K490

## CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenneth M. Hargis for

Beverly A. Ramsey
Division Leader
Risk Reduction and Environmental Stewardship
Los Alamos National Laboratory

10/1/04
Date Signed

Edwin L. Wilmot
Manager, Los Alamos Site Office
National Nuclear Security Administration
U.S. Department of Energy
Owner/Operator

10/4/04
Date Signed

# MODULE I STANDARD CONDITIONS

## I.A. EFFECT OF PERMIT

The Permittee is allowed to treat and store on site hazardous waste in accordance with the conditions of this permit. Any treatment or storage of hazardous waste not authorized in this permit or conducted under interim status, as defined by the Resource Conservation and Recovery Act (RCRA), is prohibited. Compliance with this permit constitutes compliance, for purposes of enforcement, with the New Mexico Hazardous Waste Act (Section 74-4-1 et seq. NMSA 1978) and the New Mexico Hazardous Waste Management Regulations (HWMR-5, as amended 1989), Parts V, VII and IX only for those management practices specifically authorized by this permit. The Permittee is also required to comply with HWMR-5, Parts I, II, III and IV to the extent the requirements of those Parts are applicable. The Permittee must also comply with all applicable self-implementing provisions imposed by the Resource Conservation and Recovery Act statute and/or the HWMR-5, Part VIII. A complete RCRA permit consists of this permit and a US EPA permit issued under the provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA). Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Sections 3008(a), 3008(h), 3013 or 7003 of RCRA; Sections 106(a), 104 or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 USC 9601 et seq., commonly known as CERCLA); Sections 74-4-1 et seq. NMSA 1978, or any other law governing protection of public health or the environment.

## I.B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in HWMR-5, as amended 1989, Part IX, Subpart B, included herein by reference. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the permittee, does not stay the applicability or enforceability of any permit condition. Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology as well as changes in applicable regulations and laws.

## I.C. SEVERABILITY

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

## I.D. DUTIES AND REQUIREMENTS

1. Duty to Comply The Permittee shall comply, in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(a), with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit issued in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.61. Any permit noncompliance by any Permittee employee or contractor, other than noncompliance authorized by an emergency permit, constitutes a violation of the New Mexico Hazardous Waste Act and is grounds for

enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

2. Duty to Reapply In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(b), if the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee shall submit an administratively complete application for a new permit at least 180 calendar days before this permit expires. [HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.10(h)]

3. Permit Expiration Pursuant to HWMR-5 Part IX, 40 CFR 270.50, this permit shall be effective for the fixed term of ten years. As long as the state is the permit-issuing authority, this permit and all conditions herein will remain in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application (see HWMR-5, Part IX, 40 CFR 270.10, 270.13 through 270.29) and, through no fault of the Permittee, the Secretary has not issued a new permit, as set forth in HWMR-5, Part IX, 40 CFR 270.51.

4. Need to Halt or Reduce Activity Not a Defense In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(c), it shall not be a defense for the Permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(d), the Permittee shall take all reasonable steps to minimize or correct any adverse impact on human health or the environment resulting from non-compliance with this permit.

6. Proper Operation and Maintenance In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(e), the Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of this permit.

7. Duty to Provide Information In accordance with HWMR-5, as amended l 989, Part IX, 40 CFR Section 270.30(h), the Permittee shall furnish to the Secretary, within a reasonable time, any relevant information which he may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Secretary, upon request, copies of records required to be kept by this permit. [HWMR-5, as amended 1989, Part V, 40 CFR Section 264.74(a)]

a. Los Alamos National Laboratory must submit on a semi-annual basis, by January 31, and July 31, of each calendar year, a list of any changes in the following information:

1. Changes to State, County, Department of Energy (DOE), and LANL telephone numbers.

2. Changes in addresses for State, County, DOE, and LANL entities.

3. Changes in administrative nomenclature for position titles, organizations, and physical structures.

4. Changes in names of responsible parties (personnel).

5. Changes in the names of contractors.

6. Typographical errors in this permit.

7. Any modifications not covered by numbers 1 through 6 above must be submitted in writing for a class determination by NMED prior to incorporation in the permit.

8. Inspection and Entry In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(i), the Permittee shall allow the Secretary or any authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any unclassified records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the New Mexico Hazardous Waste Act, any substances or parameters at any location; and

e. The Secretary recognizes that the Permittee operates in some cases under security restrictions imposed by the Atomic Energy Act (42 USC 2011 et seq.) and the regulations promulgated thereunder, and by other federal laws and regulations. Should conflict arise under this permit section, the Secretary and the Permittee shall cooperate in working with the appropriate Federal agency to obtain access approval. Nothing in this permit section shall be construed to deny access authorized by the Resource Conservation and Recovery Act.

9. Monitoring

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be an accepted and appropriate method such as described in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, 3rd Edition, as revised, or an equivalent method. Laboratory analytical methods must be those specified in SW-846; Standard Methods for the Examination of Water and Wastewater, Twentieth edition, or current edition; or an equivalent method, as specified in the Waste Analysis Plan, Permit Attachment A.

b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, the certification required by HWMR-5, as amended 1989, Part V, 40 CFR 264.73(b)(9), and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, record, certification, or application. These periods may be extended by request of the Secretary at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. The Permittee shall maintain records from all ground-water monitoring wells and associated ground-water surface elevations for the active life of the facility. [HWMR-5, as amended 1989, Part V, 40 CFR 264.74(b) and 270.30(j)(2)]

c. Pursuant to HWMR-5, Part IX, 40 CFR 270.30(j)(3), records of monitoring information shall specify:

(i) The dates, exact place, and times of sampling or measurements;

(ii) The individuals who performed the sampling or measurements;

(iii) The dates analyses were performed;

(iv) The individuals who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

10. Notice of Planned Physical Facility Changes The Permittee shall give notice to the Secretary, as soon as possible, of any planned physical alterations or additions to the permitted facility which may impact any procedure or system of treatment, storage or control, or any related appurtenances, installed or used by the Permittee to achieve compliance with this permit. Physical alterations or additions shall include all hazardous waste activities and associated underground tanks. Construction of new units may not begin until a permit or permit modification has been issued.

11. Certification of Construction or Modification The Permittee may not commence incineration, treatment or storage of waste at the modified unit until:

    a. The Permittee has submitted to the Secretary, by certified mail or hand delivery, a letter signed by the Permittee and a registered professional engineer, stating that the unit has been constructed or modified in compliance with the permit; and

    b. (i) The Secretary or his designee has inspected the modified or newly constructed unit and finds it is in compliance with the conditions of the permit; or

    (ii) The Secretary, or his designee, has either waived the inspection or has not, within 15 calendar days, notified the Permittee of his intent to inspect.

12. Anticipated Noncompliance The Permittee shall give advance notice to the Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

13. Transfer of Permit This permit may be transferred to a new owner or operator pursuant to HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.40. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of HWMR-5, as amended 1989, Parts III, V and IX; and HSWA.

14. Compliance Schedules Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 calendar days following each schedule date.

15. Other Information Whenever the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Secretary, the Permittee shall verbally notify the Secretary of such fact on the next work day and submit, within thirty calendar days, written correction of such facts or information. The term "Permit Application" includes any information submitted on solid waste management units.

## I.E. SIGNATORY REQUIREMENTS

All reports or other information requested by the Secretary shall be signed and certified as required by HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.11.

## I.F. CONFIDENTIAL INFORMATION

The Permittee may claim confidential, in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.12 any information, required to be submitted by this permit.

## I.G. DOCUMENTS TO BE MAINTAINED AT FACILITY

The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:

1. This permit and its attachments;

2. Waste Analysis Plan, as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.13(b) and this permit;

3. Personnel training documents and records required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.16(a) and this permit;

4. Contingency Plan, as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.53(a) and this permit;

5. Closure Plans required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.112(a) and this permit;

6. Operating record required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.73 and this permit; and

7. Inspection schedules required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.15 and this permit.

## I.H. PERMIT CONSTRUCTION

1. Citing Whenever paragraphs of this permit or of the Hazardous Waste Management Regulations are cited, such cite includes all subordinate 40 CFR sections of the cited paragraph. When subordinate 40 CFR sections are cited, such cite includes all 40 CFR subsections of the cited subparagraph. All such cites shall be considered an inclusion by reference in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30.

2. Gender Whenever the pronoun "he" is used in reference to the Secretary of the New Mexico Environment Department or the Permittee, it is to be read as "she," in any instance where the object of the reference is female.

3. Definitions For purposes of this Permit, terms used herein shall have the same meaning as those in HWMR-5, Parts I, V, VIII, and IX, unless this permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "Regional Administrator" means the Regional Administrator of EPA Region VI, or his designee or authorized representative. "Secretary" means the Secretary of the New Mexico Environment Department, or his designee or authorized representative.

a. References to "Wastes" in this permit mean "Hazardous Wastes" and “Mixed Wastes” as regulated under RCRA unless specifically designated otherwise at the time of use. For the purposes of this permit, mixed waste contains both a hazardous waste component and a source, special nuclear, or byproduct material regulated under the Atomic Energy Act.

b. The term "Knowledge of Process" means a written description of the waste, certified as true and correct by an individual familiar with the process that generated the waste. Such description shall specify the waste constituents and estimate their concentration or quantity.

c. The term "On-site" as used in permit paragraph II.B.2. means facilities under the operational control of the Permittee and located within the external perimeter of the Permittee's property. This includes Technical Areas 0, 2, 3, 6, 8, 9, 11, 14, 15, 16, 18, 21, 22, 26, 33, 35, 36, 37, 39, 40, 41, 43, 46, 48, 49, 50, 51, 52, 53, 54, 55, 58, and 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, and 74. See permit Figure 2 and Table I-1 and Table II-3.

d. Technical Area Zero (TA-0), includes only the detached sites listed in Table I-1.

e. The term "Analysis" includes physical analysis, chemical analysis and knowledge of process determinations.

f. The term "Permittee" as used in this permit applies jointly and severably to the Owner, U. S. Department of Energy, and to the Operator, the University of California Regents, doing business as the Los Alamos National Laboratory.

**TABLE I-1**
**TECHNICAL AREA ZERO GENERATION SITES**

| DESIGNATION | DESCRIPTION | ANTICIPATED WASTES |
|---|---|---|
| 0-480 | Pajarito School<br>Engineering offices | D001, D002 |
| 0-1197 | Mesa School<br>Training offices/classrooms | Any training materials |
| 0-1237 | Pueblo Complex<br>Environmental laboratory | Any sample or analysis reagents |

NOTE: Except for those sites listed in Table II-3, no other sites are included in the on-site definition in permit paragraph I.H.3.c.

# MODULE II GENERAL FACILITY CONDITIONS

## II.A. DESIGN AND OPERATION OF THE FACILITY

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release to air, soil, or surface water of hazardous waste constituents which could threaten human health or the environment.

## II.B. REQUIRED NOTICE

1. Foreign Wastes This permit does not allow the Permittee to accept wastes from a foreign source. If the Permittee is to receive hazardous waste from a foreign source, he shall apply for and receive a permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.41 or 270.42, if appropriate, prior to accepting such waste.

2. Off-Site Wastes This permit does not allow the Permittee to accept wastes from an off-site source. "Off-site source" refers to wastes generated by sources other than the Permittee or its contractor(s) operating on-site. For the purposes of this permit, wastes generated by the Permittee at Technical Area 57, the Fenton Hill site, and waste generated through investigation of Potential Release Sites (PRS) and/or Solid Waste Management Units (SWMU) listed in Table II-3 (at the end of Module II); or the waste generated through the restoration of the PRS/SWMU sites listed in Table II-3 may be accepted for storage or treatment if all such waste is properly manifested in accordance with permit paragraph II.J. below. Waste or contaminated residuals of waste associated with off-site treatment of those waste streams originally generated by the Permittee and subsequently managed or treated by the off-site facilities listed in Module II, Table 2-2, may be accepted for storage or treatment if all such waste is properly characterized and manifested in accordance with permit paragraph II.J. If the Permittee is to receive hazardous waste from an off-site source, other than those off-site sources listed in Table II-3 and Table 2-2, he shall apply for and receive a permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.42, if appropriate, prior to accepting such waste.

## II.C. WASTE ANALYSIS

1. Waste Analysis Plan The Permittee shall follow the procedures described in Permit Attachment A.

2. Quality Assurance The Permittee shall verify its waste analysis as part of a written quality assurance program. The quality assurance program shall be in accordance with current accepted practices such as specified in Test Methods for Evaluating Solid Waste:Physical/Chemical Methods SW-846, or equivalent methods approved by the Secretary; and at a minimum ensure that the Permittee maintains proper functional instruments, uses approved sampling and analytical methods, verifies the validity of sampling and analytical procedures, and performs correct calculations. The Permittee will notify any contract laboratory of the requirements of this section and permit.

3. Waste Segregation The Permittee shall keep available at at the facility, in accordance with EPA-600/2-80-076, A Method of Determining the Compatibility of Hazardous Waste.

4. Annual Verification The Permittee shall annually, by the anniversary date of each quarterly report, verify the accuracy and currency of the waste stream determination made in Permit Attachment I.

II.D. SECURITY

The Permittee shall comply with the security provisions of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.14.

II.E. INSPECTION REQUIREMENTS

1. Inspection Plan The Permittee shall follow Permit Attachment B and the inspection requirements in Modules III through VII. The Permittee shall remedy any deterioration or malfunction of equipment or structure discovered by an inspection as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.15(c). Inspection log sheets may be revised by the Permittee and submitted to the Secretary for inclusion in this permit by permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.42.

2. Facility Release Inspection

   a. The Permittee shall take surface water samples and analyze for metals, volatile and both acid- and base-neutral semivolatile organic hazardous waste constituents in accordance with Table II-2 annually at the sample locations in Table II-1. See Figure 9.

   b. The sampling and analysis shall be done using EPA-approved procedures as published in the latest issue of SW-846.

   c. Analysis of Variance (ANOVA) statistical procedures as promulgated in 53 FR 39720 (October 11, 1988) shall be used to compare data between up-gradient and down-gradient stations.

   d. Records of this inspection shall be kept in accordance with permit paragraph II.K.1.a. below. All analytical results will be recorded and reported. Reports shall be on the form provided in Figure 10.

   e. Reports of releases detected by this inspection shall be made in accordance with permit paragraph II.K.2.c. below.

   f. In the event water samples cannot be obtained at one or more sites, the attempt to obtain samples will be documented in the facility record and the Secretary notified in writing within 30 days of each unsuccessful attempt.

## II.F. PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.16. This training program shall follow Permit Attachment C, which shall be updated by the Permittee whenever necessary so as to remain current and accurate. A dated copy of the revised training program will be submitted to the Secretary for the permit files and permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.42 prior to its implementation. The Permittee shall maintain training documents and records, as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.16(d) and (e).

## II.G. REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee shall comply with the requirements of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.17.

## II.H. PREPAREDNESS AND PREVENTION

1. Required Equipment At a minimum, the Permittee shall equip the facility with the equipment set forth in Permit Attachments B. and D or the functional equivalent.

2. Testing and Maintenance of Equipment The Permittee shall test and maintain the equipment specified in permit paragraph II.H.1. above annually or more often if necessary to assure its proper operation in time of emergency.

3. Access to Communications or Alarm System The Permittee shall maintain access to the communications or alarm system(s) as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.34.

4. Required Aisle Space The Permittee shall maintain aisle space as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.35. The minimum aisle shall be twenty four inches. All containers in storage shall be accessible for inspection.

## II.I. CONTINGENCY PLAN

1. Implementation of Plan The Permittee shall immediately carry out the provisions of Permit Attachment D. whenever there is an unplanned fire, explosion, or unpermitted release of hazardous waste or hazardous constituents which threatens or could threaten human health or the environment.

2. Amendment of the Plan The Permittee shall review, as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.54., and immediately amend if necessary, the Contingency Plan.

3. Copies of the Plan The Permittee shall comply with the requirements of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.53. A dated copy of any amended Contingency Plan will be submitted to the Secretary for the permit files and permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.42 prior to its implementation.

4. Emergency Coordinator The Permittee shall comply with the requirements of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.55 concerning the emergency coordinator.

II.J. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of HWMR-5, as amended 1989, Part V, 40 CFR Sections 264.71 and 264.72 for any hazardous wastes received from or shipped off-site by the Permittee for treatment, storage or disposal.

II.K.RECORD KEEPING AND REPORTING

1. Facility Operating Record The Facility Operating Record maintained pursuant to HWMR-5, as amended 1989, Part V, 40 CFR Section 264.73 shall be maintained in such manner that any information required to be in the record shall be readily available to an inspector. Readily available means that, upon request by an inspector, the Permittee can provide the requested information within 24 hours or before the end of the inspection, whichever is less; or upon a schedule designated by the inspector.

   a. In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(j), the Permittee shall maintain at the facility until the end of the last closure period, a written record of waste and decontamination wash-water analyses. The following information shall be recorded:

      (i) The dates, exact place, and times of sampling or measurements;

      (ii) The individual who performed the sampling or measurements;

      (iii) The dates analyses were performed;

      (iv) The individuals or off-site laboratory who performed the analyses;

      (v) The analytical techniques or methods used; and

      (vi) The results of such analyses. The results shall include range, mean, standard deviation and detection limits as applicable to facilitate data analysis.

   b. The Permittee shall maintain pursuant to HWMR-5, as amended 1989, Part V, 40 CFR Section 264.73(b) at the facility until the end of the last closure period, a written record of waste disposal activities. Current EPA approved nomenclature and codes shall be used where appropriate. The following information shall be recorded:

      (i) Waste Source;

      (ii) Waste Description;

      (iii) Waste Quantity;

(iv) Current Storage Location; and

(v) Disposal. Properly completed hazardous waste manifests will suffice for wastes shipped off-site.

c. The Permittee shall maintain at the facility a written record of Contingency Plan implementation reports. The record shall contain at least the information required in permit paragraph II K.2.b. below. These records shall be kept until the end of the last closure period.

d. The Permittee shall keep at the facility a written record of all inspections conducted in accordance with Permit Attachment B. and permit paragraph II.E. above. These records shall be maintained for a minimum period of three years from the date of the inspection. Records of inspections leading to corrective action shall be retained for three years after the corrective action taken as a result of the inspection.

e. The Permittee shall keep at the facility training documents and records as required by HWMR-5, as amended 1989, Part V, 40 CFR Sections 264.16(d) and 264.1 6(e), and Permit Attachment C. Records of training shall be kept on all current employees and for three years after an employee leaves the facility owner's or operator's employ.

f. The Permittee shall maintain at the facility a copy of all biennial reports submitted in accordance with permit paragraph II.K.2. below. These copies shall be kept until the end of the last closure period.

g. The Permittee shall keep sufficient monitoring records and documentation to demonstrate compliance with this permit. Records unique to one activity may be kept in the vicinity of that activity, subject to the availability requirement in permit paragraph II.K.1. above.

h. In accordance with HWMR-5, as amended 1989, part V, 40 CFR Section 264.74(b), the retention period for all records required by this permit is extended automatically during the course of any unresolved enforcement action regarding the facility, or as directed by the Secretary.

2. <u>Reports</u>

a. The Permittee shall comply with the Biennial Report requirements of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.75.

b. In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(l)(6), the Permittee shall report to the Secretary any noncompliance with the permit which may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

(i) Information concerning the release of any hazardous waste which may endanger public or private drinking water supplies.

(ii) Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health. The description of the occurrence and its cause shall include:

(a) Name, address, and telephone number of the owner or operator;

(b) Name, address, and telephone number of the facility;

(c) Date, time, and type of incident;

(d) Name and quantity of materials involved;

(e) The extent of injuries, if any;

(f) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

(g) Estimated quantity and disposition of recovered material that resulted from the incident.

The 24-hour report shall be made by calling (505) 827-4358 during normal duty hours or (505) 827-9329, the 24-hour emergency line.

c. The Permittee shall provide to the Secretary within five (5) working days of the time the Permittee becomes aware of the circumstances, a written report on the event(s) reported orally in permit paragraph II.K.2.b. above. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance, including exact dates and times; whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply with the five-day written notice requirement if the Secretary waives the requirement and the Permittee submits a written report within fifteen (15) calendar days

of the time the Permittee becomes aware of the circumstances. The written report shall be submitted by certified mail to:

Secretary
New Mexico Environment Department
1190 St. Francis Drive, P.O.Box 26110
Harold Runnels Building
Santa Fe, NM 87502-6110

d. In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(l)(10), the Permittee shall report all other instances of noncompliance, not otherwise required to be reported above, in the annual Environmental Surveillance Report. The reports shall contain the information listed in permit paragraph II.K.2.b. above.

## II.L. CLOSURE

The provisions of this permit section apply to individual units for partial closure of the facility, as well as total closure of the entire facility. Closure of one unit may or may not affect the remaining units. The impact of such sequential or partial closure may depend on the sequence and circumstances in existence at the time of closure. The Secretary may direct or the Permittee may request appropriate revisions to the closure plan at that time.

1. Performance Standard The Permittee shall close the facility as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.111 and in accordance with each closure plan, Permit Attachment E.

2. Amendment of Closure Plans The Permittee shall amend each closure plan in accordance with HWMR-5 as amended 1989, Part V, 40 CFR Section 264.112(c) whenever necessary.

3. Notification of Closure The Permittee shall notify the Secretary at least 60 days prior to the date he expects to begin closure under any Permit Attachment E. closure plan.

4. Time Allowed For Closure After receiving the final volume of hazardous waste, the Permittee shall treat or remove from site all hazardous waste in accordance with the schedule specified in the closure plan. After receiving the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the closure plan.

5. Disposal or Decontamination of Equipment The Permittee shall properly dispose of or decontaminate all facility equipment, structures, and soils, as required by the closure plan.

6. Certification of Closure The Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan.

## II.M. MOVEMENT RESTRICTION

The Permittee shall not transport bulk liquid hazardous wastes in quantities per container in excess of 110 gallons over public roads between the hours of 7:00 AM to 8:30 AM, 12:15 PM to 1:30 PM or 4:00 PM to 5:45 PM on normal duty days. Off-site transportation under U.S. Department of Transportation regulations by EPA-registered transporters is not subject to this restriction. On-site transportation of waste~~s~~ generated as a result of an emergency cleanup in accordance with Permit Attachment D are not subject to this restriction.

## II.N. Spills

The Permittee shall take corrective action, as required by Section 74-4-4.2B NMSA 1978, (as amended 1989), for all releases of hazardous wastes or constituents from any solid waste management unit at his facility. Corrective action may include, but shall not be limited to, the following: decontamination and/or removal of all releases, spills and leaks; immediate cleanup of release or spillage of hazardous wastes, or constituent residue or listed chemicals which become wastes; prevention of surface-water or ground-water contamination which could result from a release or spill; and, cleanup of any surface-water or ground-water contamination which results from a release or spill.

**TABLE II-1**

**ENVIRONMENTAL MONITORING LOCATIONS**

| STATION | N-S Coordinate (LANL Grid) | E-W Coordinate (LANL Grid) | Map No. |
|---|---|---|---|
| Los Alamos Reservoir | N105 | W090 | 7 |
| Frijoles | S280 | E180 | 9 |
| Canada del Buey | N010 | E150 | 46 |
| Water Canyon at Beta | S090 | E090 | 48 |
| Acid Weir | N125 | E070 | 49 |
| Pueblo - 2 | N120 | E155 | 51 |
| Pueblo - 3 | N085 | E315 | 53 |
| DPS - 1 | N090 | E160 | 57 |
| SCS - 2 | N060 | E140 | 66 |
| Pajarito Stream | S180 | E140 | 35 |
| Ancho Stream | S295 | E340 | 36 |
| Frijoles Stream | S365 | E235 | 37 |
| Pajarito Canyon (PCO-3) | S098 | E293 | 104 |
| LAO-4.5 | N065 | E270 | 64 |
| MCO-3 | N040 | E110 | 69 |
| MCO-8 | N030 | E190 | 74 |
| Basalt Spring | N065 | E395 | 56 |

**TABLE II-2**

**SAMPLING PARAMETERS**

| TOTAL METALS | ORGANICS | OTHER |
|---|---|---|
| Arsenic | Halogenated volatile organics | Cyanide |
| Barium | Nonhalogenated volatile organics | pH |
| Cadmium | Acid-extractable semivolatile | |
| Chromium | organics Base-neutral extractable | |
| Lead | semivolatile organics Phenols | |
| Mercury | | |
| Selenium | | |
| Silver | | |
| Nickel | | |
| Beryllium | | |
| Copper | | |
| Zinc | | |
| Iron | | |

All methods are as published in US EPA SW-846, 3rd Edition or later.

If any metal's total concentration exceeds that metal's standard for Toxicity Characteristic Leachate Procedure (TCLP) toxicity , a determination of the TCLP toxicity concentration for that metal will be performed. Both data will be recorded and reported.

**TABLE II-3**

**List of Off-Site Potential Release Site (PRS) and/or Off-Site Solid Waste Management Units (SWMU) that may have Investigative Derived Waste (IDW) or Remediation Waste (RW) brought on to Los Alamos National Laboratory.**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 00-003 | 0 | 1071 | Container Storage |
| 00-005 | 0 | 1071 | Landfill |
| 00-011(a) | 0 | 1071 | Mortar Impact Area |
| 00-011(c) | 0 | 1071 | Mortar Impact Area |
| 00-011(d) | 0 | 1071 | Mortar Impact Area |
| 00-011(e) | 0 | 1071 | Mortar Impact Area |
| 00-012 | 0 | 1071 | Underground Storage Tank |
| 00-016 | 0 | 1071 | Firing Range |
| 00-017 | 0 | 1071 | Waste Lines |
| 00-018(a) | 0 | 1071 | Pueblo Waste Water Treatment Plant |
| 00-019 | 0 | 1071 | Waste Water Treatment Plant |
| 00-028(a) | 0 | 1071 | Effluent Discharge |
| 00-028(b) | 0 | 1071 | Effluent Discharge |
| 00-030(a) | 0 | 1071 | Septic System |
| 00-030(b) | 0 | 1071 | Septic System (6th St.) |
| 00-030(g) | 0 | 1071 | Septic System |
| 00-030(l) | 0 | 1071 | Septic System |
| 00-030(m) | 0 | 1071 | Septic System |
| 00-033 | 0 | 1071 | Warehouse |
| 00-039 | 0 | 1071 | Underground Storage Tank |
| 01-001(a) | 01 | 1078 | Septic System |

**Table II-3**
**(Continued)**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 01-001(b) | 01 | 1078 | Septic System |
| 01-001(c) | 01 | 1078 | Septic System |
| 01-001(d) | 01 | 1078 | Septic System |
| 01-001(e) | 01 | 1078 | Septic System |
| 01-001(f) | 01 | 1078 | Septic System |
| 01-001(g) | 01 | 1078 | Septic System |
| 01-001(h) | 01 | 1078 | Septic System |
| 01-001(i) | 01 | 1078 | Septic System |
| 01-001(j) | 01 | 1078 | Septic System |
| 01-001(k) | 01 | 1078 | Septic System |
| 01-001(l) | 01 | 1078 | Septic System |
| 01-001(m) | 01 | 1078 | Septic System |
| 01-001(n) | 01 | 1078 | Septic Tank #276 |
| 01-001(o) | 01 | 1078 | Ind. or Sm Waste Water Treatment |
| 01-001(s) | 01 | 1078 | Septic System |
| 01-001(t) | 01 | 1078 | Septic System |
| 01-001(u) | 01 | 1078 | Septic System |
| 01-002 | 45 | 1079 | Outfall TA-01 |
| 01-003(a) | 01 | 1078 | Landfill |
| 01-003(d) | 01 | 1078 | Surface Disposal Site |
| 01-003(e) | 01 | 1078 | Surface Disposal Site |
| 01-006(a) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(b) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(c) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(d) | 01 | 1078 | Drain, Liner and Outfall |

**Table II-3**
**(Continued)**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 01-006(h) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(n) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(o) | 01 | 1078 | Drain, Liner and Outfall |
| 01-007(a) | 01 | 1078 | Soil Contamination Area |
| 01-007(b) | 01 | 1078 | Soil Contamination Area |
| 01-007(c) | 01 | 1078 | Soil Contamination Area |
| 01-007(d) | 01 | 1078 | Soil Contamination Area |
| 01-007(e) | 01 | 1078 | Soil Contamination Area |
| 01-007(j) | 01 | 1078 | Soil Contamination Area |
| 01-007(l) | 01 | 1078 | Soil Contamination Area |
| 10-001(a) | 10 | 1079 | Firing Site |
| 10-001(b) | 10 | 1079 | Firing Site |
| 10-001(c) | 10 | 1079 | Firing Site |
| 10-001(d) | 10 | 1079 | Firing Site |
| 10-002(a) | 10 | 1079 | Disposal Pit |
| 10-002(b) | 10 | 1079 | Disposal Pit |
| 10-003(c) | 10 | 1079 | Disposal Pit |
| 10-003(d) | 10 | 1079 | Disposal Pit |
| 10-003(e) | 10 | 1079 | Disposal Pit |
| 10-003(f) | 10 | 1079 | Disposal Pit |
| 10-003(g) | 10 | 1079 | Manholes |
| 10-003(h) | 10 | 1079 | Manholes |
| 10-003(i) | 10 | 1079 | Septic Tank |
| 10-003(j) | 10 | 1079 | Tank |
| 10-003(k) | 10 | 1079 | Tank |

**Table II-3**
**(Continued)**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 10-003(l) | 10 | 1079 | Tank |
| 10-003(m) | 10 | 1079 | Waste Line |
| 10-003(n) | 10 | 1079 | Leach Field |
| 10-003(o) | 10 | 1079 | Leach Field |
| 10-004(a) | 10 | 1079 | Septic System |
| 10-004(b) | 10 | 1079 | Septic System |
| 10-005 | 10 | 1079 | Surface Disposal Area |
| 10-007 | 10 | 1079 | Landfill |
| 19-001 | 19 | 1071 | Septic System |
| 19-002 | 19 | 1071 | Septic System |
| 19-003 | 19 | 1071 | Septic System |
| 31-001 | 31 | 1079 | Septic System |
| 32-001 | 32 | 079 | Incinerator |
| 32-002(a) | 32 | 1079 | Septic System |
| 32-002(b) | 32 | 1079 | Septic System |
| 45-001 | 45 | 1079 | Waste Water Treatment Facility |
| 45-002 | 45 | 1079 | Vehicle Decontamination Area |
| 45-003 | 45 | 1079 | Waste Line |
| 45-004 | 45 | 1079 | Sanitary Sewer Outfall |
| 73-001(a) | 73 | 1071 | Landfill |
| 73-001(b) | 73 | 1071 | Surface Disposal Area |
| 73-001(c) | 73 | 1071 | Landfill |
| 73-001(d) | 73 | 1071 | Landfill |
| 73-002 | 73 | 1071 | Incinerator and Surface Disposal Area |

**Table II-3**
**(Continued)**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 73-004(a) | 73 | 1071 | Septic System |
| 73-004(b) | 73 | 1071 | Septic System |
| 73-004(c) | 73 | 1071 | Septic System |
| 73-005 | 73 | 1071 | Septic System |
| 73-006 | 73 | 1071 | Industrial or Sanitary Waste Water Treatment\Facility |

**MODULE II**
**TABLE 2-2**

List of Off-Site Waste Management Facilities that may return treatment derived waste or waste residuals to Los Alamos National Laboratory.

| **Off-Site Facility** | **E.P.A. Identification Number** |
|---|---|
| Argonne National Laboratory, Argonne, IL | IL38900089 |
| Catholic University, Washington, D.C. | DCD980204879 |
| Consolidated Incineration Facility, Savannah River Site, SC | SC1890008989 |
| Diversified Scientific Services, Inc., Kingston, TN | TND982109142 |
| Envirocare, Clive, UT | UTI982598898 |
| Waste Experimental Reduction Facility, Idaho National Engineering Laboratory, Idaho Falls, ID | ID4890008952 |
| M4 Environmental Management, Inc., Oak Ridge, TN | RD&D Permit |
| EG&G Mound Applied Technologies, Miamisburg, OH | OH6890008984 |
| Nuclear Fuel Services, Erwin, TN | TND003095635 |
| Nuclear Sources & Services, Inc., Houston, TX | TXD982560294 |
| Toxic Substance Control Act Incinerator, Oak Ridge National Laboratory, Oak Ridge, TN | TN0890090004 |
| International Technology Corporation, Technology Center, Knoxville, TN | TND000770479 |
| International Technology Corporation, Biotech Applications Center, Knoxville, TN | TND987782521 |
| International Technology Corporation, Environmental Technology Development Center, Oak Ridge, TN | TND981933120 |
| Perma-Fix, Albuquerque, NM | NM0000182121 |
| Perma-Fix, Gainesville, FL | FLG980711071 |

# MODULE III STORAGE IN CONTAINERS

## III.A. DESIGNATED STORAGE UNITS

1. Technical Area 54, Area L The Permittee may store for more than ninety days hazardous wastes in containers only in the following designated storage areas:

   a. Containers containing free liquids may be stored on the concrete containment structure, Facility Number 54-32 and 54-58.

   b. Containers containing free liquids may be stored in the packaging building, Facility Number 54-31.

   c. Containers not containing free liquids may be stored, on pallets or otherwise elevated four inches, in a single layer in cleared areas within the fenced portion of Area L, subject to the limitations of HWMR-5, as amended 1989, Part V, 40 CFR Sections 264.175(c) and 264.175(d). Such containers shall not be stored within five feet of the perimeter fence, nor five feet of any structure, nor five feet of the paved or unpaved roadway. Disposal unit covers designed to serve as storage areas are not subject to this exclusion. See Figure 6.

   d. Gas cylinders will be stored in cylinder racks, or on specially constructed pallets that provide support and restraint, under a self-supporting canopy located in cleared areas within the fenced portion of Area L, within the restrictions of permit paragraph II.G. above.

   e. The fence line around Area L as shown in permit Figure 6 shall not be altered without prior notice to the Secretary and permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.41 or 270.42 as appropriate.

   f. Containers containing free liquids may be stored in the modular storage buildings, Model 22 or equivalent, Facility Numbers 54-68 and 54-69, 54-70 for container storage located as shown in Figure 6.

2. Technical Area 50 The Permittee may store for more than ninety days hazardous wastes in containers only in the following designated storage areas:

   b. Building 50-37. Containers may be stored within storage room 115, 117, and 118 of the of TA-50-37 as shown in Figure 4.

   c. Containers containing free liquids may be stored in the modular storage buildings, 0Model 22 or equivalent, Facility Number 50-114.

3. Technical Area 50 The Permittee may store for more than ninety days hazardous and/or mixed wastes in containers only in the following designated storage areas:

b. Containers not containing free liquids may be stored on pallets, dollies, or otherwise elevated in Building 50-69, Indoor Container Storage Area ( Rooms 102 and 103), and at the Building 50-69 Outdoor Container Storage Area (CSA). Containers containing suspect or known free liquids may be stored on self-containment pallets in Building 50-69, Rooms 102 and 103, and at the Building 50-69 Outdoor CSA. Containers will not be stacked at the Building 50-69, Rooms 102 and 103, storage areas. Containers may be stacked two high at the Building 50-69 Outdoor CSA. See Figure 12.

4. Technical Area 54 West The Permittee may store for more than ninety days mixed wastes in containers only in the following designated storage areas.

a. Building 54-38 Low Bay CSA. Containers not containing free liquids may be stored on pallets or dollies in the Low Bay CSA. Containers containing suspect or known liquids may be stored on self-containment pallets in the Low Bay CSA. Containers will not be stacked at this storage area. See Figure 13.

b. Building 54-38 High Bay CSA. Containers not containing free liquids may be stored on pallets or dollies or otherwise elevated in the High Bay CSA. Containers containing suspect or known liquids may be stored on self-containment pallets in the High Bay CSA. Containers will not be stacked at this storage area. See Figure 13.

c. Building 54-38 Loading Dock CSA. Containers may be stored on self-containment pallets in the Loading Dock CSA. Containers will not be stacked at this storage area. See Figure 13.

d. Building 54-38 Outdoor CSA. Drums of waste may be stored on self-containment pallets in the Outdoor CSA. Other types of waste containers that are elevated by design may be stored in the Outdoor CSA. Containers will not be stacked at this storage area. See Figure 13.

3. Technical Area 54, Area G The Permittee may store for more than ninety days mixed wastes in containers only in the following designated storage areas:

a. Mixed waste containers potentially containing free liquids may be stored at TA-54-230. See Figure 11.

b. Mixed waste containers not containing free liquids may be stored at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and on Storage Pad 10. See Figure 11.

c. All mixed waste containers stored at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and on Storage Pad 10 will be placed on pallets or otherwise elevated four inches. Palletized 55-gallon containers may be stored in groups of four and stacked three high. Palletized overpack containers may be stacked two high. Large containers (80-, 83-, 85-, and 99-gallon drums) will also be stored on pallets but will not be stacked. Fiberglass-reinforced plywood (FRP) boxes may be stacked two high, at a maximum.

III.B. AUTHORIZED WASTES

1. Identification Only hazardous and/or mixed wastes identified in Permit Attachment G. with the process code "S01" in column D.1. "Processes" shall be stored.

2. Quantities The cumulative quantity of individual hazardous and/or mixed wastes in storage at any one time at the facility shall not exceed the quantity indicated in Permit Attachment G. Column B. "Estimated Annual Quantity of Waste".

3. Land Ban The Permittee must also comply with the following regarding storage of its wastes in containers which are prohibited from land disposal. These restrictions are imposed on any waste as it becomes prohibited from land disposal. (New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20 NMAC 4.1), Subpart VIII, 268.50, revised November 1, 1995)

   a. A storage period of one year is permitted. A storage period beyond one year is permitted provided there is proof that such storage is solely for the purpose of accumulation of such quantities as are necessary to facilitate proper recovery, treatment or disposal.

   b. Each container must be clearly marked as to its contents and the date each period of accumulation begins.

   c. Hazardous wastes meeting the treatment standards in 20 NMAC 4.1, Subpart VIII, 268.41, 268.42, 268.43, revised November 1, 1995, are not subject to the storage prohibition. Hazardous wastes meeting the treatment standards specified under the variance in 20 NMAC 4.1, Subpart VIII, 268.44, revised November 1, 1995, are not subject to the storage prohibition.

III.C. CONTAINERS

1. Capacity

   a. Lab-packed wastes shall be stored in containers not to exceed 55-gallon nominal capacity.

   b. Bulk liquids may be stored in drums of a nominal capacity of 55-gallons or less.

   c. Solidified hazardous and/or mixed wastes not containing free liquids may be stored in containers meeting U.S. Department of Transportation (DOT) requirements for transportation.

   d. Compressed gases may be stored in any sized cylinder. Small cylinders may be packed in drums or crates complying with DOT shipping regulations.

   e. Polyethylene containers of 220-gallon or 330-gallon capacity may be used in place of 55-gallon drums as long as secondary containment capacity criteria of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.175(b)(3) are not exceeded.

2. Type Containers must be of a type specified in the DOT hazardous materials regulations, 49 CFR parts 171 to 179, which specify authorized containers for the waste. As applicable, the containers shall be either: (1) previously unused or reused according to DOT requirements; (2) the original shipping containers in which the material was first marketed; or (3) any other suitable container which satisfies the requirements of permit paragraph III.C. If the hazardous and/or mixed wastes are to be received and stored in their original shipping containers, the Permittee must ensure that the requirements of permit paragraph III.C. are satisfied. Polyethylene bulk containers shall meet or exceed DOT requirements. Compressed gas cylinders not meeting DOT requirements shall be segregated in a safe area.

3. Quantity The following quantities include all stored liquid materials, whether regulated or not. Solid materials which do not displace containment capacity may be collocated without affecting these volumes. Solid materials which displace containment volume shall be included in calculating the stored volume as if they were liquids. The Permittee shall keep current accurate records of the quantity of waste in storage at each location below to ensure that these capacities are not exceeded.

   a. No more than 440 gallons of liquid shall be stored at Technical Area 54, Area L, Building Number 54-31.

   b. No more than 17,220 gallons of liquid shall be stored at each concrete containment structure: facility Number 54-32.

   c. No more than 3600 containers of 55-gallon capacity or less, or the equivalent volume of 26,470 cubic feet, 980 cubic yards or 749 cubic meters, shall be used to store solidified wastes at Technical Area 54, Area L.

   d. No more than 3,630 gallons of liquid shall be stored in Building 50-37, Rooms 115, 117, and 118 combined.

   e. No more than 1,650 gallons of waste shall be stored in each modular storage unit.

   h. No more than 1,500 gallons of waste shall be stored at the Building 50-69 Indoor CSA (Rooms 102 and 103). No more than 30,000 gallons of waste shall be stored at the Building 50-69 Outdoor CSA.

   i. No more than 2,200 gallons of waste shall be stored at the Building 54-38 High Bay CSA. No more than 880 gallons of waste shall be stored at the Building 54-38 Low Bay CSA. No more than 660 gallons of waste shall be stored at the Building 54-38 Loading Dock CSA. No more than 7,920 gallons of waste shall be stored at the Building 54-38 Outdoor CSA.

   g. No more than 970,000 gallons of waste shall be stored at TA-54-226. No more than 790,000 gallons of waste shall be stored at each of the following locations: TA-54-229, TA-54-230, TA-54-231, and TA-54-232. Of the 790,000-gallon total that may be stored in

TA-54-230, no more than 93,995 gallons shall be potential liquid-bearing waste. No more than 970,000 gallons of waste shall be stored at TA-54, Area G, Pad 10.

4. Condition

   a. If a container holding hazardous or mixed waste is not in good condition (e.g. severe rusting, structural defects) or if it begins to leak, the Permittee shall transfer the hazardous or mixed waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit.

   b. The Permittee may use overpack containers of more than 55-gallon capacity to manage defective waste storage containers. Each overpacked container shall be recorded in the facility record.

5. Compatibility of Waste with Containers

   a. The Permittee shall assure, as required by 20 NMAC 4.1, Subpart V, 264.172, revised November 1, 1995, that the ability of the container to contain the waste is not impaired. When necessary, this shall include procedures for determining whether the hazardous or mixed waste is no longer compatible with the shipping container if it is to be stored in its original container (e.g. determination of container adequacy for chemicals that have a finite shelf life or may change in composition upon aging).

   b. The Permittee shall not place into the polyethylene containers described in permit paragraph III.C.1.e. above, any material for which the manufacturer does not rate the container suitability as "Good" or "Excellent" in the current compatibility technical bulletin issued by the manufacturer. A copy of the current bulletin shall be available at the facility.

6. Management The Permittee shall manage containers as required by 20 NMAC 4.1, Subpart V, 264.173, revised November 1, 1995, and Permit Attachment F.

III.D. CONTAINMENT

The Permittee shall construct and maintain the containment systems for each storage unit in permit paragraphs III.A. above in accordance with the requirements of 20 NMAC 4.1, Subpart V, 264.175, revised November 1, 1995.

III.E. IGNITABLE OR REACTIVE WASTES

The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility property line.

III.F. INCOMPATIBLE WASTES

The Permittee shall manage incompatible wastes or incompatible wastes and materials in accordance with the requirements of 20 NMAC 4.1, Subpart V, 264.177, revised November 1, 1995.

III.G. CLOSURE

The Permittee shall comply with the Closure Plan, Permit Attachment E. and permit paragraph II.L. above, for closure of any permitted storage area.

III.H. INSPECTION

1. Inspection Plan The Permittee shall inspect the storage areas in accordance with Permit Attachment B.

2. Spill Kits The type, presence, location and quantity of spill kits shall be verified and annotated monthly. If spill kits are locked up, the location of access keys shall be verified.

3. Warning Signs The legibility and condition of warning signs shall be included in the weekly inspection. Missing or illegible signs shall be promptly replaced within 24 hours of discovery.

    a. Signs shall be at the entrances to the hazardous and mixed waste units. Collocated units may be included within one signed area.

    b. Signs shall say "Danger, Unauthorized Personnel Keep Out" and "Hazardous Waste Storage Area".

    c. Signs shall be in both English and Spanish.

    d. Signs on approachable perimeter fences shall be spaced no more than 50 feet apart.

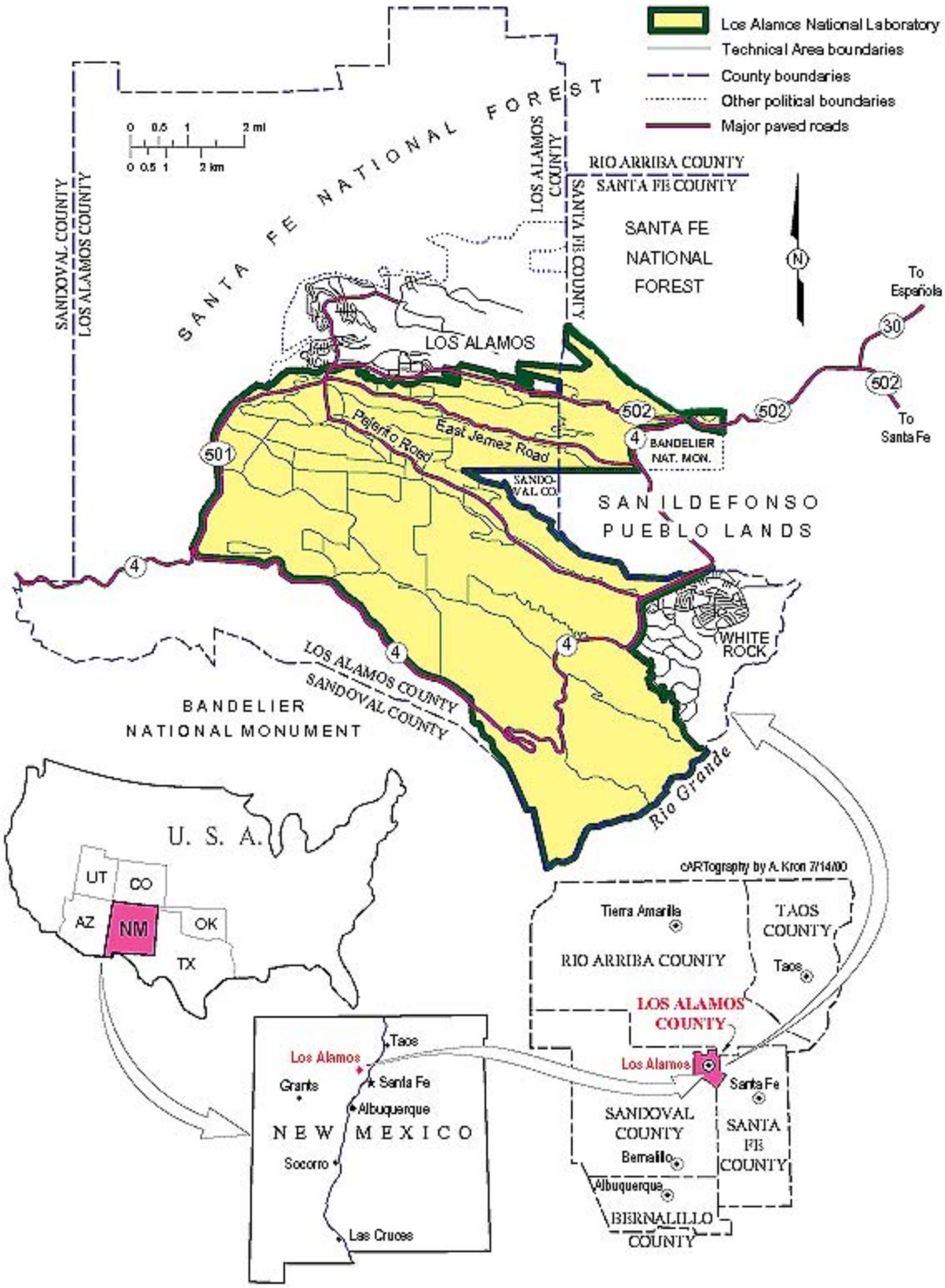



**Figure 1**

Regional Location Map of Los Alamos National Laboratory and Surrounding Land Use

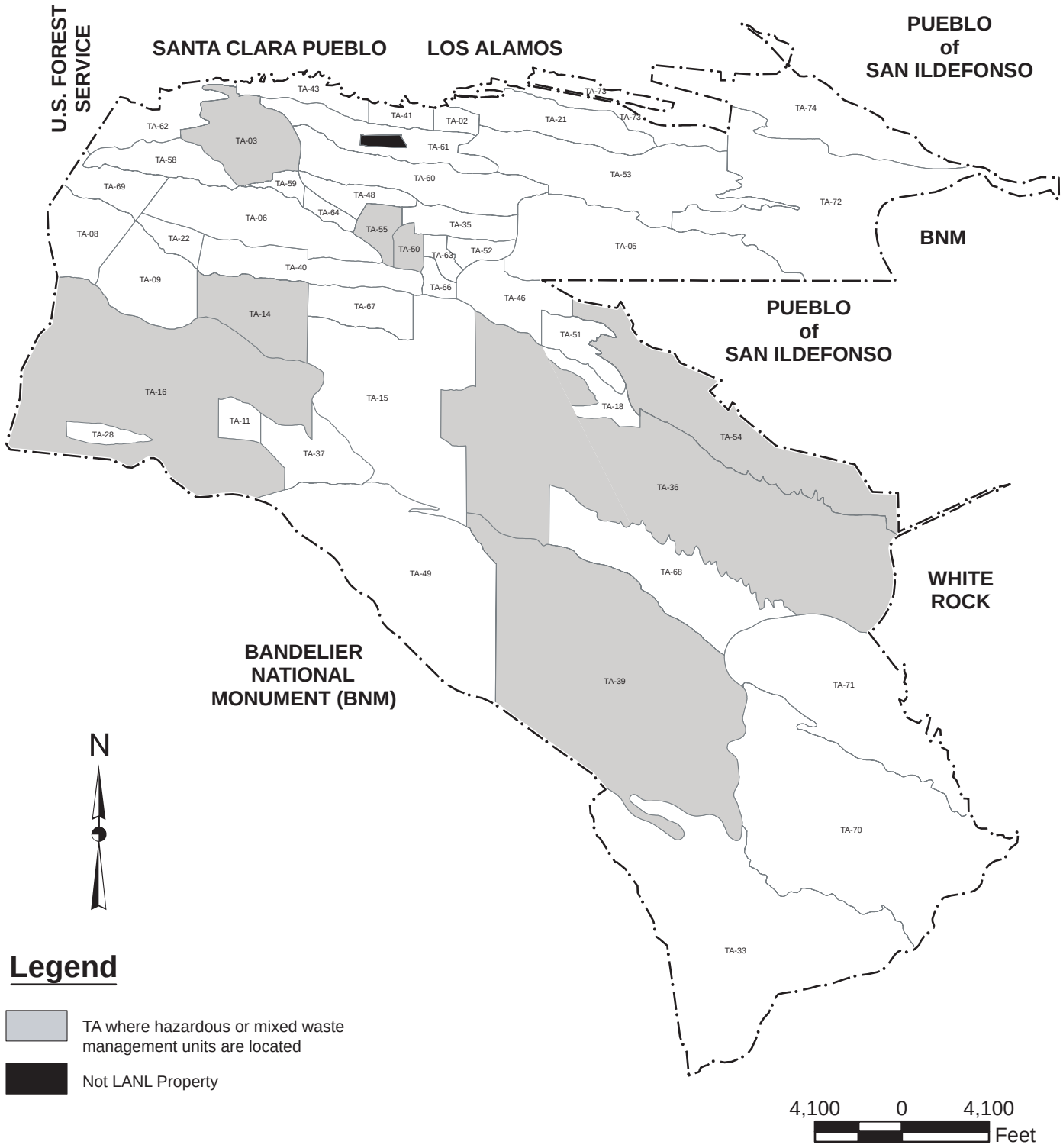



**Figure 2**
Location Map of Los Alamos National Laboratory (LANL) Technical Areas (TA)

State Plane Coordinate System New Mexico Central Zone North American Datum 1983 (ft)

Disclaimer: Neither the United States Government nor the University of California nor any of their employees, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

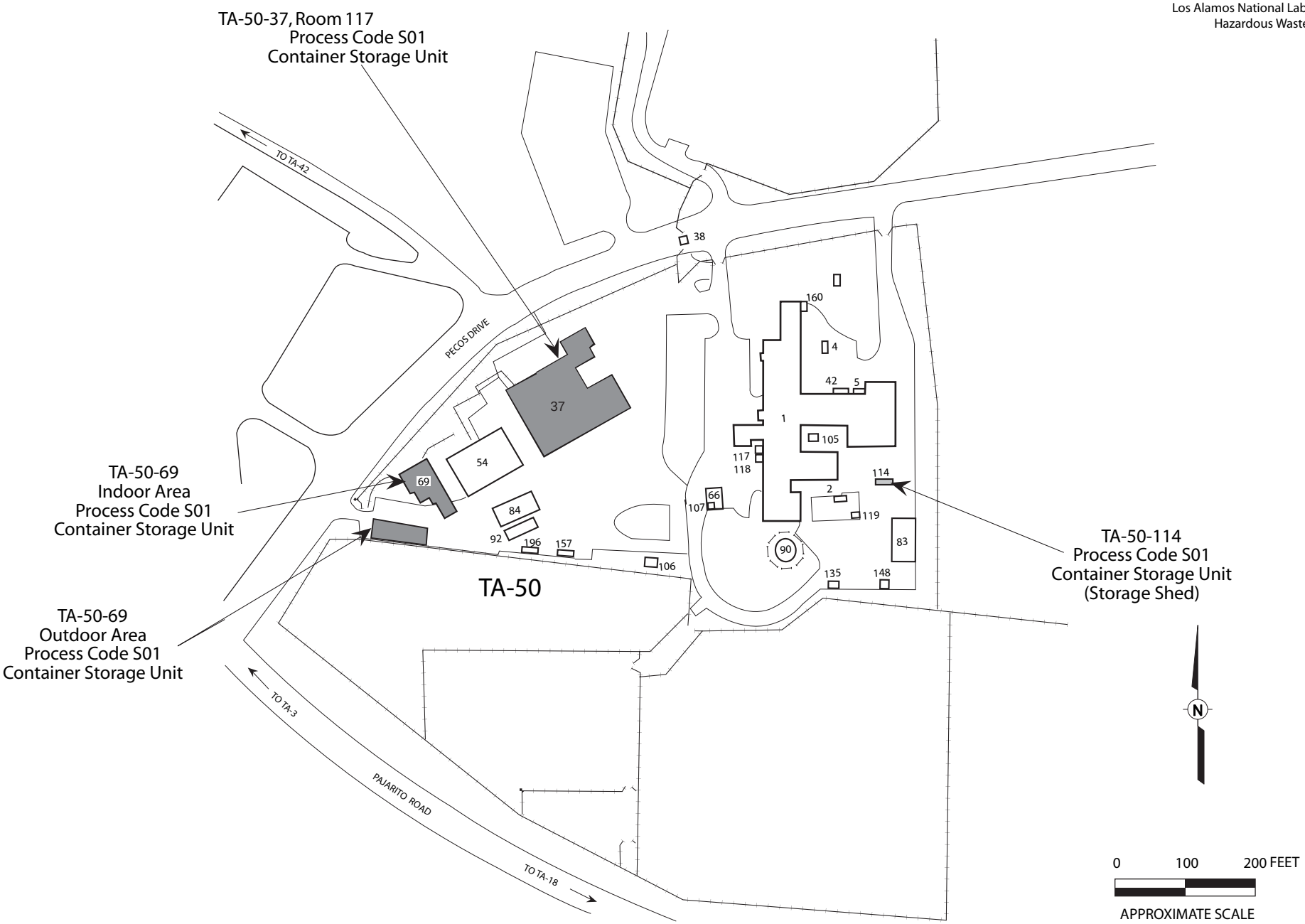



Figure 4
Container Storage Area Locations at Technical Area (TA) 50

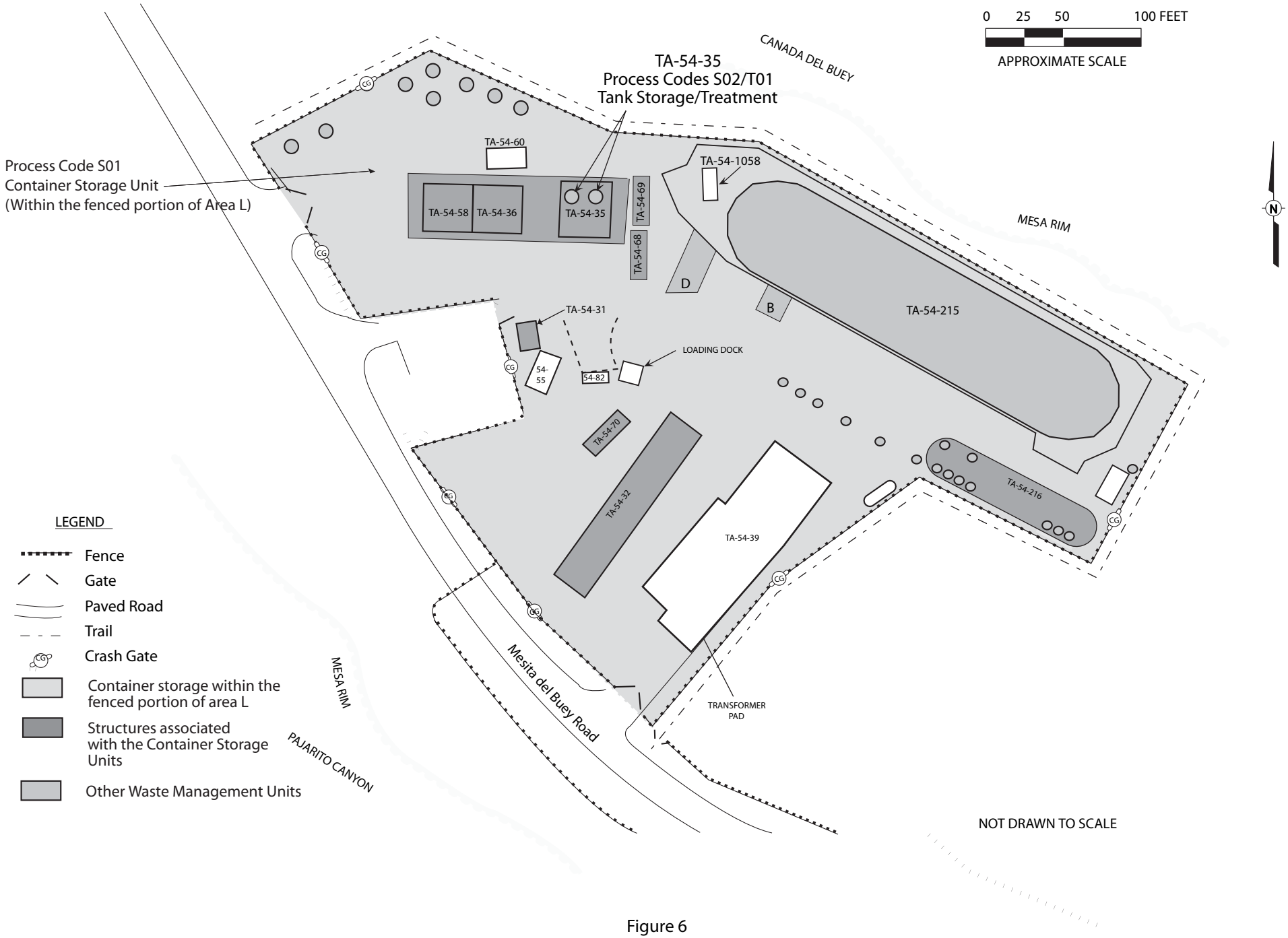



Figure 6
Technical Area (TA) 54, Area L, Container Storage Area and Storage/Treatment Tanks

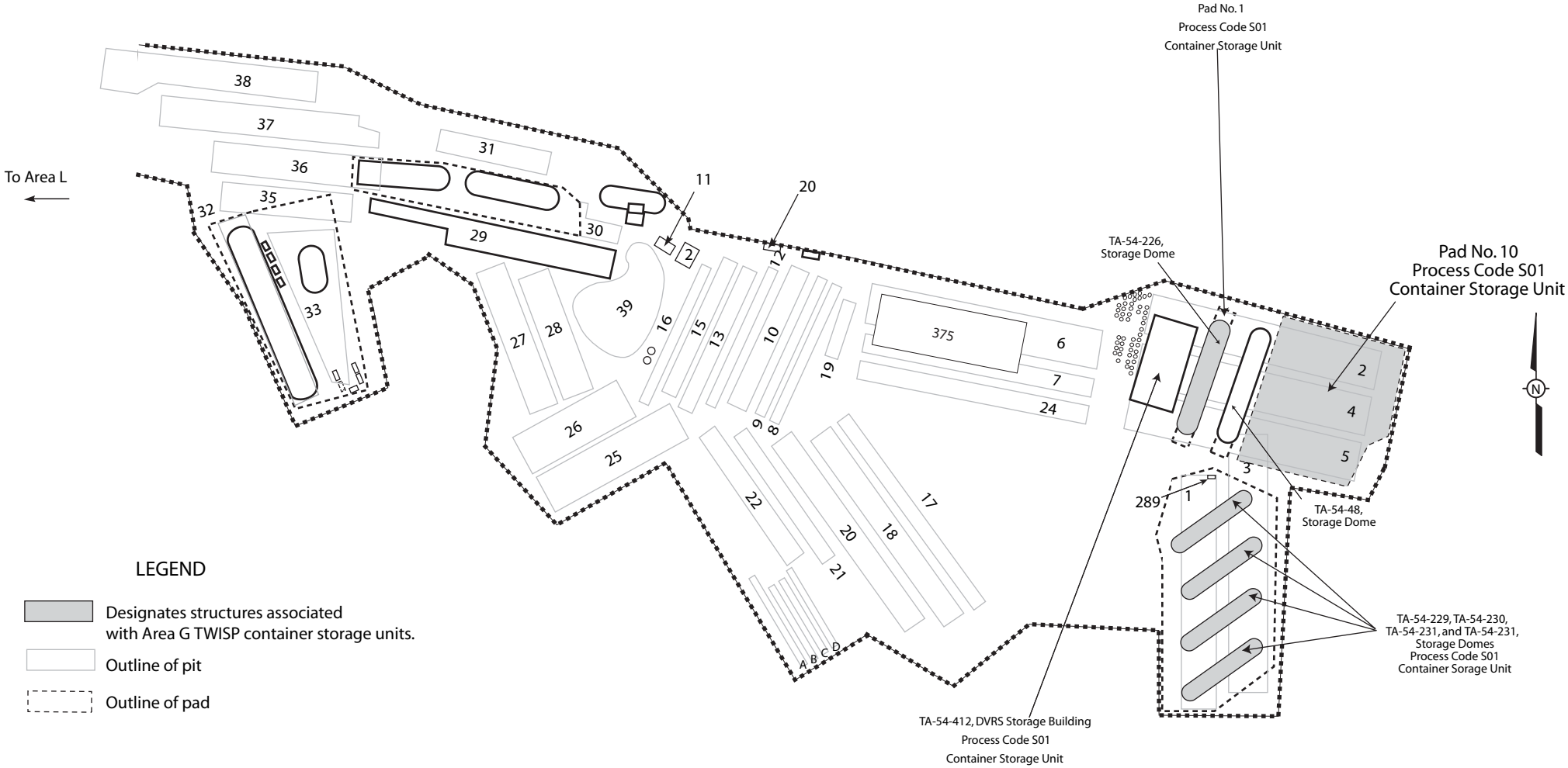
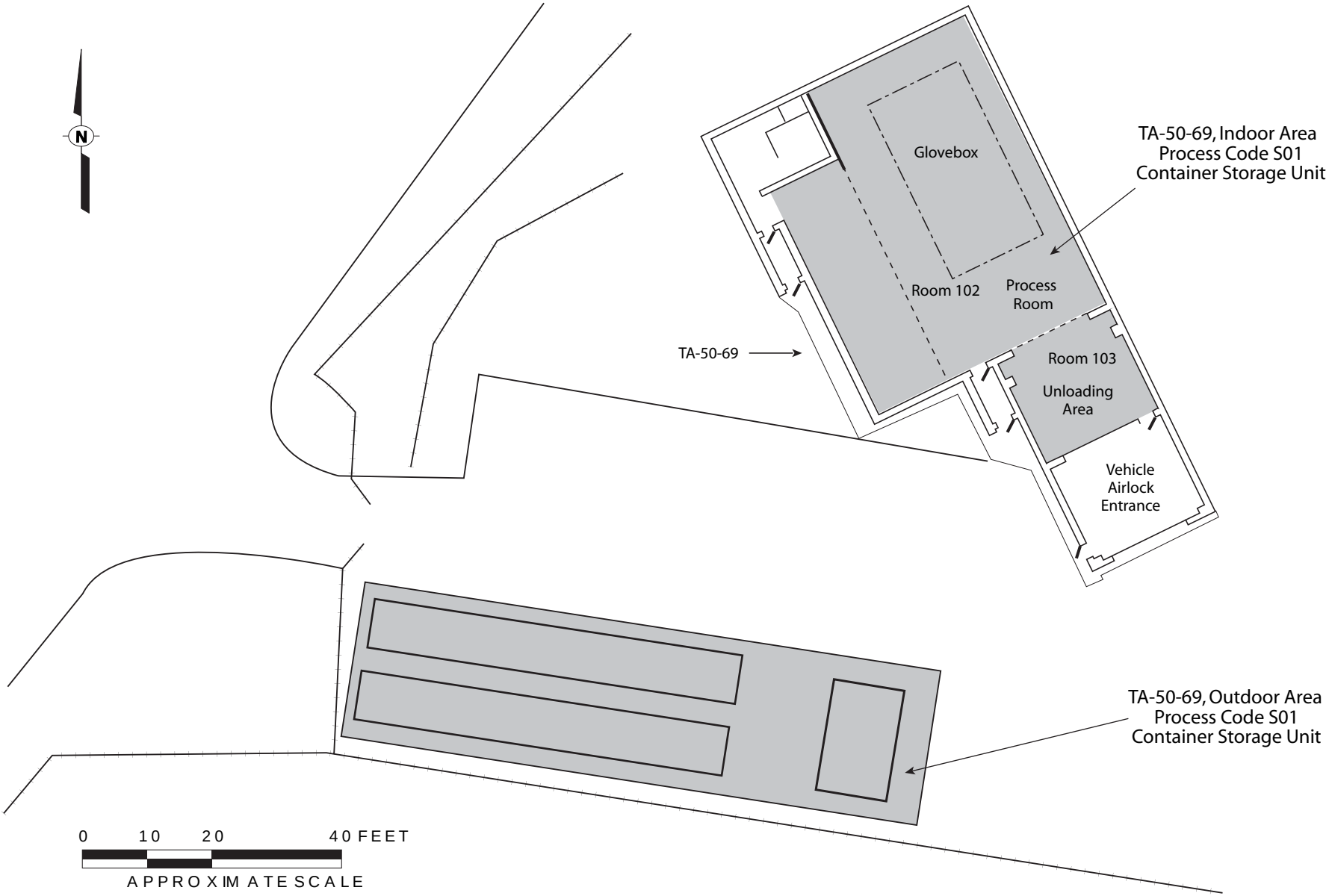



Figure 11

Container Storage at Technical Area (TA) 54, Area G
TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Storage Pad 10




***Note: Container Storage Area in Building 69 does not include mezzanine.**

Figure 12
Container Storage at Technical Area (TA) 50, Building 69

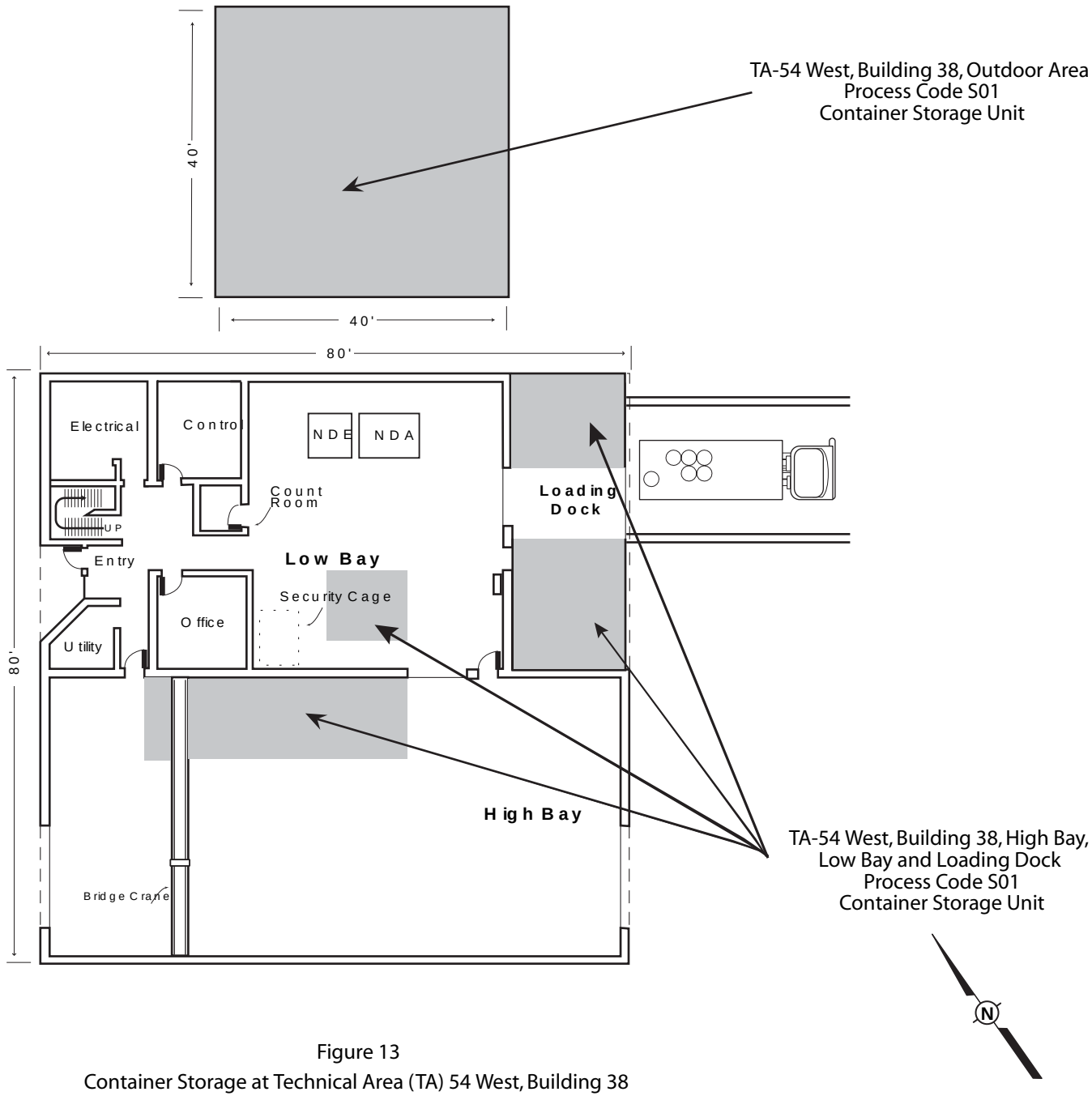



Figure 13
Container Storage at Technical Area (TA) 54 West, Building 38

# INSPECTION PLAN

## PERMIT ATTACHMENT B
## NM0890010515-1

# INSPECTION PLAN
# PERMIT ATTACHMENT B
# NM 0890010515-1

## B.1 TA-50 MODULAR CONTAINER STORAGE BUILDINGS POTENTIAL PROBLEMS

The modular container storage area is routinely inspected for potential problems with safety and emergency equipment, security devices, containers, and container storage facilities. Potential problems are listed on an inspection checklist. Potential problems include containment failure, fire, explosion, exposure, and system leakage.

### B.1.1 Frequency and Content of Inspection

The modular container storage units are inspected weekly by visually inspecting containers for waste leakage and for corrosion.

### B.1.2 Remedial Action

Leaks from containers in the modular storage buildings will collect in the 500-gallon sump within the unit. In the case of small spills, vermiculite or other compatible absorbent is poured or placed over the spill area and once the liquid is absorbed, it is swept or shoveled into drums or other appropriate containers. For spills involving larger liquid volumes, free liquids are pumped into drums and absorbent is used as above to remove the remaining liquid. Once liquids are removed, the sump is cleaned using appropriate cleaning agents. All expended cleaning material that is hazardous waste will be handled accordingly.

In the case of exposure, remedial actions include treating the exposed personnel at the HSR-2 Medical Facility and determining the cause of exposure by observation, Laboratory records, and/or sampling.

Similar to hazardous waste releases, the extent of damage from fire and explosion is assessed by visual observations, Laboratory records, and if necessary, sampling. Equipment damaged or contaminated by fire, explosion, or spills is identified by visual inspections and sampling, if necessary.

## B.2 TA-50 ROOM 117 STORAGE AREA POTENTIAL PROBLEMS

The Room 117 storage area is routinely inspected for potential problems with safety and emergency equipment, security devices, containers, container storage facilities, and loading and unloading facilities. Inspections of specific equipment and systems are conducted with a frequency appropriate to current operations, as well as appropriate to the equipment and systems. Potential problems include containment failure, fire, explosion, exposure, equipment deterioration or malfunction, and leaks from the incinerator.

B.2.1 Frequency and Content of Inspection

The storage area, building and emergency equipment are inspected according to the schedule in Table B-1.

B.2.2 Remedial Action

If any defects, deterioration, damage or hazards are discovered during inspection, appropriate remedial actions including repairs, maintenance and replacement will be completed as soon as practical to preclude further damage and reduce the need for emergency repairs. If a hazard is found imminent or if a hazardous situation already exists, remedial action will be initiated immediately and the unit not reused until corrective action is complete. Any remedial action taken due to an inspection will be noted on the operating log.

Remedial actions in the case of containment failure, fire, explosion, or exposure are identical to the measures at the TA-50 modular container storage area. See Section B.1.2 above.

B.2.3 Inspection Logs

General inspections are conducted by the operating group according to checklists associated with the operating log. Results of the inspection (Attachment B-1–), the inspector's name, and date and time of inspection are recorded on the inspection log sheet. A copy is sent for records to the Solid Waste Regulatory Compliance Group (SWRC) and kept for at least three years after all remedial action is complete. The waste storage room will be inspected using Figures B-5 and B-6.

## B.3 TA-54, AREA L WASTE TRANSFER, PACKAGING AND CONTAINER STORAGE FACILITIES AND TREATMENT TANKS

### B.3.1 Potential Problems

Area L is routinely inspected for potential problems with safety and emergency equipment, security devices, containers, container storage facilities, treatment tanks, and loading and unloading facilities. Potential problems are listed on the weekly inspection checklist. The container storage areas will be inspected weekly. The treatment tanks will be inspected weekly and after storms to detect any leakage, free board, damage, overflow, or cracks. In addition, the interior of each treatment tank will be inspected yearly for thin spots or excessive corrosion. Prior to the interior inspection, the treatment tank will be emptied by pumping into drums following standard procedures. After it is empty, any liner is removed and the tank must be thoroughly cleaned and checked to be sure it is free of flammable, toxic and corrosive vapors and materials before entry. If this requires steaming, the tank must be cooled after cleaning and the rinse water checked to be sure it is essentially neutral. Any nearby operations considered hazardous to tank entry are shut down. The atmosphere in the tank must be tested for the presence of combustible or toxic vapors and for oxygen content. A sufficient number of standby personnel must be present to give aid in case of trouble. Protective clothing or equipment may be required in some instances. Potential problems at Area L include containment failure, fire, explosion, and exposure.

### B.3.2 Frequency and Content of Inspection

Area L is inspected according to the schedule in Table B-1. In addition, the treatment tank's shell and liner will be inspected annually to ensure that the tanks walls and liner have not experienced damage due to corrosion or erosion. For the annual inspection, the tank KYNAR (@) lining will be tested for pinholes, cracks, or other failures using a Holiday Detector (@) spark test or equivalent. The Holiday Detector (@) works by sweeping an electrically charged brush over the liner surface. If a pinhole or crack is present, the liner no longer insulates the metal tank shell from the current, and a spark is produced, thus identifying the failed surface. The tank shell and liner wall thickness will also be acoustically analyzed annually to determine the extent of deterioration (ASME NDT Section IX). The acoustic analytic analysis utilizes the travel time or changes of wall thickness. Should the liner wall exhibit considerable (unexpected) thinning, the inspection frequency will be increased. The results of the annual inspection will be maintained in the permanent operating record.

Prior to the interior inspection, the treatment tank is emptied by discharging in the normal manner. After it is empty, the tank must be thoroughly cleaned and checked to be sure it is free of flammable, toxic, and corrosive vapors and materials before entry. If this requires steaming, the tank must be cooled after cleaning and the rinse water checked to be sure it is essentially neutral. Any nearby operations considered hazardous to tank entry are shut down. Respiratory protection shall be used as necessary. Protective clothing or equipment may be required in some instances. A sufficient number of standby men must be present to give aid in case of trouble.

### B.3.3 Remedial Action

If any defects, deterioration, damage or hazards are discovered during inspection, appropriate remedial actions including repairs, maintenance and replacement will be completed as soon as practical to preclude further damage and reduce the need for emergency repairs. If a hazard is found imminent or if a hazardous

situation already exists, remedial action will be initiated immediately and the unit will be taken out of service until corrective action is complete. Any remedial action taken due to an inspection will be noted on the operating log.

In the case of failure of run-on or run-off control measures, the Waste Facility Management (FWO-WFM) facility manager or his qualified designee will assess the damage by visual observations and sampling and monitoring to determine the type and extent of contamination. Mitigation procedures and repairs, such as sandbagging and building berms, will be instituted immediately. All such action will be entered in the site log.

Remedial action in the case of drum or container failure, fire, explosion, or exposure is handled as described for the TA-50 modular storage unit. If there has been a release to the environment, soil and water samples will be taken down gradient from the release. At the transfer, packaging and storage facilities in Area L, releases from drum or container failure collect in sumps as well as berms.

If leakage, corrosion, overflow or any other damage is detected in the treatment tanks, the contents will be pumped into a drum or another treatment tank. At least 33 empty drums are always available to hold the maximum amount of liquid in a treatment tank in the unlikely event that the tank is completely full and the contents cannot be pumped into another treatment tank. The portable pumps used for emptying the tank are the same pumps used to draw down the tanks and have adequate capacity to fill 55-gallon drums. The pumps and hose used are compatible with the hazardous wastes they handle and are decontaminated after use by flushing with water. The wash water is handled as hazardous waste. The pumps are located at TA-54, Area L.

### B.3.4 Inspection Logs

Each inspection is conducted by the operating groups according to the checklist in the inspection log (Attachment B-1). Results of the inspection, the inspector's name, and date and time of inspection are recorded on the inspection log sheet. A copy is sent to SWRC for records and kept for at least three years after the completion of all remedial action.

## B.5 PREPAREDNESS AND PREVENTION REQUIREMENTS

### B.5.1 Internal Communication/Alarm Equipment

The following internal communication/alarm equipment, or the functional equivalent, is available at LANL to provide emergency instruction for rapid evacuation and to initiate emergency response:

- Centrex telephone system
- Medium range radio nets (30-60 miles)
- Limited range radio nets (3-10-miles)
- Telephone/radio paging

- Two-way hand held radios
- Emergency central alarm system
- Mechanical central alarm system

Because this equipment is laboratory-wide, it allows all personnel to contact Emergency Managers in all areas of the laboratory. All hazardous and/or mixed waste handling personnel have immediate access to internal alarms or emergency communication devices. Communication/alarm equipment available at TA-50 and TA-54 can be found in Appendix D-1.

B.5.2 External Communication/Alarm Equipment

The Laboratory has established external communication capabilities with the Los Alamos Police Department and the Los Alamos Medical Center. The following external communication/alarm equipment, or the functional equivalent, is available at LANL:

- Centrex telephone system
- Private telephone lines (if Centrex fails)
- Medium range radio nets (30-60 miles)
- Limited range radio nets (3-10 miles)
- Two national Warning System (NAWAS) stations
- Direct lines from Emergency Operations Centers to KRSN (local radio station)
- Local cable television
- A Community Alert Network

B.5.3 Emergency Equipment

A list of emergency equipment available at LANL, including types of equipment, locations, and contact phone numbers is shown in Permit Attachment D.

Emergency vehicles are inspected quarterly, according to the schedule in Table B-1. Medical supplies include self-contained breathing apparatuses, wheel chairs, manual resuscitation, portable oxygen units, blankets, blood supplies, and medical kits.

B.5.4 Water for Fire Control

The Department of Energy (DOE) is responsible for overall water production, transmission, and storage for the Laboratory and Los Alamos County. Storage capacity is adequate to provide water for fire fighting purposes.

Hydrant flow tests and block valve inspections are performed annually. Pressure regulating valves are inspected and adjusted every 60 days. Flow rates for hydrants are specified by FSS-21, an experienced fire protection engineering staff, and are dependent upon site needs, including size of building and presence of sprinkler systems.

## B.6 AISLE SPACE REQUIREMENTS

Aisle space between waste containers at all container storage areas is inspected weekly to insure it is adequate to provide access for inspection purposes, and movement of personnel, containers, and equipment.

There are no ramps provided for fork lifts or drum handling equipment at the TA-50 modular container storage area. Drums are placed in the container storage using drum slings or hydraulically powered drum tongs on a forklift.

Aisles between rows of drums at the Area L transfer, packaging and storage facilities are maintained at a minimum width of two feet to permit access for inspection and handling.

When waste volumes necessitate aisle spacing at the TA-50-69 Outdoor CSA; and the CSAs at TA-54-38, a minimum aisle space of 26 inches is maintained to permit access for inspection and handling. The limited number of containers in the TA-50-69 Indoor CSA does not require aisle spaces. Containers are placed in the storage areas either manually or with hoists, cranes, forklifts, or dollies.A minimum aisle space of 28 inches will be maintained between rows of containers at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Storage Pad 10. In addition, 44-inch-wide emergency egress aisles will be located at every 100 feet of dome length. Curbed storage dome areas will be ramped at the entrance to each dome to facilitate access of forklifts and drum handling equipment.

## B.7 TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, AND PAD 10 STORAGE AREAS

### B.7.1 Potential Problems

The container storage areas (CSA) located at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pad 10 will be routinely inspected for various items, including integrity of containers and self-containment systems as well as conditions of safety and emergency equipment, security devices, and loading/unloading areas. Potential problems may include leaks, containment failure, and equipment deterioration or malfunction. Identified problems will be recorded in Part II of the Inspection Record Form (IRF). The IRF may be revised, as needed.

### B.7.2 Frequency and Content of Inspection

CSAs and associated equipment located at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pad 10 will be inspected in accordance with the schedule in Table B-1. Items to be inspected daily include structural integrity of containers, condition of secondary containment structures, appropriate aisle space and stacking, and conditions of loading/unloading areas. Items to be inspected weekly include

conditions of safety equipment, security devices, emergency equipment, and pallets. Inspectors will use the IRF when conducting daily and weekly inspections.

B.7.3 Preventive and Remedial Action

If any defects, deterioration, damage, or potential hazards are discovered during inspections, appropriate corrective measures (e.g., transfer of waste from a defective container to an appropriate container in good condition) will be completed promptly to minimize further damage and prevent the need for emergency response. If a hazardous condition is imminent or has already occurred, remedial actions (including cleanup, repairs, maintenance, and/or replacement) will be completed immediately. Any remedial action taken as a result of an inspection will be recorded in Part II of the IRF.

In the case of small spills, compatible sorbent is poured over the spill area and once the liquid is sorbed, it is swept or shoveled into appropriate containers. For spills involving larger liquid volumes, free liquids are pumped or HEPA vacuumed into appropriate containers and sorbent is used as above to remove the remaining liquid. Once liquids are removed, the spill area is cleaned using appropriate cleaning agents. All expended cleaning material will be sampled to determine appropriate waste management procedures.

In the case of exposure, remedial actions include treating exposed personnel at the HSR-2 central medical facility and determining the cause of exposure by observation, Laboratory records, and/or sampling.

The extent of damage from fire and/or explosion is assessed by visual observations, Laboratory records, and, if necessary, sampling.

Equipment damaged or contaminated by fire, explosion, or spills is identified by visual inspections and, if necessary, sampling.

B.8 TA-50-69 INDOOR AND OUTDOOR STORAGE AREAS

B.8.1 Potential Problems

The TA-50-69 Indoor and Outdoor CSAs are routinely inspected for various items, including integrity of containers and self-containment systems as well as conditions of safety and emergency equipment, security devices, and loading/unloading areas. Potential problems include leaks, containment failure, and equipment deterioration or malfunction. Identified problems are recorded in Part II of the IRF.

B.8.2 Frequency and Content of Inspection

The TA-50-69 Indoor and Outdoor CSAs and associated equipment are inspected in accordance with the schedule in Table B-1. Items inspected daily include structural integrity of containers, condition of self-containment systems, appropriate aisle space and stacking, and conditions of loading/unloading areas. Items inspected weekly include conditions of safety equipment, security devices, emergency equipment, and pallets. Inspectors will use the IRF when conducting daily and weekly inspections.

B.8.3 Preventive and Remedial Action

If any defects, deterioration, damage, or potential hazards are discovered during inspections, appropriate corrective measures (e.g., transfer of waste from a defective container to an appropriate container in good condition) will be completed promptly to minimize further damage and prevent the need for emergency response. If a hazardous condition is imminent or has already occurred, remedial actions (including cleanup, repairs, maintenance, and/or replacement) will be completed immediately. Any remedial action taken as a result of an inspection will be recorded in Part II of the IRF.

In the case of small spills, compatible sorbent is poured over the spill area and once the liquid is sorbed, it is swept or shoveled into appropriate containers. For spills involving larger liquid volumes, free liquids are pumped or HEPA vacuumed into appropriate containers and sorbent is used as above to remove the remaining liquid. Once liquids are removed, the spill area is cleaned using appropriate cleaning agents. All expended cleaning material will be sampled to determine appropriate waste management procedures.

In the case of failure of runoff control measures (e.g., self-containment system failure) at the TA-50-69 Outdoor CSA, damage will be assessed by visual observations and sampling to determine the type and extent of contamination. Mitigation procedures (e.g., sandbagging, placing portable berms) will be instituted immediately.

In the case of exposure, remedial actions include treating exposed personnel at the HSR-2 central medical facility and determining the cause of exposure by observation, Laboratory records, and/or sampling.

The extent of damage from fire and/or explosion is assessed by visual observations, Laboratory records, and, if necessary, sampling.

Equipment damaged or contaminated by fire, explosion, or spills is identified by visual inspections and, if necessary, sampling.

### B.8.4 Inspection Logs

Each inspection is conducted by the operating group responsible for the waste management unit and is recorded on the IRF. Records are maintained by the operating group in inspection logbooks for a minimum of three years. A copy of the IRF is sent weekly to SWRC and maintained at SWRC for a minimum of three years.

## B.9 TA-54-38 STORAGE AREAS

### B.9.1 Potential Problems

The TA-54-38 CSAs are routinely inspected for various items, including integrity of containers and self-containment systems as well as conditions of safety and emergency equipment, security devices, and loading/unloading areas. Potential problems include leaks, containment failure, and equipment deterioration or malfunction. Identified problems are recorded in Part II of the IRF.

### B.9.2 Frequency and Content of Inspection

The TA-54-38 CSAs and associated equipment are inspected in accordance with the schedule in Table B-1. Items inspected daily include structural integrity of containers, condition of self-containment systems,

appropriate aisle space and stacking, and conditions of loading/unloading areas. Items inspected weekly include conditions of safety equipment, security devices, emergency equipment, and pallets. Inspectors will use the IRF when conducting daily and weekly inspections.

B.9.3 Preventive and Remedial Action

If any defects, deterioration, damage, or potential hazards are discovered during inspections, appropriate corrective measures (e.g., transfer of waste from a defective container to an appropriate container in good condition) will be completed promptly to minimize further damage and prevent the need for emergency response. If a hazardous condition is imminent or has already occurred, remedial actions (including cleanup, repairs, maintenance, and/or replacement) will be completed immediately. Any remedial action taken as a result of an inspection will be recorded in Part II of the IRF.

In the case of small spills, compatible sorbent is poured over the spill area and once the liquid is sorbed, it is swept or shoveled into appropriate containers. For spills involving larger liquid volumes, free liquids are pumped or HEPA vacuumed into appropriate containers and sorbent is used as above to remove the remaining liquid. Once liquids are removed, the spill area is cleaned using appropriate cleaning agents. All expended cleaning material will be sampled to determine appropriate waste management procedures.

In the case of failure of runoff control measures (e.g., self-containment system failure) at the TA-54-38 Outdoor CSA, damage will be assessed by visual observations and sampling to determine the type and extent of contamination. Mitigation procedures (e.g., sandbagging, placing portable berms) will be instituted immediately.

In the case of exposure, remedial actions include treating exposed personnel at the HSR-2 central medical facility and determining the cause of exposure by observation, Laboratory records, and/or sampling.

The extent of damage from fire and/or explosion is assessed by visual observations, Laboratory records, and, if necessary, sampling.

Equipment damaged or contaminated by fire, explosion, or spills is identified by visual inspections and, if necessary, sampling.

B.9.4 Inspection Logs

Each inspection is conducted by the operating group responsible for the waste management unit and is recorded on the IRF. Records are maintained by the operating group in inspection logbooks for a minimum of three years. A copy of the IRF is sent weekly to SWRC and maintained at SWRC for a minimum of three years.

**TABLE B-1**
**INSPECTION SCHEDULE**

| | |
|---|---|
| MODULAR STORAGE UNITS | |
| Daily when conducting waste handling operations | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, 13, 14, 18, 22, and 23 |
| Weekly | Inspection Record Form Boxes 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| CONCRETE CONTAINMENT STRUCTURES | |
| Daily when conducting waste handling operations | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, and 18 |
| Weekly | Inspection Record Form Boxes 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| TA-50-37 STORAGE AREA | |
| Daily when conducting waste handling operations | Inspection Record Form Boxes 7, 8, 22, 33, and 34 |
| Weekly | Inspection Record Form Boxes 9, 12, 13, 14, 15, 16, 20, 21, 22, 23, 26, and 32 |
| WASTE TRANSFER/STORAGE UNIT | |
| Daily when conducting waste handling operations | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, and 18 |
| Weekly | Inspection Record Form Boxes 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| SOLID WASTE STORAGE AREA | |
| Daily when conducting waste handling operations | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, and 18 |
| Weekly | Inspection Record Form Boxes 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| TA-54 AREA L WASTE TREATMENT/STORAGE TANKS | |
| Daily when conducting waste handling operations | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, and 18 |
| Weekly | Inspection Record Form Boxes 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| Annually | Special Report |

| | |
|---|---|
| After Storms | Special Report |
| EMERGENCY VEHICLES | |
| Quarterly | Special Report |
| FIRE CONTROL SYSTEM | |
| Annually | Special Report |
| TA-50-69 INDOOR AND OUTDOOR STORAGE AREAS | |
| Daily when conducting waste handling operations | IRF |
| Weekly | IRF |
| TA-54-38 STORAGE AREAS | |
| Daily when conducting waste handling operations | IRF |
| Weekly | IRF |
| TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, AND PAD 10 STORAGE AREAS | |
| Daily when conducting waste handling operations | Inspection Record Form (IRF) |
| Weekly | IRF |

**ATTACHMENT B-1**

**Hazardous and Mixed Waste Facility**

**Inspection Record Form**

**HAZARDOUS AND MIXED WASTE FACILITY INSPECTION RECORD FORM**

| [1]FACILITY | [2] <90 DAY, GENERATOR STORAGE TREATMENT, STORAGE, DISPOSAL | [3]START DATE | [4]END DATE |
|---|---|---|---|
| [5] Containers Incinerator | Landfill Misc. Unit | Surface Impoundment Tank | Waste Pile UST |
| Thermal Treatment Land Treatment | Chem/Phys./Bio. Treat. Underground Inj. | | |

**PART I** - Enter condition of item inspected (OK or AR [action required]) in column for day inspected.

| ITEM | INSPECTED FOR | SUN | MON | TUE | WED | THU | FRI | SAT |
|---|---|---|---|---|---|---|---|---|
| [6]No use | Check if no waste is present | | | | | | | |
| [7](Un)loading area tanks/ containers | Spills and deterioration | | | | | | | |
| [8]Communication equipment (phone/radio/alarms) | Properly functioning | | | | | | | |
| [9]Tanks (all above ground portions) monitoring data | Discharge controls condition, leaks, level (6 freeboard), corrosion | | | | | | | |
| [10]Surface impoundments and containment | Freeboard (2 ft) sudden drops in level | | | | | | | |
| [11]Porta berm | Leaks condition | | | | | | | |
| [12]Eye wash safety showers | Leaks, functioning | | | | | | | |
| [13]Structural integrity of containers/tanks, valves, pipes, and flanges | Deterioration and leaks, corrosion, damage | | | | | | | |
| [14]Cover/lid of containers | Closed and secured | | | | | | | |
| [15]Warning signs | Posted and readable (bilingual) | | | | | | | |
| [16]Labels | "HAZARDOUS WASTE" present on all containers/tanks | | | | | | | |
| [17]Accumulation start date (<90 day storage) | Present on all containers, tanks, none exceed 90 days | | | | | | | |
| [18]Run on/off control (Area L, G, H, P) landfills, detonation pads | Integrity, erosion, ponding | | | | | | | |
| [19]Cover integrity (Area L, G, H, P) landfills | Erosion, subsidence water intrusion | | | | | | | |
| [20]Security | Condition, fence/gates/locks | | | | | | | |
| [21]Site lighting | Functions properly | | | | | | | |

**HAZARDOUS AND MIXED WASTE FACILITY INSPECTION RECORD FORM, Continued**

| ITEM | INSPECTED FOR | SUN | MON | TUE | WED | THU | FRI | SAT |
|---|---|---|---|---|---|---|---|---|
| [22]Containment structures | Integrity, standing water, vegetation, erosion | | | | | | | |
| [23]Management of containers | Segregated according to compatibility, 2 ft aisle space | | | | | | | |
| [24]Hose bibs, water supply | Leaks, functioning | | | | | | | |
| [25]Storage Shed (Area L) | Floor damage, liquid | | | | | | | |
| [26]Road/work surfaces | Cracks/potholes | | | | | | | |
| [27]Wind sock | Damage, functioning | | | | | | | |
| [28]Shaft cover and rail | Present, damage | | | | | | | |
| [29]Pallets | Integrity, damage | | | | | | | |
| [30]Treatment tanks | Proper operation, leaks | | | | | | | |
| [31]Refrigerator | Damaged containers | | | | | | | |
| [32]Spill control, fire, and emergency equipment | Present and in good working order | | | | | | | |
| [33]Incinerator emergency waste feed cutoff/alarms | Proper operating condition of all shutdown controls | | | | | | | |
| [34]Incinerator pumps valves, pipes, monitoring controls | Leaks/spills/tampering operating within specifications | | | | | | | |
| [35]Pressure vessels (S-site) | Deterioration and sand condition | | | | | | | |
| [36]Oil burn pans (S-site) | Deterioration and leaks | | | | | | | |
| [37]HE burn pads (S-site) | Deterioration, vegetation, sand condition, erosion | | | | | | | |
| [38]Radiation safety | Signs, monitoring ( ß $^{3}H$) | | | | | | | |
| [39]Date | Date of inspection | | | | | | | |
| [40]Time | Time of inspection | | | | | | | |
| [41]Inspector | Initials of inspector | | | | | | | |

**PART II** - For any AR (Action Required) in PART I above, describe below: action required, action taken, date of action. Attach additional sheets if necessary.

| [42]INSPECTOR | [43]GROUP | [44]DATE | [45]TIME |
|---|---|---|---|
| | | | |

**Part I**

1. FACILITY: Location information including Technical Area (TA), building, and room if applicable. Other location descriptors may be necessary. (e.g., TA-59-3-114 or TA-59-1-S). Dock)

2. <90 Day, Generator Storage should be checked if this location is intended for operation in accordance with generator requirements for storage of hazardous waste for less than 90 days.

   Treatment, Storage, Disposal should be checked if this location is listed in LANL's Hazardous Waste Facility Permit or Part A Application as a permitted or interim status TSD operation.

3. START DATE: The date of the first inspection for the week on that inspection sheet. (Usually the first working day of the week)

4. END DATE: The date of the last inspection for the week on that inspection sheet. (Usually the last working day of the week, however, if handling of hazardous waste occurs during the weekend inspections must be conducted.)

5. Check the appropriate box for the type of operation. Several boxes may be checked if necessary for those locations where inspections are combined on a single sheet. You must have prior approval from SWRC to combine inspections for more than one unit.

6. NO USE: May be checked if the unit did not store, treat, dispose, or otherwise handle hazardous waste for the day/week in question. The individual responsible for the inspection must then only complete boxes 39, 40, 41 for that day/week. If any hazardous waste is subsequently placed at the site for any reason, a full inspection must be performed immediately, and every working day thereafter until all waste is properly disposed of.

7. Loading and unloading areas must be inspected daily when in use for signs of damage or deterioration that may lead to an accident or spill. This includes asphalt pads, and areas where containers or tanks are handled or contents thereof are transferred.

8. Communication equipment: Includes all telephones, two-way radios, and alarms for the area being inspected. Consult with SWRC to determine what equipment is necessary at any particular location.

9. For tanks systems used for treatment or storage of hazardous waste, all above ground portions of the tank system, including any and all ancillary plumbing, must be inspected daily for signs of leaking, corrosion, deterioration, or improper operation. Tanks must be operated with a minimum freeboard of 6 inches. If the tank system includes discharge controls, overtopping controls, tank level alarms, or other monitoring equipment including leak detection equipment, all controls and relevant data must be checked to ensure they are operating properly and that operation is within design specifications for the system.

10. Surface impoundments must be operated with a minimum of 24 inches (60 cm) of freeboard from the top of the dike or berm to the surface of the waste therein. Inspectors must look for signs of leaks,

deterioration, and erosion of dikes and berms, and any associated plumbing or valves. These could include dying vegetation, guilies and sudden changes in level.

11. For those locations where inflatable "Porta-Berms" are used as secondary containment for tanks and containers of hazardous waste, inspectors must ensure that they are adequately inflated. Inspectors must also check for the presence of liquids in the containment unit which could indicate leaks or spills of hazardous waste. All monitoring and leak detection systems must also be checked.

12. Where required, eye-wash and safety showers must be inspected to ensure proper operating condition. Outside locations must be checked for freezing.

13. All containers and tanks must be checked for structural integrity, leaks, corrosion, or damage. This item includes checking condition of all construction materials, fixtures, seams, and auxiliary equipment. See 9 above.

14. All tanks and containers used for treating or storing hazardous waste must have the cover or lid securely in place. Containers are not considered to be closed unless the lid/cover is fastened in the manner the manufacturer originally intended.

15. Required signs must be readable and prominently posted. TSD facilities and <90 day storage areas must be equipped with bilingual (english/spanish) signs with the legend "DANGER UNAUTHORIZED PERSONNEL KEEP OUT." TSDs must be identified with signs that read "HAZARDOUS WASTE STORAGE AREA." <90 day storage areas must be identified with a sign with the legend "<90 DAY HAZARDOUS WASTE STORAGE AREA."

16. All containers and tanks must be labeled with the words "HAZARDOUS WASTE" and with other words that identify the contents. Mixed waste must also be labeled as "RADIOACTIVE."

17. All containers and tanks of hazardous waste in TSDs or <90 day storage areas must be marked with the accumulation start date. At TSDs, containers without dates must be dated when they arrive at the facility. At <90 day storage areas, containers must be marked with the accumulation start date at the time the container first receives any waste. For <90 day storage areas, no containers may exceed 90 days from accumulation start date to the time they are delivered to a permitted treatment, storage, or disposal unit. Transportation is by FWO-SWO or its representatives only.

18. Landfills and detonation pads must have run-on and run-off controls inspected wherever present. Leachate collection systems, where present, must also be inspected. Items to be inspected for are proper operating condition, damage, erosion, contaminant migration, ponding, etc. Detonation pads must be inspected for unburned or undetonated explosives, ordnance, and debris.

19. Landfill covers must be inspected at least weekly and after storms for evidence of erosion, subsidence, and water intrusion.

20. Site security must be verified. Items such as fences, gates, locks, etc. should be checked for proper condition and adequacy.

21. Site lighting must be adequate to prevent accidents related to hazardous waste operations and for any other night operations that may take place within the boundaries of the hazardous waste unit.

22. Secondary containment structures for hazardous waste operations must be inspected to verify proper operating condition and to ensure adequate capacity. Structures must also be inspected for the presence of standing water or hazardous waste. For incinerators and certain operations at TA-55, secondary containment includes inspections of gloves and gloveboxes, hoods, and ventilation systems where necessary.

23. All hazardous waste containers holding materials that may be incompatible with any other materials at that location must be separated from those materials by dikes, berms, or other physical barriers to prevent a possible reaction. All containers of hazardous waste must be stored in a manner that ensures a minimum of 2 feet of aisle space between containers. Drums containing free liquids or those holding hazardous waste (excluding mixed wastes) may not be stacked over two high.

24. TSD facilities must have water at adequate volume and pressure for fire protection available. Hose bibs should be inspected for proper operating condition and adequate pressure. Outside water supplies must be checked for freezing.

25. The storage shed at Area L must be inspected for damage, free liquids that might indicate a leak, and chemical compatibility of materials stored therein.

26. Road and work surfaces, process floors, or other work surfaces at TSDs must be inspected for damage or erosion that could lead to a spill or accident, and for adequate secondary containment.

27. Wind socks, where required, at TSDs must be inspected to ensure that they are present and in proper operating condition.

28. Disposal shafts and shafts used for retrievable storage should have their covers securely in place and guard rails must be installed and in good condition.

29. Hazardous waste containers at TSDs and <90 day storage areas must be stored on pallets if they are stored outside without a roof.

30. Hazardous waste treatment tanks must be operated within design specifications and in accordance with SOPs and work plans. Tanks must be inspected for leaks or damage prior to operation.

31. Refrigerators used for storing hazardous waste, or samples thereof, must be inspected for proper operating condition and leaking or damaged containers.

32. Hazardous waste TSDs and <90 day storage areas must have adequate fire and spill control equipment for the types and volumes of waste present. Equipment must be present, in good working order, and appropriate for the material in question.

33. Incinerator waste feed cutoffs, emergency shutdown controls, and associated alarms or warning systems must be inspected for proper operating condition.

34. Incinerators, ancillary plumbing and equipment, and all monitoring controls must be inspected to ensure that they are in proper operating condition, and are being operated within design specifications. Inspectors must also look for evidence of leaks, corrosion, spills, or tampering.

35. Pressure vessels must be inspected for signs of deterioration or damage. Condition of the sand and loading must also be checked to ensure adequacy.

36. Oil burn pans must be inspected for deterioration, damage, or leaks. Inspectors must also inspect for unburned explosives and debris.

37. HE burn pads must be inspected for deterioration, damage, leaks, or vegetation that could catch fire. Condition of the sand must also be checked. Inspectors must also inspect for unburned explosives and debris.

38. Radioactive materials must be properly placarded, labeled, and stored within controlled areas. Containers should be monitored/swiped for outside contamination if suspected and all leaks or spills must be monitored to ensure adequate cleanup.

39. Inspectors will record the date of the current inspection.

40. Inspectors will record the time of the current inspection.

41. Inspectors will initial each daily inspection.

**Part II**

Inspectors must explain in detail, any deficiency noted above. Items to be included are: type of problem, any action taken, and the date/time of the action. Additional sheets may be attached as necessary.

42. Signature of individual performing inspection.
43. Organization responsible for this location.
44. Date record was signed and completed.
45. Time record was signed and completed.

# PERSONNEL TRAINING

## PERMIT ATTACHMENT C
## NM0890010515-1

# ATTACHMENT C
# PERSONNEL TRAINING

This attachment describes the personnel training program for Los Alamos National Laboratory (LANL) in accordance with the regulatory requirements of the New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20 NMAC 4.1), Subpart V, 264.16, "Personnel Training," revised November 1, 1995. The information presented outlines the personnel training program at LANL. The primary objective of the training program is to prepare persons to operate and maintain safely those areas managing hazardous and/or mixed waste in accordance with 20 NMAC 4.1, Subpart V, revised November 1, 1995. This training program applies to all employees of the U.S. Department of Energy, the University of California, and any of their subcontractors who work regularly at LANL and who handle or generate hazardous and/or mixed waste. The degree of training varies with the job duties. However, all personnel who may handle or generate hazardous and/or mixed waste receive an introduction to RCRA.

## C.1 HAZARDOUS AND MIXED WASTE MANAGEMENT/RESPONSIBILITIES

Waste management groups within the Facility Waste Operations Division (FWO) and the Risk Reduction and Environmental Stewardship Division (RRES) are responsible for most waste management activities at LANL. Waste management activities associated with high-explosive waste treatment are handled by the Engineering Sciences and Applications Division (ESA) and the Dynamic Experimentation Division (DX). The Nuclear Materials Technology Division (NMT) is responsible for waste management activities at Technical Area 55. With the noted exceptions, FWO waste management groups are responsible for all day-to-day operational aspects of waste management.

Other LANL groups and various support personnel assist in waste management activities and provide support to RRES and FWO Divisions. Laboratory-contracted support services (e.g., KBR-Shaw-LATA [KSL]) provide trained personnel to assist CST in waste-handling activities. Personnel in the Health Physics Operations Group, Occupational Medicine Group, Industrial Hygiene and Safety Group, Occurrence Investigation Group, Hazardous Materials Response Group (S-10), Meteorology and Air Quality Group, Water Quality and Hydrology Group, Ecology Group, and personnel in the Solid Waste Regulatory Compliance Group (RRES-SWRC) are trained in their specialties to provide emergency response support. Protection Technology Los Alamos (PTLA) is responsible for LANL security, traffic control, and site access control.

The Emergency Management and Response (EM&R) Office provides emergency planning and response at LANL and has the overall responsibility for LANL's Emergency Management Plan (EMP) training. The Performance Surety (PS) Division Training Group (PS-13) is responsible for developing and delivering LANL-wide Environment, Safety, and Health (ES&H) training. Environmental courses are designed with substantial input from RRES-SWRC, the FWO waste management groups, and others, as appropriate.

## C.2 TRAINING CONTENT, FREQUENCY, AND TECHNIQUES

The training program instituted at LANL includes a combination of LANL-wide courses (received internally or through external vendors and usually classroom-based), facility-specific training (developed and delivered within a particular facility), and on-the-job training (OJT) (performance-based courses that focus primarily on procedures performed by individual workers). Each of these types of training is described briefly in Sections C.2.1 through C.2.3. All LANL and LANL contract employees will receive the appropriate level of training within six months of their date of hire or transfer. Personnel will not work in unsupervised positions until they successfully complete the appropriate level of training for their positions and responsibilities.

Records of LANL-wide training currently sponsored or administered by PS-13 are entered by that group into the Employee Development System (EDS), the official LANL training database. These records document that the required training has been successfully completed by the worker. Training records of former workers are kept for at least three years from the date last worked at the facility. It is required that records documenting successful completion of facility-specific, on-the-job, or externally provided training be entered into the EDS by sponsoring organizations. Group or section training personnel or document control custodians will maintain, at a minimum, hard copies of training records for currently employed workers until the facility closes.

Table C-1 summarizes the components of the LANL-wide training program as administered through PS-13. This table includes a listing of the relevant training courses, a summary of topics, and a designation of the relevant courses for each job category. Categories of workers summarized in Table C-1 include hazardous/mixed waste workers, managers and supervisors of hazardous/mixed waste workers, emergency responders, and uncontrolled area potential release site workers. Table C-2 summarizes the components of facility-specific training and OJT that workers must receive. Each training element was designed to ensure that every worker involved in hazardous and/or mixed waste operations is properly trained in procedures relevant to the positions in which they are employed. Tracking the completion of training is possible through the EDS training plans.

The responsibilities of the worker categories summarized in Table C-1 are presented herein. Hazardous/mixed waste workers are responsible for handling and/or managing hazardous/mixed wastes and assisting in spill and emergency response activities, as required. Managers and supervisors of hazardous/mixed waste workers are directly responsible for day-to-day operations related to waste management activities and ensuring that personnel safety and training requirements are met. Emergency responders are trained emergency response personnel (e.g., S-10) that respond to emergencies (e.g., spills, fires, explosions) involving hazardous and/or mixed wastes that provide support for emergency response activities. Uncontrolled area potential release site workers conduct investigations and remedial activities at potential release sites and are responsible for proper waste management from generation to disposal, including waste characterization, treatment, and storage.

Training materials of LANL-wide training courses are on file in the ES&H Training Center and are available for review by all hazardous/mixed waste management and handling personnel, emergency response personnel, and regulatory agencies. Course content will be reviewed annually and updated as required to remain current with RCRA regulations. Alternative forms of training (e.g., paper-based self-study courses, computer-based training) may be taken to meet specific training requirements. Such alternate forms of training must be approved by PS-13 personnel and determined to be equivalent in content to more traditional classroom-based training courses. Files

listing the requisite skills, education, and training for workers who handle hazardous and/or mixed waste and the duties and responsibilities for each job description, as well as the name of each worker filling a job description, are maintained, as required by 20 NMAC 4.1, Subpart V, 264.16(d)(2), revised November 1, 1995. This information is located in the EDS as well as maintained at the facility by the group or section document control custodian.

### C.2.1 LANL-Wide Training

The RCRA Personnel Training course provides an overview of RCRA regulations and emphasizes compliance with the RCRA requirements that apply to job-related activities, such as the safe handling of hazardous and mixed waste. Program instructors are trained in hazardous and mixed waste management programs and procedures and in RCRA provisions. The course is designed to provide training that is appropriate for the worker's responsibilities. PS-13, with guidance from RRES-SWRC, provides an annual refresher of applicable RCRA requirements. Personnel who handle hazardous/mixed waste and/or clean up spills or releases of hazardous/mixed waste and the managers and supervisors of these workers receive instruction on appropriate topics listed in Table C-1. In addition, personnel responsible for requisitioning the transport, treatment, or storage of hazardous and/or mixed waste receive supplemental training, as necessary, as listed in Table C-1. Training is typically provided by LANL training instructors or by external vendors knowledgeable about a particular subject.

### C.2.2 Facility-Specific Training

All waste-handling personnel will participate in facility-specific training at their work locations. Table C-2 addresses program requirements that ensure that hazardous and mixed waste management and handling personnel know the specific requirements for their facilities and are able to respond effectively to emergencies. Personnel will become familiar with emergency and monitoring equipment use, inspection, repair, and replacement at their facility. In addition, they will receive instruction on contingency plan contents and implementation (as they apply to their facility) including, but not limited to, communications or alarm systems, response to fires and explosions at their facility, and key parameters for automatic waste-feed cutoff systems and shutdown of facility operations.

### C.2.3 On-the-Job Training

Performance-based OJT is developed in conformance with LANL standards. Supervisors or other experts who can evaluate worker proficiency provide training appropriate for the procedures required of each function-specific position. To become proficient in hazardous and/or mixed waste procedures, workers receive this performance-based training, as necessary.

OJT topics include implementing facility-specific procedures, maintaining operating records, fulfilling reporting requirements, and conducting inspections specific to the facility. Workers whose duties include packaging and transportation support receive training on packaging, labeling, recordkeeping, and waste segregation for transportation within their facility. Emergency responders receive facility-specific training regarding emergency response and shutdown procedures at the facility to which they are assigned.

### C.2.4 Training Coordinator

The PS-13 Group Leader directs the LANL-wide ES&H training program. The Group Leader is trained in the operation of hazardous and mixed waste management facilities, waste management practices, and emergency procedures and is responsible for coordinating training courses. Line managers are responsible for ensuring that personnel under their supervision receive necessary training.

## C.3 EMERGENCY TRAINING

If called upon by the EM&R Office, additional non-LANL emergency response personnel (e.g., KSL, PTLA) may assist the LANL Emergency Manager at the scene of a hazardous or mixed waste emergency. These professionals are trained in their specialties (e.g., heavy equipment operation, hazardous material cleanups, traffic control, security). LANL contract personnel are also trained in personal safety. At all times during an emergency, these workers are under the direct supervision of the Incident Commander in the Unified Command or the designated Crisis Manager, as appropriate. A more detailed discussion of emergency procedures, personnel, and equipment is provided in Permit Attachment D.

To ensure maximum protection of life and property and to mitigate the consequences of an emergency situation, facility personnel involved in waste handling and emergency response must be knowledgeable about appropriate building and operating area emergency procedures. These workers receive training in facility-specific emergency procedures or participate in the LANL-wide emergency training program. Group leaders and immediate supervisors are responsible for ensuring that education and training in facility-specific emergency procedures are provided to all personnel under their supervision. Training in facility-specific emergency procedures is given by the operating group. Periodic announced and unannounced emergency drills and exercises are used to familiarize workers with emergency procedures. Training is also provided to workers through prominent instructional displays and through presentations and discussions in safety meetings.

Each new or transferred worker is indoctrinated by an immediate supervisor regarding the general and specific emergency procedures related to the work area. The immediate supervisor also advises each worker of changes to any emergency procedures and provides an annual refresher of procedures affecting the work area. The organization that develops and delivers facility-specific training maintains these training records.

Specialized training is given to personnel assigned special functions or specific emergency duties. Emergency response personnel are required to attend courses on implementation of the RCRA contingency plan, spill response, and Occupational Safety and Health Administration (OSHA) emergency response provisions. The EM&R Office provides training related to implementing LANL's EMP. All waste management and handling personnel participate in a training program in which they are instructed in emergency procedures pertinent to their work areas. The operating group provides this site-specific instruction.

## C.4 IMPLEMENTATION OF TRAINING PROGRAMS

General Employee Training (GET), an ES&H orientation course, is given to all new employees. GET is also required of contract workers and visitors who work on site at LANL for ten or more consecutive days. GET includes, but is not limited to, ES&H policy, OSHA rights and regulations, industrial safety, waste minimization, general radiation protection, industrial hygiene, emergency management, and fire protection. Personnel who will handle or be associated with hazardous waste

are required to take the hazard communications and waste generator training courses. All workers who will handle or be associated with mixed waste also receive courses in hazard communications and waste generator training as well as radiation worker protection. Workers will not work without direct supervision or at a new position until they have been trained.

The Waste Generation Overview training course provides hazardous and mixed waste generators with information needed to identify wastes that are subject to RCRA regulations in 20 NMAC 4.1, Subpart II, revised November 1, 1995. The training defines hazardous waste and hazardous constituents (including hazardous components in mixed waste) and addresses how to identify hazardous waste and hazardous constituents. A second course, Waste Documentation Forms, focuses on documenting characterized waste according to RCRA and LANL requirements. Both training courses inform hazardous and mixed waste generators of their responsibilities and requirements and supports the documentation of process knowledge, which generators may use to characterize hazardous and mixed waste. All workers who handle hazardous and/or mixed waste are required to have RCRA Personnel Training, and those who work at treatment, storage, or disposal units are required to have Hazardous Waste Operations and Emergency Response (HAZWOPER) Occasional Site Worker training.

All hazardous and mixed waste management and handling personnel must attend annual refresher courses. These courses are intended to update personnel on LANL procedures and changes in RCRA provisions and to provide them with an overview of their introductory training. Line managers and group leaders will ensure that personnel participate in the appropriate introductory and annual training courses.

**TABLE C-1**
**LOS ALAMOS NATIONAL LABORATORY-WIDE TRAINING PROGRAM**

| **COURSES**[a] | **Hazardous/Mixed Waste Worker** | **Manager/Supervisor of Hazardous/Mixed Waste Workers** | **Emergency Responder** | **Uncontrolled Area Potential Release Site Worker** |
|---|---|---|---|---|
| **Criticality Safety Training** (presents nuclear theory, criticality reactions, characteristics, exposure protection principles, and criticality prevention measures) | *[b] | * | * | * |
| **General Employee Training** (includes familiarization with standard operating safety guidelines) | X[c] | X | X | X |
| **Hazard Communication Introduction** (includes information on explosion/fire hazards, chemical burns, chemical compatibility, eye/skin hazards and protection, respiratory hazards and protection) | X | X | X | X |
| **HAZWOPER[d]: First Responder (Operations Level)** (provides an overview of hazardous materials emergency response including recognition and identification of hazardous materials and associated risks, required actions, and relationships with other emergency responders) | | | X | |
| **HAZWOPER: General Site Worker** (provides general information on hazardous waste operations and emergency response for general site workers engaged in corrective action, remediation, or decontamination and decommissioning activities) | | | | X |
| **HAZWOPER: Occasional Site Worker** (provides general information on hazardous waste operations and emergency response for occasional and regular site workers) | X | X | | |

**TABLE C-1**
**LOS ALAMOS NATIONAL LABORATORY-WIDE TRAINING PROGRAM**
**(continued)**

| **COURSES[a]** | **Hazardous/Mixed Waste Worker** | **Manager/Supervisor of Hazardous/Mixed Waste Workers** | **Emergency Responder** | **Uncontrolled Area Potential Release Site Worker** |
|---|---|---|---|---|
| **HAZWOPER: Refresher for General Site Workers** (provides general information on hazardous waste operations to general site workers) | | | | X |
| **HAZWOPER: Refresher for TSD[e] Workers** (provides general information on hazardous waste operations to TSD workers) | X | X | | |
| | | | | |
| **RCRA[g] Personnel Training** (includes an overview of Code of Federal Regulations Title 40, Parts 260-265, 268; New Mexico Administrative Code, Title 20, Chapter 4, Part 1, revised November 1, 1995; Department of Transportation shipping regulations; internal and external protocol for facility inspections; operating equipment, communication systems, security systems; contingency plan; and emergency equipment use, inspection, and repair) | X | X | * | * |
| **RCRA Refresher Training** (includes regulatory and legislative updates, occurrence reports and lessons learned, audit findings, modification/review of the contingency plan; provides required retraining) | X | X | * | * |
| **Refresher General Employee Radiological Training** (provides refresher general radiological training) | * | * | * | * |
| **Radiological Worker I and II Training** (requires recertification every two years) | * | * | X | X |
| **Refresher Radiological Worker I and II Training** (provides refresher radiological training) | * | * | X | X |

**TABLE C-1**
**LOS ALAMOS NATIONAL LABORATORY-WIDE TRAINING PROGRAM**
**(continued)**

| **COURSES**[a] | **Hazardous/Mixed Waste Worker** | **Manager/Supervisor of Hazardous/Mixed Waste Workers** | **Emergency Responder** | **Uncontrolled Area Potential Release Site Worker** |
|---|---|---|---|---|
| **Waste Generation Overview** (includes waste management regulations and policies, definition of hazardous waste, waste minimization, cycle of waste management at Los Alamos National Laboratory, storage and disposal) | X | X | X | X |
| **Waste Management Coordinator Requirements** (provides training on waste management to coordinators) | * | * | | * |
| **Cardiopulmonary Resuscitation: Adult** (requires annual recertification) | * | * | * | * |
| **First Aid: Standard** (requires recertification every three years) | * | * | * | * |
| **Health Physics Checklist Indoctrination** (provides health physics information to new workers) | * | * | X | X |
| **HMPT**[h] **Training - General** (includes introduction to HMPT regulations, identification and segregation of hazardous materials, packaging, placarding/labeling, manifesting/recordkeeping) | * | * | | |
| **Lockout/Tagout** (provides information on lockout/tagout procedures and policy) | * | * | * | * |
| **Respirators: Air-Purifying** (provides required annual retraining for operation and inspection of device, changing filters, donning and doffing) | * | * | X | * |
| **Respirators: Self-Contained Breathing Apparatus** (provides required annual retraining for operation and | * | * | X | * |

**TABLE C-1**
**LOS ALAMOS NATIONAL LABORATORY-WIDE TRAINING PROGRAM**
**(continued)**

| **COURSES**[a] | **Hazardous/Mixed Waste Worker** | **Manager/Supervisor of Hazardous/Mixed Waste Workers** | **Emergency Responder** | **Uncontrolled Area Potential Release Site Worker** |
|---|---|---|---|---|
| inspection, changing compressed air bottles, donning and doffing, safety features, care and cleaning, fitting) | | | | |
| **Waste Documentation Forms** (includes use of Waste Profile Form, use of waste disposal forms, use of manifest system, as applicable) | * | * | | * |

[a] Additional training courses (not listed in this attachment) may also be taken by personnel depending on the types of hazards (e.g., chemical) associated with a particular job description.
[b] * indicates that a course may be required for specific job tasks and/or work areas.
[c] X indicates a required course.
[d] HAZWOPER = Hazardous waste operations and emergency response
[e] TSD = Treatment, storage, and disposal
[f] OSHA = Occupational Safety and Health Act
[g] RCRA = Resource Conservation and Recovery Act
[h] HMPT = Hazardous materials packaging and transportation

**TABLE C-2**
**FACILITY-SPECIFIC AND ON-THE-JOB**
**TRAINING FOR**
**HAZARDOUS AND MIXED WASTE HANDLING OPERATIONS**

The following categories of facilities will provide facility-specific training for all workers and on-the-job training on procedures directly applicable to an individual's work assignment:

- Treatment units
- Open burning and explosives detonation areas
- Container and tank storage areas
- Other categories, as necessary.

**Facility-specific training** will include the following topics:

- Supervised operation of the facility
- Emergency shutdown and evacuation procedures
- Accidental release and spill response procedures
- Familiarization with emergency equipment use, inspection, and repair
- Use of communication/alarm system
- Contingency plan training
- Operations manual specific to the facility
- Specialized equipment at the facility
- Information about the particular chemical and radioactive hazards present at the facility.

**On-the-job training** will consist of training individuals to be familiar with and use the standard operating procedures that apply to their jobs.

# CONTAINER MANAGEMENT
# PERMIT ATTACHMENT F
# NM0890010515-1

# ATTACHMENT F
# CONTAINER MANAGEMENT

## F.1 CONTAINER PACKAGING, SAMPLING and LABELING

### F.1.1 Container Packaging and Transport

When chemical substances are declared to be in excess, the originating group completes Waste Profile Form (WPF, see Permit Attachments A.2 and A.3) and sends the form to the Solid Waste Operations Group (FWO-SWO). The WPF provides waste characterization information for subsequent management of material. The WPF is reviewed for adequacy of information and assignation of segregation codes, Department of Transportation information, and Environmental Protection Agency (EPA) Hazardous Waste Numbers. When the WPF is approved, the waste generator submits a Chemical Waste Disposal Request (CWDR) to FWO-SWO. The CWDR lists the chemical waste the generating group needs to dispose of, the quantity of the wastes, and other pertinent information about the containers.

A uniform waste manifest is prepared for use when the waste is collected, packaged, and transported. All waste materials are packaged and transferred in accordance with DOT regulations and the Laboratory's On-Site Transportation Manual.

FWO-SWO personnel review the waste disposal request for adequacy of information and assignation of segregation codes, DOT information, and EPA codes. FWO-SWO personnel then use the waste disposal request to complete the shipping papers for waste collection. Also, FWO-SWO use the waste disposal request to create a second record as part of the Hazardous Waste Database. FWO-SWO personnel visit the generating site to package the waste and transport it to TA-54, Area L. All waste is transferred in accordance with DOT regulations and Laboratory procedures.

Containers will be visually inspected for integrity before transport. If the container is unacceptable, it will be repackaged or overpacked prior to transport. The wastes are transported by vehicles ranging from half-ton to trucks to semitrailers with maximum capacities of up to 80,000 pounds.

Upon arrival at a hazardous or mixed waste management unit, the wastes are unloaded from the transport vehicle and placed into appropriate storage areas. Lab pack waste will be temporary placed at the packaging building for labeling or compositing. Drums and Tuff-Tanks will be placed on either the sampling pad or storage pad for sampling and labeling.

### F.1.2 Drum Labeling, Recording, and Sampling System

Each unique package of waste is labeled with the following information:

—chemical segregation group number

—unique record number

—date of generation

—either an EPA hazardous waste label or the words "hazardous waste."

—DOT Hazard class and shipping information, as appropriate

— EPA hazardous waste code(s) or the hazardous constituent(s)

This information and the data from the CWDR are entered into a chemical and mixed waste database. All records are then maintained in accordance with the requirements of this permit.

Sampling of the waste is then performed as outlined in Permit Attachment A. The sampling pad at TA-54, Area L, is restricted to one compatibility group of chemicals at a time (e.g., organics). The group allowed at the time will be posted on the pad. This ensures that incompatible chemicals do not react in the containment basin of the pad. Before a new compatibility group of chemicals is placed on the pad, the containment area will be cleaned. For this reason, the main sampling pad will generally be used for organic waste and acid/base waste will be sampled at the appropriate storage cell.

After all packages are labeled and/or sampled, they are moved to one of the Laboratory's storage areas. The permitted areas are defined in Permit Module III.

## F.2 STORAGE AREA PRACTICES

### F.2.1 Storage Areas at TA-50 and TA-54

The Laboratory has the following storage areas that are the subject of this permit: modular storage units and the main storage pad at TA-54, Area L; the modular storage unit at TA-50, the storage room; the TA-50-69 indoor and outdoor storage units; and the TA-54-38 storage units; and TA-54-226, -229, -230, -231, -232, and Pad 10 at TA-54, Area G. The usage of each of these units is discussed below.

#### F.2.1.1 Modular Storage Units, TA-54, Area L (TA-54-68 and -69 and -70)

The primary usage of the modular units will be for the storage of lab pack waste, particularly those in fiberboard containers. After labeling, the lab packs are placed directly in the appropriate storage cell. Each modular unit has two or three cells allowing single chemical family group to be stored in each cell at any one time. However, more than one cell may be used for the same chemical type. Each cell will be labeled as to the chemical family stored there. If at any time the cell designation changes, such as from organic to reactive, the cell will first be cleaned to ensure that no hazardous waste constituent residues remain that would create an incompatibility problem during a spill.

#### F.2.1.2 Storage Pad at TA-54, Area L (TA-54-32)

Material stored on the storage pad at TA-54, Area L, will generally be placed there after labeling and sampling. This may not be the case for acids and bases where the storage cell is also used as the sampling pad. The pad is divided into six cells allowing the storage of six chemical family groups. However, more than one cell may be used for the same chemical type. All cells will be labeled as to which chemical type is stored there. If at any time it is necessary to change the designation of a cell, it will first be cleaned to remove any residues that might produce an unfavorable reaction with the new chemical type.

F.2.1.3 Modular Storage Unit at TA-50 (TA-50-114)

The modular storage units at TA-50 will be used primarily to store acid and base wastes. Each cell will be labeled acid or base to indicate the type of waste stored there. If at any time the designation of a cell needs to be changed, the cell will first be cleaned to ensure that incompatible residues have been removed.

F.2.1.5 Storage Room at TA-50-37, Room 117

The storage room at TA-50-37 is divided into two areas, one for solids and one for liquids. The liquid side is further divided into two cells. Therefore, up to three chemical types may be stored at any one time. Cells will be labeled as to the chemical type stored there. If at any time the cell designation needs to be changed, the cell will be cleaned to remove any incompatible residues.

F.2.1.6 Storage Pads at TA-54, Area L (TA-54-36 and –58)

The primary activities at TA-54-36 and TA-54-58 will fall into two categories. The first is sorting, surveying, and decontaminating certain waste currently in storage and labeled "suspect mixed waste." All of the waste found to contain no radioactive component will be repackaged, shipped off-site, and disposed of at a permitted Hazardous Waste Treatment, Storage and Disposal Facility.

The second is typically associated with hazardous and mixed waste streams for which commercial treatment and/or disposal is currently available. These waste streams will be staged, inspected, sampled, and analyzed to provide complete hazardous waste and radiological characterization. When these steps are completed, the waste streams will be profiled into the commercial facilities and shipped for ultimate treatment and/or disposal.

The activities at pads #58 and #36 consist of opening the drums, surveying the contents for radiological content, decontaminating the material as warranted, repackaging the material for either return to storage, shipment off-site for disposal, or disposal as low level waste at TA-54, Area G.

Pads #58 and #36 consist of two cement pads that are sloped toward a dry containment sump at the centerline of the rear wall to facilitate pumping of any captured liquids. The walls encircling the pads vary from approximately 4 inches in height at the drive over entrance to the pad to approximately eleven and one-half inches in height at the edge of the dry sump. The "dry sump" in each pad is to provide secondary containment only, has no discharge and must be pumped in the event any liquid is captured. The pads are coated with an impermeable epoxy coating and are covered by a single, metal "pole barn."

Pad #36 has a temporary modular containment structure constructed over it. This structure provides containment and protection for the sampling and repackaging activities. The sides of the structure have been equipped with slanted sheets of plywood to direct the snow and rain away from the secondary containment. The modular containment structure is secured to the beams supporting the "pole barn" wit guy wires. Whenever this temporary structure is removed from Pad #36, it will

be decontaminated according to the procedures of Permit Attachment E.3, E.3.3 and E.3.4: Closure Procedures and Decontamination and Decontamination Verification.

F.2.1.6 TA-54, Area G, Container Storage Areas (TA-54-226, -229, -230, -231, -232, and Pad 10)

The container storage areas (CSA) at TA-54, Area G (TA-54-226, -229, -230, -231, -232, and Pad 10) will be used for the storage of transuranic (TRU) mixed waste containers retrieved from under earthen cover at Pad 1 (TA-54-226) and Pads 2 and 4. The waste containers, including drums and fiberglass-reinforced plywood (FRP) boxes, will be segregated by LANL waste code prior to being placed in a storage dome. If any of the retrieved containers require overpacking or repackaging, the overpack or repackaging container will be labeled with barcodes that identify the original waste container. None of the wastes to be placed in the storage domes will be ignitable or reactive, no incompatible wastes will be mixed, and no wastes will be placed in containers that previously held incompatible wastes. TA-54-230 will be used to store drums and FRP crates that potentially contain liquids. The remaining CSAs will store only solid TRU mixed waste.

F.2.1.7 TA-50-69 Indoor and Outdoor Container Storage Areas

The indoor and outdoor storage areas associated with TA-50-69 are used for storage of TRU mixed waste, low-level mixed waste, and hazardous waste. Potentially incompatible wastes will be segregated on self-containment pallets at both the indoor and outdoor storage areas. Potential liquid-bearing waste containers will be stored on self-containment pallets at both the indoor and outdoor storage areas.

F.2.1.8 TA-54-38 Container Storage Areas

The four container storage areas at TA-54-38 are used for storage of TRU mixed waste and low-level mixed waste. Potentially incompatible wastes will be segregated on self-containment pallets at each storage area. Potential liquid-bearing waste containers will be stored on self-containment pallets at each storage area.

F.2.2 General Container Management Practices

All hazardous recyclable materials are stored as hazardous waste until such time as they are recycled. They are placed in the same segregated storage areas as the other waste.

Any bulging drums are handled in accordance with accepted practice and Laboratory procedures. Generally this means that personnel will follow such practices as slowly venting the drum as it is being opened and personnel wearing protective clothing and splash guards.

Any spills resulting from the transfer/storage of waste will be cleaned up in accordance with Attachment D.

Inspections will be conducted and aisle space will be maintained in accordance with Permit Attachment B.

Off-site shipments of waste will occur at either the given storage area directly or from the transport pad at TA-54, Area L. This will avoid unnecessary transport on Pajarito Road.

Repackaging of waste will generally occur adjacent to the storage area the waste was removed from. Other possible areas include the TA-54, Area L, sampling pad (TA-54-36), and transport pad (TA-54-58); and the

TA-50-69 indoor storage area. Repackaging can range from overpacking a leaking container to off-site contractors repackaging the lab pack waste to meet incinerator specifications.

Permit Module III provides additional requirements all container storage areas.

**ATTACHMENT G**
**Authorized Wastes**
**NM0890010515-1**

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 0 | 0 | 1 | 100,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 0 | 2 | 320,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 3 | 35,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 4 | 2,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 5 | 60,000 | P | S | 0 | 1 | S | 0 | 2 | T | 0 | 1 | |
| D | 0 | 0 | 6 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 7 | 1,500 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 8 | 100,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 9 | 15,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 1 | 0 | 7,500 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 1 | 1 | 7,500 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 1 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 3 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 4 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 5 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 7 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 8 | 15,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 9 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 0 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 1 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 2 | 3,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 3 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 4 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 5 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 7 | 500 | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 0 | 2 | 8 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 9 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 0 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 1 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 2 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 3 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 4 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 5 | 2,500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 6 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 7 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 8 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 4 | 0 | 2,500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 4 | 1 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 4 | 2 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 4 | 3 | 500 | P | S | 0 | 1 | | | | | | | |
| | | | | END OF D DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | 0 | 0 | 1 | 360,000 | P | S | 0 | 1 | S | 0 | 2 | | | | Solidified if treatment standards are met |
| F | 0 | 0 | 2 | 75,000 | P | S | 0 | 1 | S | 0 | 2 | | | | |
| F | 0 | 0 | 3 | 150,000 | P | S | 0 | 1 | S | 0 | 2 | | | | |
| F | 0 | 0 | 4 | 2,000 | P | S | 0 | 1 | | | | | | | |
| F | 0 | 0 | 5 | 100,000 | P | S | 0 | 1 | S | 0 | 2 | | | | |
| F | 0 | 0 | 6 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| F | 0 | 0 | 7 | 12,500 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| F | 0 | 0 | 8 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| F | 0 | 0 | 9 | 6,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| F | 0 | 2 | 7 | 700 | P | S | 0 | 1 | | | | | | | |
| F | 0 | 2 | 8 | 700 | P | S | 0 | 1 | | | | | | | |
| | | | | END OF F DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 0 | 4 | 4 | 20,000 | P | S | 0 | 1 | | | | | | | |
| K | 0 | 4 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| K | 0 | 4 | 5 | 2,000 | P | S | 0 | 1 | | | | | | | |
| | | | | END OF K DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | 0 | 0 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 3 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 1 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 1 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 2 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 9 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 3 | 0 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 3 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 4 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | 0 | 3 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 4 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 5 | 6 | 6,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 0 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | 0 | 7 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 3 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 7 | 4 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 7 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 6 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 7 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 8 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 8 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 8 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 9 | 9 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 0 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 4 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 0 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 6 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 0 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 9 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | 1 | 1 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 3 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 1 | 4 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 1 | 5 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 1 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 2 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 2 | 1 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 2 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 1 | 2 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| | | | | END OF P DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 0 | 0 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 2 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| U | 0 | 3 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 0 | 3 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 8 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 0 | 6 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 1 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 1 | 0 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 9 | 500 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 4 | 10,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 1 | 3 | 5 | 500* | P | S | 0 | 1 | | | | T | 0 | 1 | |
| U | 1 | 3 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 6 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 1 | 6 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 2 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 2 | 0 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 6 | 1,500 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 8 | 2,000 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 3 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 3 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 3 | 6 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 2 | 3 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 3 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 3 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 3 | 5 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 3 | 5 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| | | | | END OF U DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| **Technical Area 50, Building 69, Indoor and Outdoor Container Storage Area** | | | | | | | |
| 263 | D001 | 1,170 | K | S01 | | | Low-level Mixed Waste (LLMW) and Transuranic Mixed Waste (TRUMW) |
| 264 | D002 | 610 | K | S01 | | | LLMW and TRUMW |
| 265 | D003 | 60 | K | S01 | | | LLMW and TRUMW |
| 266 | D004 | 390 | K | S01 | | | LLMW and TRUMW |
| 267 | D005 | 360 | K | S01 | | | LLMW and TRUMW |
| 268 | D006 | 57,130 | K | S01 | | | LLMW and TRUMW |
| 269 | D007 | 59,610 | K | S01 | | | LLMW and TRUMW |
| 270 | D008 | 135,280 | K | S01 | | | LLMW and TRUMW |
| 271 | D009 | 4,120 | K | S01 | | | LLMW and TRUMW |
| 272 | D010 | 430 | K | S01 | | | LLMW and TRUMW |
| 273 | D011 | 480 | K | S01 | | | LLMW and TRUMW |
| 274 | D018 | 20 | K | S01 | | | LLMW and TRUMW |
| 275 | D019 | 450 | K | S01 | | | LLMW and TRUMW |
| 276 | D021 | 170 | K | S01 | | | LLMW and TRUMW |
| 277 | D022 | 100 | K | S01 | | | LLMW and TRUMW |
| 278 | D027 | 70 | K | S01 | | | LLMW and TRUMW |
| 279 | D028 | 18,250 | K | S01 | | | LLMW and TRUMW |
| 280 | D029 | 18,160 | K | S01 | | | LLMW and TRUMW |
| 281 | D030 | 410 | K | S01 | | | LLMW and TRUMW |
| 282 | D031 | 10 | K | S01 | | | LLMW and TRUMW |
| 283 | D032 | 260 | K | S01 | | | LLMW and TRUMW |
| 284 | D033 | 180 | K | S01 | | | LLMW and TRUMW |
| 285 | D034 | 90 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity Of Waste | C. Unit of Measure (enter code) | D. PROCESSES (1) PROCESS CODES (enter) | | | D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)) |
|---|---|---|---|---|---|---|---|
| 286 | D035 | 10 | K | S01 | | | LLMW and TRUMW |
| 287 | D036 | 30 | K | S01 | | | LLMW and TRUMW |
| 288 | D037 | 50 | K | S01 | | | LLMW and TRUMW |
| 289 | D038 | 10 | K | S01 | | | LLMW and TRUMW |
| 290 | D039 | 120 | K | S01 | | | LLMW and TRUMW |
| 291 | D040 | 280 | K | S01 | | | LLMW and TRUMW |
| 292 | D041 | 10 | K | S01 | | | LLMW and TRUMW |
| 293 | D042 | 90 | K | S01 | | | LLMW and TRUMW |
| 294 | D043 | 40 | K | S01 | | | LLMW and TRUMW |
| 295 | F001 | 35,050 | K | S01 | | | LLMW and TRUMW |
| 296 | F002 | 4,540 | K | S01 | | | LLMW and TRUMW |
| 297 | F003 | 2,300 | K | S01 | | | LLMW and TRUMW |
| 298 | F004 | 130 | K | S01 | | | LLMW and TRUMW |
| 299 | F005 | 20,430 | K | S01 | | | LLMW and TRUMW |
| 300 | P003 | 10 | K | S01 | | | LLMW and TRUMW |
| 301 | P012 | 10 | K | S01 | | | LLMW and TRUMW |
| 302 | P015 | 10 | K | S01 | | | LLMW and TRUMW |
| 303 | P029 | 10 | K | S01 | | | LLMW and TRUMW |
| 304 | P030 | 10 | K | S01 | | | LLMW and TRUMW |
| 305 | P031 | 10 | K | S01 | | | LLMW and TRUMW |
| 306 | P038 | 10 | K | S01 | | | LLMW and TRUMW |
| 307 | P056 | 20 | K | S01 | | | LLMW and TRUMW |
| 308 | P063 | 10 | K | S01 | | | LLMW and TRUMW |
| 309 | P068 | 10 | K | S01 | | | LLMW and TRUMW |
| 310 | P073 | 110 | K | S01 | | | LLMW and TRUMW |
| 311 | P076 | 10 | K | S01 | | | LLMW and TRUMW |
| 312 | P078 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity Of Waste | C. Unit of Measure (enter code) | D. PROCESSES (1) PROCESS CODES (enter) | | | D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)) |
|---|---|---|---|---|---|---|---|
| 313 | P095 | 10 | K | S01 | | | LLMW and TRUMW |
| 314 | P096 | 10 | K | S01 | | | LLMW and TRUMW |
| 315 | P098 | 10 | K | S01 | | | LLMW and TRUMW |
| 316 | P106 | 10 | K | S01 | | | LLMW and TRUMW |
| 317 | P113 | 10 | K | S01 | | | LLMW and TRUMW |
| 318 | P120 | 10 | K | S01 | | | LLMW and TRUMW |
| 319 | U001 | 10 | K | S01 | | | LLMW and TRUMW |
| 320 | U002 | 10 | K | S01 | | | LLMW and TRUMW |
| 321 | U003 | 10 | K | S01 | | | LLMW and TRUMW |
| 322 | U012 | 10 | K | S01 | | | LLMW and TRUMW |
| 323 | U019 | 10 | K | S01 | | | LLMW and TRUMW |
| 324 | U022 | 10 | K | S01 | | | LLMW and TRUMW |
| 325 | U029 | 10 | K | S01 | | | LLMW and TRUMW |
| 326 | U031 | 10 | K | S01 | | | LLMW and TRUMW |
| 327 | U037 | 10 | K | S01 | | | LLMW and TRUMW |
| 328 | U044 | 10 | K | S01 | | | LLMW and TRUMW |
| 329 | U045 | 10 | K | S01 | | | LLMW and TRUMW |
| 330 | U052 | 10 | K | S01 | | | LLMW and TRUMW |
| 331 | U056 | 10 | K | S01 | | | LLMW and TRUMW |
| 332 | U057 | 10 | K | S01 | | | LLMW and TRUMW |
| 333 | U075 | 10 | K | S01 | | | LLMW and TRUMW |
| 334 | U077 | 10 | K | S01 | | | LLMW and TRUMW |
| 335 | U080 | 10 | K | S01 | | | LLMW and TRUMW |
| 336 | U108 | 10 | K | S01 | | | LLMW and TRUMW |
| 337 | U112 | 10 | K | S01 | | | LLMW and TRUMW |
| 338 | U115 | 10 | K | S01 | | | LLMW and TRUMW |
| 339 | U117 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 340 | U121 | 10 | K | S01 | | | LLMW and TRUMW |
| 341 | U122 | 10 | K | S01 | | | LLMW and TRUMW |
| 342 | U123 | 10 | K | S01 | | | LLMW and TRUMW |
| 343 | U131 | 10 | K | S01 | | | LLMW and TRUMW |
| 344 | U133 | 10 | K | S01 | | | LLMW and TRUMW |
| 345 | U134 | 10 | K | S01 | | | LLMW and TRUMW |
| 346 | U135 | 10 | K | S01 | | | LLMW and TRUMW |
| 347 | U140 | 10 | K | S01 | | | LLMW and TRUMW |
| 348 | U144 | 10 | K | S01 | | | LLMW and TRUMW |
| 349 | U145 | 10 | K | S01 | | | LLMW and TRUMW |
| 350 | U151 | 10 | K | S01 | | | LLMW and TRUMW |
| 351 | U154 | 10 | K | S01 | | | LLMW and TRUMW |
| 352 | U159 | 10 | K | S01 | | | LLMW and TRUMW |
| 353 | U160 | 10 | K | S01 | | | LLMW and TRUMW |
| 354 | U161 | 10 | K | S01 | | | LLMW and TRUMW |
| 355 | U165 | 10 | K | S01 | | | LLMW and TRUMW |
| 356 | U169 | 10 | K | S01 | | | LLMW and TRUMW |
| 357 | U188 | 10 | K | S01 | | | LLMW and TRUMW |
| 358 | U190 | 10 | K | S01 | | | LLMW and TRUMW |
| 359 | U196 | 10 | K | S01 | | | LLMW and TRUMW |
| 360 | U204 | 10 | K | S01 | | | LLMW and TRUMW |
| 361 | U210 | 10 | K | S01 | | | LLMW and TRUMW |
| 362 | U211 | 10 | K | S01 | | | LLMW and TRUMW |
| 363 | U213 | 10 | K | S01 | | | LLMW and TRUMW |
| 364 | U216 | 10 | K | S01 | | | LLMW and TRUMW |
| 365 | U218 | 10 | K | S01 | | | LLMW and TRUMW |
| 366 | U219 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 367 | U220 | 10 | K | S01 | | | LLMW and TRUMW |
| 368 | U225 | 10 | K | S01 | | | LLMW and TRUMW |
| 369 | U226 | 10 | K | S01 | | | LLMW and TRUMW |
| 370 | U227 | 10 | K | S01 | | | LLMW and TRUMW |
| 371 | U228 | 10 | K | S01 | | | LLMW and TRUMW |
| 372 | U239 | 10 | K | S01 | | | LLMW and TRUMW |
| 373 | U246 | 10 | K | S01 | | | LLMW and TRUMW |
| 374 | D001 | 25,360 | K | S01 | | | Hazardous Waste (HW) |
| 375 | D002 | 20,550 | K | S01 | | | HW |
| 376 | D003 | 1,200 | K | S01 | | | HW |
| 377 | D004 | 1,700 | K | S01 | | | HW |
| 378 | D005 | 1,900 | K | S01 | | | HW |
| 379 | D006 | 5,250 | K | S01 | | | HW |
| 380 | D007 | 9,400 | K | S01 | | | HW |
| 381 | D008 | 39,200 | K | S01 | | | HW |
| 382 | D009 | 16,400 | K | S01 | | | HW |
| 383 | D010 | 2,150 | K | S01 | | | HW |
| 384 | D011 | 11,700 | K | S01 | | | HW |
| 385 | D016 | 10 | K | S01 | | | HW |
| 386 | D017 | 20 | K | S01 | | | HW |
| 387 | D018 | 2,270 | K | S01 | | | HW |
| 388 | D019 | 40 | K | S01 | | | HW |
| 389 | D021 | 110 | K | S01 | | | HW |
| 390 | D022 | 1,450 | K | S01 | | | HW |
| 391 | D026 | 180 | K | S01 | | | HW |
| 392 | D027 | 80 | K | S01 | | | HW |
| 393 | D028 | 18,400 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 394 | D029 | 18,300 | K | S01 | | | HW |
| 395 | D030 | 730 | K | S01 | | | HW |
| 396 | D031 | 10 | K | S01 | | | HW |
| 397 | D032 | 300 | K | S01 | | | HW |
| 398 | D033 | 210 | K | S01 | | | HW |
| 399 | D034 | 120 | K | S01 | | | HW |
| 400 | D035 | 670 | K | S01 | | | HW |
| 401 | D036 | 50 | K | S01 | | | HW |
| 402 | D037 | 50 | K | S01 | | | HW |
| 403 | D038 | 580 | K | S01 | | | HW |
| 404 | D039 | 200 | K | S01 | | | HW |
| 405 | D040 | 570 | K | S01 | | | HW |
| 406 | D041 | 10 | K | S01 | | | HW |
| 407 | D042 | 100 | K | S01 | | | HW |
| 408 | D043 | 60 | K | S01 | | | HW |
| 409 | F001 | 51,170 | K | S01 | | | HW |
| 410 | F002 | 46,030 | K | S01 | | | HW |
| 411 | F003 | 12,770 | K | S01 | | | HW |
| 412 | F004 | 660 | K | S01 | | | HW |
| 413 | F005 | 61,650 | K | S01 | | | HW |
| 414 | F009 | 20 | K | S01 | | | HW |
| 415 | F027 | 20 | K | S01 | | | HW |
| 416 | P003 | 10 | K | S01 | | | HW |
| 417 | P006 | 10 | K | S01 | | | HW |
| 418 | P011 | 10 | K | S01 | | | HW |
| 419 | P012 | 10 | K | S01 | | | HW |
| 420 | P015 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 421 | P029 | 10 | K | S01 | | | HW |
| 422 | P030 | 10 | K | S01 | | | HW |
| 423 | P031 | 10 | K | S01 | | | HW |
| 424 | P033 | 10 | K | S01 | | | HW |
| 425 | P038 | 10 | K | S01 | | | HW |
| 426 | P043 | 10 | K | S01 | | | HW |
| 427 | P048 | 10 | K | S01 | | | HW |
| 428 | P056 | 1,030 | K | S01 | | | HW |
| 429 | P063 | 10 | K | S01 | | | HW |
| 430 | P068 | 10 | K | S01 | | | HW |
| 431 | P073 | 10 | K | S01 | | | HW |
| 432 | P076 | 60 | K | S01 | | | HW |
| 433 | P078 | 70 | K | S01 | | | HW |
| 434 | P092 | 10 | K | S01 | | | HW |
| 435 | P095 | 10 | K | S01 | | | HW |
| 436 | P096 | 10 | K | S01 | | | HW |
| 437 | P098 | 10 | K | S01 | | | HW |
| 438 | P104 | 10 | K | S01 | | | HW |
| 439 | P105 | 10 | K | S01 | | | HW |
| 440 | P106 | 10 | K | S01 | | | HW |
| 441 | P112 | 10 | K | S01 | | | HW |
| 442 | P113 | 10 | K | S01 | | | HW |
| 443 | P119 | 10 | K | S01 | | | HW |
| 444 | P120 | 10 | K | S01 | | | HW |
| 445 | U001 | 10 | K | S01 | | | HW |
| 446 | U002 | 310 | K | S01 | | | HW |
| 447 | U003 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity Of Waste | C. Unit of Measure (enter code) | D. PROCESSES | | | |
|---|---|---|---|---|---|---|---|
| | | | | (1) PROCESS CODES (enter) | | | (2) PROCESS DESCRIPTION (If a code is not entered in D(1)) |
| 448 | U007 | 10 | K | S01 | | | HW |
| 449 | U008 | 10 | K | S01 | | | HW |
| 450 | U009 | 10 | K | S01 | | | HW |
| 451 | U012 | 10 | K | S01 | | | HW |
| 452 | U018 | 10 | K | S01 | | | HW |
| 453 | U019 | 90 | K | S01 | | | HW |
| 454 | U022 | 10 | K | S01 | | | HW |
| 455 | U029 | 10 | K | S01 | | | HW |
| 456 | U031 | 10 | K | S01 | | | HW |
| 457 | U033 | 10 | K | S01 | | | HW |
| 458 | U037 | 10 | K | S01 | | | HW |
| 459 | U041 | 10 | K | S01 | | | HW |
| 460 | U044 | 10 | K | S01 | | | HW |
| 461 | U045 | 10 | K | S01 | | | HW |
| 462 | U052 | 10 | K | S01 | | | HW |
| 463 | U055 | 10 | K | S01 | | | HW |
| 464 | U056 | 10 | K | S01 | | | HW |
| 465 | U057 | 10 | K | S01 | | | HW |
| 466 | U067 | 10 | K | S01 | | | HW |
| 467 | U068 | 10 | K | S01 | | | HW |
| 468 | U070 | 20 | K | S01 | | | HW |
| 469 | U075 | 50 | K | S01 | | | HW |
| 470 | U077 | 10 | K | S01 | | | HW |
| 471 | U080 | 1,690 | K | S01 | | | HW |
| 472 | U085 | 10 | K | S01 | | | HW |
| 473 | U091 | 180 | K | S01 | | | HW |
| 474 | U092 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 475 | U103 | 10 | K | S01 | | | HW |
| 476 | U108 | 10 | K | S01 | | | HW |
| 477 | U109 | 10 | K | S01 | | | HW |
| 478 | U112 | 10 | K | S01 | | | HW |
| 479 | U115 | 10 | K | S01 | | | HW |
| 480 | U117 | 10 | K | S01 | | | HW |
| 481 | U121 | 10 | K | S01 | | | HW |
| 482 | U122 | 230 | K | S01 | | | HW |
| 483 | U123 | 10 | K | S01 | | | HW |
| 484 | U124 | 10 | K | S01 | | | HW |
| 485 | U131 | 10 | K | S01 | | | HW |
| 486 | U133 | 10 | K | S01 | | | HW |
| 487 | U134 | 180 | K | S01 | | | HW |
| 488 | U135 | 80 | K | S01 | | | HW |
| 489 | U136 | 10 | K | S01 | | | HW |
| 490 | U140 | 10 | K | S01 | | | HW |
| 491 | U144 | 10 | K | S01 | | | HW |
| 492 | U145 | 10 | K | S01 | | | HW |
| 493 | U151 | 240 | K | S01 | | | HW |
| 494 | U153 | 10 | K | S01 | | | HW |
| 495 | U154 | 40 | K | S01 | | | HW |
| 496 | U159 | 20 | K | S01 | | | HW |
| 497 | U160 | 10 | K | S01 | | | HW |
| 498 | U161 | 90 | K | S01 | | | HW |
| 499 | U162 | 10 | K | S01 | | | HW |
| 500 | U163 | 10 | K | S01 | | | HW |
| 501 | U165 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 502 | U167 | 10 | K | S01 | | | HW |
| 503 | U168 | 10 | K | S01 | | | HW |
| 504 | U169 | 10 | K | S01 | | | HW |
| 505 | U170 | 10 | K | S01 | | | HW |
| 506 | U188 | 10 | K | S01 | | | HW |
| 507 | U190 | 10 | K | S01 | | | HW |
| 508 | U196 | 10 | K | S01 | | | HW |
| 509 | U204 | 10 | K | S01 | | | HW |
| 510 | U210 | 100 | K | S01 | | | HW |
| 511 | U211 | 40 | K | S01 | | | HW |
| 512 | U213 | 10 | K | S01 | | | HW |
| 513 | U216 | 10 | K | S01 | | | HW |
| 514 | U218 | 10 | K | S01 | | | HW |
| 515 | U219 | 10 | K | S01 | | | HW |
| 516 | U220 | 100 | K | S01 | | | HW |
| 517 | U223 | 10 | K | S01 | | | HW |
| 518 | U225 | 10 | K | S01 | | | HW |
| 519 | U226 | 2,540 | K | S01 | | | HW |
| 520 | U227 | 10 | K | S01 | | | HW |
| 521 | U228 | 420 | K | S01 | | | HW |
| 522 | U239 | 170 | K | S01 | | | HW |
| 523 | U240 | 10 | K | S01 | | | HW |
| 524 | U246 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| **Technical Area 54 West, Building 38, Container Storage Area** | | | | | | | |
| 525 | D001 | 4,210 | K | S01 | | | Low-level Mixed Waste (LLMW) and Transuranic Mixed Waste (TRUMW) |
| 526 | D002 | 2,180 | K | S01 | | | LLMW and TRUMW |
| 527 | D003 | 200 | K | S01 | | | LLMW and TRUMW |
| 528 | D004 | 1,400 | K | S01 | | | LLMW and TRUMW |
| 529 | D005 | 1,280 | K | S01 | | | LLMW and TRUMW |
| 530 | D006 | 205,660 | K | S01 | | | LLMW and TRUMW |
| 531 | D007 | 214,580 | K | S01 | | | LLMW and TRUMW |
| 532 | D008 | 487,000 | K | S01 | | | LLMW and TRUMW |
| 533 | D009 | 14,840 | K | S01 | | | LLMW and TRUMW |
| 534 | D010 | 1,540 | K | S01 | | | LLMW and TRUMW |
| 535 | D011 | 1,720 | K | S01 | | | LLMW and TRUMW |
| 536 | D018 | 80 | K | S01 | | | LLMW and TRUMW |
| 537 | D019 | 1,600 | K | S01 | | | LLMW and TRUMW |
| 538 | D021 | 610 | K | S01 | | | LLMW and TRUMW |
| 539 | D022 | 380 | K | S01 | | | LLMW and TRUMW |
| 540 | D027 | 230 | K | S01 | | | LLMW and TRUMW |
| 541 | D028 | 65,680 | K | S01 | | | LLMW and TRUMW |
| 542 | D029 | 65,350 | K | S01 | | | LLMW and TRUMW |
| 543 | D030 | 1,480 | K | S01 | | | LLMW and TRUMW |
| 544 | D031 | 20 | K | S01 | | | LLMW and TRUMW |
| 545 | D032 | 940 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 546 | D033 | 630 | K | S01 | | | LLMW and TRUMW |
| 547 | D034 | 330 | K | S01 | | | LLMW and TRUMW |
| 548 | D035 | 30 | K | S01 | | | LLMW and TRUMW |
| 549 | D036 | 100 | K | S01 | | | LLMW and TRUMW |
| 550 | D037 | 160 | K | S01 | | | LLMW and TRUMW |
| 551 | D038 | 20 | K | S01 | | | LLMW and TRUMW |
| 552 | D039 | 440 | K | S01 | | | LLMW and TRUMW |
| 553 | D040 | 990 | K | S01 | | | LLMW and TRUMW |
| 554 | D041 | 20 | K | S01 | | | LLMW and TRUMW |
| 555 | D042 | 320 | K | S01 | | | LLMW and TRUMW |
| 556 | D043 | 120 | K | S01 | | | LLMW and TRUMW |
| 557 | F001 | 126,190 | K | S01 | | | LLMW and TRUMW |
| 558 | F002 | 16,330 | K | S01 | | | LLMW and TRUMW |
| 559 | F003 | 8,270 | K | S01 | | | LLMW and TRUMW |
| 560 | F004 | 490 | K | S01 | | | LLMW and TRUMW |
| 561 | F005 | 73,530 | K | S01 | | | LLMW and TRUMW |
| 562 | P003 | 10 | K | S01 | | | LLMW and TRUMW |
| 563 | P012 | 10 | K | S01 | | | LLMW and TRUMW |
| 564 | P015 | 10 | K | S01 | | | LLMW and TRUMW |
| 565 | P029 | 10 | K | S01 | | | LLMW and TRUMW |
| 566 | P030 | 10 | K | S01 | | | LLMW and TRUMW |
| 567 | P031 | 10 | K | S01 | | | LLMW and TRUMW |
| 568 | P038 | 10 | K | S01 | | | LLMW and TRUMW |
| 569 | P056 | 80 | K | S01 | | | LLMW and TRUMW |
| 570 | P063 | 10 | K | S01 | | | LLMW and TRUMW |
| 571 | P068 | 10 | K | S01 | | | LLMW and TRUMW |
| 572 | P073 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 573 | P076 | 10 | K | S01 | | | LLMW and TRUMW |
| 574 | P078 | 10 | K | S01 | | | LLMW and TRUMW |
| 575 | P095 | 10 | K | S01 | | | LLMW and TRUMW |
| 576 | P096 | 10 | K | S01 | | | LLMW and TRUMW |
| 577 | P098 | 10 | K | S01 | | | LLMW and TRUMW |
| 578 | P106 | 10 | K | S01 | | | LLMW and TRUMW |
| 579 | P113 | 10 | K | S01 | | | LLMW and TRUMW |
| 580 | P120 | 10 | K | S01 | | | LLMW and TRUMW |
| 581 | U001 | 10 | K | S01 | | | LLMW and TRUMW |
| 582 | U002 | 10 | K | S01 | | | LLMW and TRUMW |
| 583 | U003 | 10 | K | S01 | | | LLMW and TRUMW |
| 584 | U012 | 10 | K | S01 | | | LLMW and TRUMW |
| 585 | U019 | 10 | K | S01 | | | LLMW and TRUMW |
| 586 | U022 | 10 | K | S01 | | | LLMW and TRUMW |
| 587 | U029 | 10 | K | S01 | | | LLMW and TRUMW |
| 588 | U031 | 10 | K | S01 | | | LLMW and TRUMW |
| 589 | U037 | 10 | K | S01 | | | LLMW and TRUMW |
| 590 | U044 | 10 | K | S01 | | | LLMW and TRUMW |
| 591 | U045 | 10 | K | S01 | | | LLMW and TRUMW |
| 592 | U052 | 10 | K | S01 | | | LLMW and TRUMW |
| 593 | U056 | 10 | K | S01 | | | LLMW and TRUMW |
| 594 | U057 | 10 | K | S01 | | | LLMW and TRUMW |
| 595 | U075 | 10 | K | S01 | | | LLMW and TRUMW |
| 596 | U077 | 10 | K | S01 | | | LLMW and TRUMW |
| 597 | U080 | 30 | K | S01 | | | LLMW and TRUMW |
| 598 | U108 | 10 | K | S01 | | | LLMW and TRUMW |
| 599 | U112 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 600 | U115 | 10 | K | S01 | | | LLMW and TRUMW |
| 601 | U117 | 10 | K | S01 | | | LLMW and TRUMW |
| 602 | U121 | 10 | K | S01 | | | LLMW and TRUMW |
| 603 | U122 | 10 | K | S01 | | | LLMW and TRUMW |
| 604 | U123 | 10 | K | S01 | | | LLMW and TRUMW |
| 605 | U131 | 10 | K | S01 | | | LLMW and TRUMW |
| 606 | U133 | 10 | K | S01 | | | LLMW and TRUMW |
| 607 | U134 | 10 | K | S01 | | | LLMW and TRUMW |
| 608 | U135 | 10 | K | S01 | | | LLMW and TRUMW |
| 609 | U140 | 10 | K | S01 | | | LLMW and TRUMW |
| 610 | U144 | 10 | K | S01 | | | LLMW and TRUMW |
| 611 | U145 | 10 | K | S01 | | | LLMW and TRUMW |
| 612 | U151 | 60 | K | S01 | | | LLMW and TRUMW |
| 613 | U154 | 20 | K | S01 | | | LLMW and TRUMW |
| 614 | U159 | 30 | K | S01 | | | LLMW and TRUMW |
| 615 | U160 | 10 | K | S01 | | | LLMW and TRUMW |
| 616 | U161 | 10 | K | S01 | | | LLMW and TRUMW |
| 617 | U165 | 10 | K | S01 | | | LLMW and TRUMW |
| 618 | U169 | 10 | K | S01 | | | LLMW and TRUMW |
| 619 | U188 | 10 | K | S01 | | | LLMW and TRUMW |
| 620 | U190 | 10 | K | S01 | | | LLMW and TRUMW |
| 621 | U196 | 10 | K | S01 | | | LLMW and TRUMW |
| 622 | U204 | 10 | K | S01 | | | LLMW and TRUMW |
| 623 | U210 | 10 | K | S01 | | | LLMW and TRUMW |
| 624 | U211 | 10 | K | S01 | | | LLMW and TRUMW |
| 625 | U213 | 10 | K | S01 | | | LLMW and TRUMW |
| 626 | U216 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 627 | U218 | 10 | K | S01 | | | LLMW and TRUMW |
| 628 | U219 | 10 | K | S01 | | | LLMW and TRUMW |
| 629 | U220 | 10 | K | S01 | | | LLMW and TRUMW |
| 630 | U225 | 10 | K | S01 | | | LLMW and TRUMW |
| 631 | U226 | 260 | K | S01 | | | LLMW and TRUMW |
| 632 | U227 | 10 | K | S01 | | | LLMW and TRUMW |
| 633 | U228 | 20 | K | S01 | | | LLMW and TRUMW |
| 634 | U239 | 20 | K | S01 | | | LLMW and TRUMW |
| 635 | U246 | 10 | K | S01 | | | LLMW and TRUMW |

EPA I.D. Number (enter from Page 1) NM0890010515

Secondary ID Number (enter from Page 1)

XIV. Description of Hazardous Wastes (Continued)

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | D. Processes | | | |
|---|---|---|---|---|---|---|---|
| | | | | (1) Process Codes (enter) | | | (2) Process Description (If a code is not entered in D[1]) |
| **Technical Area (TA) 54-226, -229, -230, -231, -232, and Pad 10** | | | | | | | |
| 1 | F001 | 1,301 | P | S01 | | | Transuranic Mixed Waste (TRUMW); A15 |
| 2 | F002 | | | | | | |
| 3 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 4 | D007 | 406,940 | P | S01 | | | TRUMW; A25 |
| 5 | D008 | | | | | | |
| 6 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 7 | D006 | 311,765 | P | S01 | | | TRUMW; A26 |
| 8 | D007 | | | | | | |
| 9 | D008 | | | | | | |
| 10 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 11 | D001 | 101,995 | P | S01 | | | TRUMW; A27 |
| 12 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 13 | D003 | 71,062 | P | S01 | | | TRUMW; A28 |
| 14 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 15 | D008 | 96,700 | P | S01 | | | TRUMW; A30 |
| 16 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 17 | D008 | 190,691 | P | S01 | | | TRUMW; A31 |
| 18 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 19 | D008 | 434,743 | P | S01 | | | TRUMW; A61 |
| 20 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 21 | D004 | 2,413,802 | P | S01 | | | TRUMW; A75 |
| 22 | D007 | | | | | | |
| 23 | D008 | | | | | | |
| 24 | D011 | | | | | | |
| 25 | F001 | | | | | | |
| 26 | F002 | | | | | | |

EPA I.D. Number (enter from Page 1) NM0890010515

Secondary ID Number (enter from Page 1)

XIV. Description of Hazardous Wastes (Continued)

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | D. Processes | | | |
|---|---|---|---|---|---|---|---|
| | | | | (1) Process Codes (enter) | | | (2) Process Description (If a code is not entered in D[1]) |
| 27 | F003 | | | | | | |
| 28 | F005 | | | | | | |
| 29 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 30 | D007 | 313,787 | P | S01 | | | TRUMW; A76 |
| 31 | F001 | | | | | | |
| 32 | F002 | | | | | | |
| 33 | F005 | | | | | | |

NOTE: Use these buttons to print or save the form. DO NOT use the browser tool bar.

SAVE PRINT

LA-UR-04-6714

*Approved for public release; distribution is unlimited.*

*Title:* September 2004 Class 1 Permit Modifications, Los Alamos National Laboratory Hazardous Waste Facility Permit

*Author(s):* Luciana Vigil-Holterman, RRES-SWRC

*Submitted to:* New Mexico Environment Department-Hazardous Waste Bureau

SAVE PRINT CLEAR FORM

Los Alamos NATIONAL LABORATORY

Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the University of California for the U.S. Department of Energy under contract W-7405-ENG-36. By acceptance of this article, the publisher recognizes that the U.S. Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

Form 836 (8/00)

## *Introduction*

The modifications included in this submittal have been combined into groupings of like changes. Below is a summary describing each of the groups and a brief explanation why they were grouped. Detail about the Class 1 permit modifications made can be found in the table entitled "Class 1 Changes to LANL Hazardous Waste Facility Permit."

| **Class 1 Permit Modification Group Explanations**<br>*September 2004* | | | |
|---|---|---|---|
| **Class** | **Brief Description** | **Group** | **Category Grouping Justification** |
| Class 1/ Item A.1 | Administrative and informational changes. | 1 | Authorization change |
| Class 1/ Item B.1.a | Changes to waste sampling or analysis methods (to conform with agency guidance or regulations). | 2 | Method reference updates |
| Class 1/ Item A.1 | Administrative and informational changes. | 3 | Addition of waste definition |
| Class 1/ Item A.1 | Administrative and informational changes. | 4 | Permit language simplifications |
| Class 1/ Item A.1 | Administrative and informational changes. | 5 | Incorporation of hazardous waste streams to description as they are allowed within the fence line of Area L |
| Class 1/ Item A.1 | Administrative and informational changes. | 6 | Administrative consolidation |
| Class 1/ Item A.1 | Administrative and informational changes. | 7 | Incorporation of Appendix D-1 |
| Class 1/ Item A.1 | Administrative and informational changes. | 8 | Figure updates |
| Class 1/ Item A.1 | Administrative and informational changes. | 9 | Editorial changes |
| Class 1/ Item A.1 | Administrative and informational changes. | 10 | Module II editorial change |
| Class 1/ Item A.1 | Administrative and informational changes. | 11 | Responsible organization editorial change |
| Class 1/ Item A.1 | Administrative and informational changes. | 12 | Editorial changes to remove extraneous information |
| Class 1/ Item A.1 | Administrative and informational changes. | 13 | Minor inspection table change |
| Class 1/ Item A.1 | Administrative and informational changes. | 14 | Procedure information change |
| Class 1/ Item A.2 | Correction of typographical errors. | 15 | Typographical error |
| Class 1/ Item A.2 | Correction of typographical errors. | 16 | Removal of incorrect information |
| Class 1/ Item A.3 | Equipment replacement or upgrading with functionally equivalent components. | 17 | Addition of functionally equivalent equipment option |
| Class 1/ Item B.5.a | Changes in the training plan (other changes). | 18 | Training plan informational change |

| Class 1 Changes to LANL Hazardous Waste Facility Permit<br>*September 2004* | | | | | | |
|---|---|---|---|---|---|---|
| **Part** | **Section** | **Modification** | **Class** | **Brief Description** | **Other Justification** | **GRP** |
| Module I | I.A | Removed " which addresses the portion of the RCRA program for which the State is not authorized" | Class 1/ Item A.1 | Administrative and informational changes. | NMED received authorization for HSWA. | 1 |
| Module I | I.D.9.a | Changed "1986" to "3rd Edition" | Class 1/ Item B.1.a | Changes to waste sampling or analysis methods (to conform with agency guidance or regulations). | Update of version. | 2 |
| Module I | I.D.9.a | Deleted "1986 as revised" | Class 1/ Item B.1.a | Changes to waste sampling or analysis methods (to conform with agency guidance or regulations). | Update of version. | 2 |
| Module I | I.D.9.a | Changed "Fifteenth" to "Twentieth" and deleted "1980 and 1981 Supplement," | Class 1/ Item B.1.a | Changes to waste sampling or analysis methods (to conform with agency guidance or regulations). | Update of version. | 2 |
| Module I | I.H.3.a | Inserted "and “Mixed Wastes” " and "For the purposes of this permit, mixed waste contains both a hazardous waste component and a source, special nuclear, or byproduct material regulated under the Atomic Energy Act." | Class 1/ Item A.1 | Administrative and informational changes. | Informational change to reflect all wastes covered by permit. | 3 |
| Module II | II.C.2 | Deleted "1986, as revised," | Class 1/ Item B.1.a | Changes to waste sampling or analysis methods (to conform with agency guidance or regulations). | Update of version. | 2 |
| Module II | II.C.3 | Changed "each place where waste storage for more than ninety days occurs, a copy of " to "at the facility, in accordance with" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change to simplify permit and to clearly state intention of requirement. | 4 |
| Module II | II.H.1 | Added "or the functional equivalent" | Class 1/ Item A.3 | Equipment replacement or upgrading with functionally equivalent components. | Editorial change to ensure there is backup equipment available in the event of necessary maintenance or repair on required equipment. | 17 |
| Module II | II.K.2.c | Changed "87503" to "87502-6110" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change to update address. | 10 |

| Class 1 Changes to LANL Hazardous Waste Facility Permit<br>*September 2004* | | | | | | |
|---|---|---|---|---|---|---|
| **Part** | **Section** | **Modification** | **Class** | **Brief Description** | **Other Justification** | **GRP** |
| Module III | III.C.5.b | Deleted "A copy of the current bulletin shall be available at any location where the polyethylene container(s) is (are) filled or stored with contained wastes for more than thirty days." and replaced with "A copy of the current bulletin shall be available at the facility." | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change to simplify permit and to clearly state intention of requirement. | 4 |
| Figures | Figure 1 | Replaced old figure with most recent figure edited from the current General Part B Application | Class 1/ Item A.1 | Administrative and informational changes. | Administrative update to reflect new facility boundary. | 8 |
| Figures | Figure 2 | Replaced old figure with the most recent figure edited from the current General Part B Application | Class 1/ Item A.1 | Administrative and informational changes. | Administrative update to reflect new facility boundary. | 8 |
| Figures | Figure 4 | Figure 4 now shows the location of the container storage areas at TA-50 | Class 1/ Item A.1 | Administrative and informational changes. | Administrative update to ensure that all units are included in the permit and illustrated accurately. | 8 |
| Figures | Figure 6 | Replaced figure with most recent figure edited from the 2003 General Part A Application illustrating container storage at TA-54-Area L and the Storage/Treatment Tanks | Class 1/ Item A.1 | Administrative and informational changes. | Administrative update to ensure that all units are included in the permit and illustrated accurately. | 8 |
| Figures | Figure 11 | Replaced figure with most recent figure edited from the 2003 General Part A Application illustrating container storage locations at TA-50-69 | Class 1/ Item A.1 | Administrative and informational changes. | Administrative update to ensure that all units are included in the permit and illustrated accurately. | 8 |
| Figures | Figure 12 | Replaced figure with most recent figure edited from the 2003 General Part A Application illustrating container storage locations at TA-50-38, West | Class 1/ Item A.1 | Administrative and informational changes. | Administrative update to ensure that all units are included in the permit and illustrated accurately. | 8 |
| Figures | Figure 13 | Replaced figure with most recent figure edited from the 2003 General Part A Application illustrating permitted container storage locations at TA-54-Area G | Class 1/ Item A.1 | Administrative and informational changes. | Administrative update to ensure that all units are included in the permit and illustrated accurately. | 8 |
| Attachment B | B.1.2 | Added "or placed " | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change for clarity. | 9 |

| Class 1 Changes to LANL Hazardous Waste Facility Permit<br>*September 2004* | | | | | | |
|---|---|---|---|---|---|---|
| **Part** | **Section** | **Modification** | **Class** | **Brief Description** | **Other Justification** | **GRP** |
| Attachment B | B.1.2 | Changed "will be considered hazardous waste and handled accordingly" to "that is hazardous waste will be handled accordingly" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change for waste reduction so that not all expended cleaning material is disposed of as hazardous waste and to clarify the authority of this permit. Change simplifies permit and clearly states the intention of the requirement. | 4 |
| Attachment B | B.1.2 | Changed group name | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment B | B.2.3 | Deleted "and title" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change for clarity. | 9 |
| Attachment B | B.2.3 | Changed group name | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment B | B.3.3 | Changed group name | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment B | B.3.3 | Second sentence of the third paragraph changed to state, "If there has been a release to the environment, soil and water samples will be taken down gradient from the release." | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change to clarify that environmental media samples will be taken only when there is reason to believe that hazardous waste has been released to the environment. Change simplifies permit and clearly states the intention of the requirement. | 4 |
| Attachment B | B.3.4 | Deleted "and title" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change for clarity. | 9 |
| Attachment B | B.3.4 | Changed group name | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment B | B.5.1 | Added ", or the functional equivalent, " | Class 1/ Item A.3 | Equipment replacement or upgrading with functionally equivalent components. | Editorial change to ensure there is backup equipment available in the event of necessary maintenance or repair on required equipment. | 17 |
| Attachment B | B.5.1 | Added "Communication/alarm equipment available at TA-50 and TA-54 can be found in Appendix D-1." To the end of the first paragraph. | Class 1/ Item A.1 | Administrative and informational changes. | Administrative change to utilize the approved incorporation of Appendix D-1 (approved January 3, 1997) and to prevent redundancy. | 7 |
| Attachment B | B.5.1 | Deleted remainder (four paragraphs ) of section. | Class 1/ Item A.1 | Administrative and informational changes. | Administrative change to utilize the approved incorporation of Appendix D-1 (approved January 3, 1997) and to prevent redundancy. | 7 |

| Class 1 Changes to LANL Hazardous Waste Facility Permit<br>*September 2004* | | | | | | |
|---|---|---|---|---|---|---|
| **Part** | **Section** | **Modification** | **Class** | **Brief Description** | **Other Justification** | **GRP** |
| Attachment B | B.5.2 | Added ", or the functional equivalent," | Class 1/ Item A.3 | Equipment replacement or upgrading with functionally equivalent components. | Editorial change to ensure there is backup equipment available in the event of necessary maintenance or repair on required equipment. | 17 |
| Attachment B | B.6 | Deleted "Much of the bermed or curbed areas are ramped to facilitate access of forklifts and drum handling equipment." | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to remove extraneous information. | 12 |
| Attachment B | B.7.3 | Changed group name | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment B | B.8.3 | Changed group name | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment B | B.8.4 | Changed "the original records" to "Records" | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to remove extraneous information. | 12 |
| Attachment B | B.8.4 | Changed group name twice | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment B | B.9.3 | Changed group name | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment B | B.9.4 | Changed "the original records" to "Records" | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to remove extraneous information. | 12 |
| Attachment B | B.9.4 | Changed group name twice | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment B | Table B-1 | Consolidated TA-54, Area L Structures into one listing and listed TA-50-114 separately from other modular units. | Class 1/ Item A.1 | Administrative and informational changes. | Administrative change to consolidate reference to units at TA-54, Area L. | 6 |
| Attachment B | Table B-1 | Changed all daily inspections to state "Daily when conducting waste handling operations" | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to make the inspection requirement consistent with 20.4.1.500 NMAC (incorporating 40 CFR 264.15(b)(4)) regarding the frequency of inspections of areas subject to spills. | 13 |
| Attachment B | Inspection Record Form | Changed group name three times within "Instructions for Use of the Hazardous and Mixed Waste Facility Inspection Record Form" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment C | C.1 | Changed fifteen group and division names | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |

| Class 1 Changes to LANL Hazardous Waste Facility Permit<br>*September 2004* | | | | | | |
|---|---|---|---|---|---|---|
| **Part** | **Section** | **Modification** | **Class** | **Brief Description** | **Other Justification** | **GRP** |
| Attachment C | C.1 | Deleted "ESH-19 is responsible for providing waste management regulatory guidance to CST personnel and the waste generators at LANL. | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to remove extraneous information. | 12 |
| Attachment C | C.1 | Changed "Johnson Controls World Services Inc. (JCI)" to "Laboratory-contracted support services (e.g., KBR-Shaw-LATA [KSL])" and deleted "s" in "provides" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment C | C.1 | Deleted abbreviations for seven groups | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment C | C.1 | Changed "specialities" to "specialties" | Class 1/ Item A.2 | Correction of typographical errors. | Editorial change of a typographical error. | 15 |
| Attachment C | C.2 | Changed "LANL, JCI, and PTLA employees" to "LANL and LANL contract employees" | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to simplify permit and clarify the role of contract employees. | 9 |
| Attachment C | C.2 | Four group names changed | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment C | C.2.1 | Changed two group names | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment C | C.2.4 | Changed group name | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment C | C.3 | Change two group names | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |
| Attachment C | C.4 | Deleted "on the first day of employment" | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to remove extraneous information. | 12 |
| Attachment C | Table C-1 | Deleted "OSHA Rights and Responsibilities" requirements | Class 1/ Item B.5.a | Changes in the training plan (other changes). | Update because course has become a module of "General Employee Training." | 18 |
| Attachment C | Table C-1 | Change requirements for "Refresher General Employee Radiological Training" so that this class is only "required for specific job tasks and/or work areas" | Class 1/ Item B.5.a | Changes in the training plan (other changes). | Administrative change to reflect the actual use of this course. This was possibly a typographical error within the last version. | 18 |
| Attachment F | F.1.1 | Six group names changed | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change. | 11 |

| Class 1 Changes to LANL Hazardous Waste Facility Permit<br>*September 2004* | | | | | | |
|---|---|---|---|---|---|---|
| **Part** | **Section** | **Modification** | **Class** | **Brief Description** | **Other Justification** | **GRP** |
| Attachment F | F.1.1 | Added "and the Laboratory's On-Site Transportation Manual" to the first sentence of second paragraph | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change for clarity. | 9 |
| Attachment F | F.1.2 | Deleted "(if this information is not already on the container, the date from the CWDR Chemical Waste Disposal Request form is used)" | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to remove extraneous information. | 12 |
| Attachment F | F.1.2 | Inserted "— EPA hazardous waste code(s) or the hazardous constituent(s)" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change for clarity. Waste numbers are necessary on containers. | 9 |
| Attachment F | F.2.1 | Deleted "two " | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to remove extraneous information. | 12 |
| Attachment F | F.2.1 | Deleted " (two total)" | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to remove extraneous information. | 12 |
| Attachment F | F.2.1 | Deleted "(four total)" | Class 1/ Item A.1 | Administrative and informational changes. | Minor change to remove extraneous information. | 12 |
| Attachment F | F.2.1.1 | Added "two or " to the third sentence | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change to state that modular units may have two or three cells, rather than only three as stated previously. This clarifies the sentence. | 9 |
| Attachment F | F.2.1.1 | Added "and -70" to the title of section | Class 1/ Item A.2 | Correction of typographical errors. | Editorial change to incorporate approved unit originally overlooked in this section. | 15 |
| Attachment F | F.2.1.1 | Changed "maximum of six chemical family groups to be stored at any one time" to "single chemical family group to be stored in each cell at any one time" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change to make the description of operations more clear. | 9 |
| Attachment F | F.2.1.1 | Changed "However, multiple cells may be used for the same chemical family, such as two cells contain organic waste" to "However, more than one cell may be used for the same chemical type" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change to simplify sentence. | 4 |
| Attachment F | F.2.1.1 | Changed "organic residues " to "hazardous waste constituent residues" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change to more clearly define waste. | 9 |
| Attachment F | F.2.1.2 | Replaced "families of chemicals" with "chemical family groups" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change for clarity. | 9 |

| Class 1 Changes to LANL Hazardous Waste Facility Permit<br>*September 2004* | | | | | | |
|---|---|---|---|---|---|---|
| **Part** | **Section** | **Modification** | **Class** | **Brief Description** | **Other Justification** | **GRP** |
| Attachment F | F.2.1.3 | Deleted "All waste stored here will have been labeled and sampled at TA-54, Area L." | Class 1/ Item A.1 | Administrative and informational changes. | Two of the modular storage units that are referenced are no longer part of the permit, and the final modular storage unit (TA-50-114) is no longer storing waste and is undergoing closure procedures. Therefore, this requirement is no longer applicable. | 14 |
| Attachment F | F.2.1.6 | Changed "directed at specific mixed waste streams " to "typically associated with hazardous and mixed waste streams " | Class 1/ Item A.1 | Administrative and informational changes. | Administrative change because paragraph suggests that only mixed wastes are staged, inspected, sampled and analyzed at TA-54-36 and TA-54-58. | 5 |
| Attachment F | F.2.1.6 | Deleted "mixed" twice in section. | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change because text currently suggests only mixed waste is stored at TA-54-36 and -58. This clarifies the paragraph. | 5 |
| Attachment F | F.2.2 | Changed "recyclable materials" to "hazardous recyclable materials" | Class 1/ Item A.1 | Administrative and informational changes. | Editorial change to clarify that not all recyclable materials are stored as hazardous waste. | 9 |
| Attachment F | F.2.2 | Changed "Inspection" to Inspections" | Class 1/ Item A.2 | Correction of typographical errors. | Editorial change of a typographical error. | 15 |
| Attachment F | F.2.2 | Changed "TA-54-31" to "TA-54-36" and deleted ", and TA-54-59" | Class 1/ Item A.2 | Correction of typographical errors. | Editorial change to correct the incorrect designation for the sampling pad and delete a unit designation that does not exist. | 15 |
| Attachment G | Area L | Removed information from "Process Description" field | Class 1/ Item A.1 | Administrative and informational changes. | Minor change because information provided in the column was not inclusive of all wastes that may carry the specific EPA Hazardous Waste Numbers. This made the information irrelevant. | 12 |
| Attachment G | Area L | Removed 9 EPA Hazardous Waste Numbers | Class 1/ Item A.2 | Correction of typographical errors. | Editorial change because waste numbers do not exist. | 16 |
| Attachment G | Area L | Removed 2 EPA Hazardous Waste Numbers | Class 1/ Item A.2 | Correction of typographical errors. | Editorial change because waste numbers were redundant. | 16 |

# MODULE I STANDARD CONDITIONS

## I.A. EFFECT OF PERMIT

The Permittee is allowed to treat and store on site hazardous waste in accordance with the conditions of this permit. Any treatment or storage of hazardous waste not authorized in this permit or conducted under interim status, as defined by the Resource Conservation and Recovery Act (RCRA), is prohibited. Compliance with this permit constitutes compliance, for purposes of enforcement, with the New Mexico Hazardous Waste Act (Section 74-4-1 et seq. NMSA 1978) and the New Mexico Hazardous Waste Management Regulations (HWMR-5, as amended 1989), Parts V, VII and IX only for those management practices specifically authorized by this permit. The Permittee is also required to comply with HWMR-5, Parts I, II, III and IV to the extent the requirements of those Parts are applicable. The Permittee must also comply with all applicable self-implementing provisions imposed by the Resource Conservation and Recovery Act statute and/or the HWMR-5, Part VIII. A complete RCRA permit consists of this permit and a US EPA permit issued under the provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA)~~ which addresses the portion of the RCRA program for which the State is not authorized~~. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Sections 3008(a), 3008(h), 3013 or 7003 of RCRA; Sections 106(a), 104 or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 USC 9601 et seq., commonly known as CERCLA); Sections 74-4-1 et seq. NMSA 1978, or any other law governing protection of public health or the environment.

## I.B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in HWMR-5, as amended 1989, Part IX, Subpart B, included herein by reference. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the permittee, does not stay the applicability or enforceability of any permit condition. Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology as well as changes in applicable regulations and laws.

## I.C. SEVERABILITY

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

## I.D. DUTIES AND REQUIREMENTS

1. Duty to Comply The Permittee shall comply, in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(a), with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit issued in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.61. Any permit noncompliance by any Permittee employee or contractor, other than noncompliance authorized by an emergency

permit, constitutes a violation of the New Mexico Hazardous Waste Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

2. Duty to Reapply In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(b), if the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee shall submit an administratively complete application for a new permit at least 180 calendar days before this permit expires. [HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.10(h)]

3. Permit Expiration Pursuant to HWMR-5 Part IX, 40 CFR 270.50, this permit shall be effective for the fixed term of ten years. As long as the state is the permit-issuing authority, this permit and all conditions herein will remain in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application (see HWMR-5, Part IX, 40 CFR 270.10, 270.13 through 270.29) and, through no fault of the Permittee, the Secretary has not issued a new permit, as set forth in HWMR-5, Part IX, 40 CFR 270.51.

4. Need to Halt or Reduce Activity Not a Defense In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(c), it shall not be a defense for the Permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(d), the Permittee shall take all reasonable steps to minimize or correct any adverse impact on human health or the environment resulting from non-compliance with this permit.

6. Proper Operation and Maintenance In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(e), the Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance include effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of this permit.

7. Duty to Provide Information In accordance with HWMR-5, as amended l 989, Part IX, 40 CFR Section 270.30(h), the Permittee shall furnish to the Secretary, within a reasonable time, any relevant information which he may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Secretary, upon request, copies of records required to be kept by this permit. [HWMR-5, as amended 1989, Part V, 40 CFR Section 264.74(a)]

a. Los Alamos National Laboratory must submit on a semi-annual basis, by January 31, and July 31, of each calendar year, a list of any changes in the following information:

1. Changes to State, County, Department of Energy (DOE), and LANL telephone numbers.

2. Changes in addresses for State, County, DOE, and LANL entities.

3. Changes in administrative nomenclature for position titles, organizations, and physical structures.

4. Changes in names of responsible parties (personnel).

5. Changes in the names of contractors.

6. Typographical errors in this permit.

7. Any modifications not covered by numbers 1 through 6 above must be submitted in writing for a class determination by NMED prior to incorporation in the permit.

8. Inspection and Entry In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(i), the Permittee shall allow the Secretary or any authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any unclassified records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the New Mexico Hazardous Waste Act, any substances or parameters at any location; and

e. The Secretary recognizes that the Permittee operates in some cases under security restrictions imposed by the Atomic Energy Act (42 USC 2011 et seq.) and the regulations promulgated thereunder, and by other federal laws and regulations. Should conflict arise under this permit section, the Secretary and the Permittee shall cooperate in working with the appropriate Federal agency to obtain access approval. Nothing in this permit section shall be construed to deny access authorized by the Resource Conservation and Recovery Act.

9. Monitoring

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be an accepted and appropriate method such as described in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, ~~1986~~3rd Edition, as revised, or an equivalent method. Laboratory analytical methods must be those specified in SW-846~~, 1986 as revised~~; Standard Methods for the Examination of Water and Wastewater, ~~Fifteenth~~ Twentieth edition, ~~1980 and 1981 Supplement,~~ or current edition; or an equivalent method, as specified in the Waste Analysis Plan, Permit Attachment A.

b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, the certification required by HWMR-5, as amended 1989, Part V, 40 CFR 264.73(b)(9), and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, record, certification, or application. These periods may be extended by request of the Secretary at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. The Permittee shall maintain records from all ground-water monitoring wells and associated ground-water surface elevations for the active life of the facility. [HWMR-5, as amended 1989, Part V, 40 CFR 264.74(b) and 270.30(j)(2)]

c. Pursuant to HWMR-5, Part IX, 40 CFR 270.30(j)(3), records of monitoring information shall specify:

(i) The dates, exact place, and times of sampling or measurements;

(ii) The individuals who performed the sampling or measurements;

(iii) The dates analyses were performed;

(iv) The individuals who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

10. Notice of Planned Physical Facility Changes The Permittee shall give notice to the Secretary, as soon as possible, of any planned physical alterations or additions to the permitted facility which may impact any procedure or system of treatment, storage or control, or any related appurtenances, installed or used by the Permittee to achieve compliance with this permit. Physical alterations or additions shall include all hazardous waste activities and associated underground tanks. Construction of new units may not begin until a permit or permit modification has been issued.

11. Certification of Construction or Modification The Permittee may not commence incineration, treatment or storage of waste at the modified unit until:

    a. The Permittee has submitted to the Secretary, by certified mail or hand delivery, a letter signed by the Permittee and a registered professional engineer, stating that the unit has been constructed or modified in compliance with the permit; and

    b. (i) The Secretary or his designee has inspected the modified or newly constructed unit and finds it is in compliance with the conditions of the permit; or

    (ii) The Secretary, or his designee, has either waived the inspection or has not, within 15 calendar days, notified the Permittee of his intent to inspect.

12. Anticipated Noncompliance The Permittee shall give advance notice to the Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

13. Transfer of Permit This permit may be transferred to a new owner or operator pursuant to HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.40. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of HWMR-5, as amended 1989, Parts III, V and IX; and HSWA.

14. Compliance Schedules Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 calendar days following each schedule date.

15. Other Information Whenever the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Secretary, the Permittee shall verbally notify the Secretary of such fact on the next work day and submit, within thirty calendar days, written correction of such facts or information. The term "Permit Application" includes any information submitted on solid waste management units.

## I.E. SIGNATORY REQUIREMENTS

All reports or other information requested by the Secretary shall be signed and certified as required by HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.11.

## I.F. CONFIDENTIAL INFORMATION

The Permittee may claim confidential, in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.12 any information, required to be submitted by this permit.

## I.G. DOCUMENTS TO BE MAINTAINED AT FACILITY

The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:

1. This permit and its attachments;

2. Waste Analysis Plan, as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.13(b) and this permit;

3. Personnel training documents and records required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.16(a) and this permit;

4. Contingency Plan, as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.53(a) and this permit;

5. Closure Plans required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.112(a) and this permit;

6. Operating record required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.73 and this permit; and

7. Inspection schedules required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.15 and this permit.

## I.H. PERMIT CONSTRUCTION

1. Citing Whenever paragraphs of this permit or of the Hazardous Waste Management Regulations are cited, such cite includes all subordinate 40 CFR sections of the cited paragraph. When subordinate 40 CFR sections are cited, such cite includes all 40 CFR subsections of the cited subparagraph. All such cites shall be considered an inclusion by reference in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30.

2. Gender Whenever the pronoun "he" is used in reference to the Secretary of the New Mexico Environment Department or the Permittee, it is to be read as "she," in any instance where the object of the reference is female.

3. Definitions For purposes of this Permit, terms used herein shall have the same meaning as those in HWMR-5, Parts I, V, VIII, and IX, unless this permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "Regional Administrator" means the Regional Administrator of EPA Region VI, or his designee or authorized representative. "Secretary" means the Secretary of the New Mexico Environment Department, or his designee or authorized representative.

a. References to "Wastes" in this permit mean "Hazardous Wastes" and "Mixed Wastes" as regulated under RCRA unless specifically designated otherwise at the time of use. For the purposes of this permit, mixed waste contains both a hazardous waste component and a source, special nuclear, or byproduct material regulated under the Atomic Energy Act.

b. The term "Knowledge of Process" means a written description of the waste, certified as true and correct by an individual familiar with the process that generated the waste. Such description shall specify the waste constituents and estimate their concentration or quantity.

c. The term "On-site" as used in permit paragraph II.B.2. means facilities under the operational control of the Permittee and located within the external perimeter of the Permittee's property. This includes Technical Areas 0, 2, 3, 6, 8, 9, 11, 14, 15, 16, 18, 21, 22, 26, 33, 35, 36, 37, 39, 40, 41, 43, 46, 48, 49, 50, 51, 52, 53, 54, 55, 58, and 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, and 74. See permit Figure 2 and Table I-1 and Table II-3.

d. Technical Area Zero (TA-0), includes only the detached sites listed in Table I-1.

e. The term "Analysis" includes physical analysis, chemical analysis and knowledge of process determinations.

f. The term "Permittee" as used in this permit applies jointly and severably to the Owner, U. S. Department of Energy, and to the Operator, the University of California Regents, doing business as the Los Alamos National Laboratory.

**TABLE I-1**
**TECHNICAL AREA ZERO GENERATION SITES**

| DESIGNATION | DESCRIPTION | ANTICIPATED WASTES |
|---|---|---|
| 0-480 | Pajarito School<br>Engineering offices | D001, D002 |
| 0-1197 | Mesa School<br>Training offices/classrooms | Any training materials |
| 0-1237 | Pueblo Complex<br>Environmental laboratory | Any sample or analysis reagents |

NOTE: Except for those sites listed in Table II-3, no other sites are included in the on-site definition in permit paragraph I.H.3.c.

# MODULE II GENERAL FACILITY CONDITIONS

## II.A. DESIGN AND OPERATION OF THE FACILITY

The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release to air, soil, or surface water of hazardous waste constituents which could threaten human health or the environment.

## II.B. REQUIRED NOTICE

1. Foreign Wastes This permit does not allow the Permittee to accept wastes from a foreign source. If the Permittee is to receive hazardous waste from a foreign source, he shall apply for and receive a permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.41 or 270.42, if appropriate, prior to accepting such waste.

2. Off-Site Wastes This permit does not allow the Permittee to accept wastes from an off-site source. "Off-site source" refers to wastes generated by sources other than the Permittee or its contractor(s) operating on-site. For the purposes of this permit, wastes generated by the Permittee at Technical Area 57, the Fenton Hill site, and waste generated through investigation of Potential Release Sites (PRS) and/or Solid Waste Management Units (SWMU) listed in Table II-3 (at the end of Module II); or the waste generated through the restoration of the PRS/SWMU sites listed in Table II-3 may be accepted for storage or treatment if all such waste is properly manifested in accordance with permit paragraph II.J. below. Waste or contaminated residuals of waste associated with off-site treatment of those waste streams originally generated by the Permittee and subsequently managed or treated by the off-site facilities listed in Module II, Table 2-2, may be accepted for storage or treatment if all such waste is properly characterized and manifested in accordance with permit paragraph II.J. If the Permittee is to receive hazardous waste from an off-site source, other than those off-site sources listed in Table II-3 and Table 2-2, he shall apply for and receive a permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.42, if appropriate, prior to accepting such waste.

## II.C. WASTE ANALYSIS

1. Waste Analysis Plan The Permittee shall follow the procedures described in Permit Attachment A.

2. Quality Assurance The Permittee shall verify its waste analysis as part of a written quality assurance program. The quality assurance program shall be in accordance with current accepted practices such as specified in Test Methods for Evaluating Solid Waste:Physical/Chemical Methods SW-846, ~~1986, as revised,~~ or equivalent methods approved by the Secretary; and at a minimum ensure that the Permittee maintains proper functional instruments, uses approved sampling and analytical methods, verifies the validity of sampling and analytical procedures, and performs correct calculations. The Permittee will notify any contract laboratory of the requirements of this section and permit.

3. Waste Segregation The Permittee shall keep available at at the facility, in accordance with ~~each place where waste storage for more than ninety days occurs, a copy of~~ EPA-600/2-80-076, A Method of Determining the Compatibility of Hazardous Waste.

4. Annual Verification The Permittee shall annually, by the anniversary date of each quarterly report, verify the accuracy and currency of the waste stream determination made in Permit Attachment I.

II.D. SECURITY

The Permittee shall comply with the security provisions of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.14.

II.E. INSPECTION REQUIREMENTS

1. Inspection Plan The Permittee shall follow Permit Attachment B and the inspection requirements in Modules III through VII. The Permittee shall remedy any deterioration or malfunction of equipment or structure discovered by an inspection as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.15(c). Inspection log sheets may be revised by the Permittee and submitted to the Secretary for inclusion in this permit by permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.42.

2. Facility Release Inspection

   a. The Permittee shall take surface water samples and analyze for metals, volatile and both acid- and base-neutral semivolatile organic hazardous waste constituents in accordance with Table II-2 annually at the sample locations in Table II-1. See Figure 9.

   b. The sampling and analysis shall be done using EPA-approved procedures as published in the latest issue of SW-846.

   c. Analysis of Variance (ANOVA) statistical procedures as promulgated in 53 FR 39720 (October 11, 1988) shall be used to compare data between up-gradient and down-gradient stations.

   d. Records of this inspection shall be kept in accordance with permit paragraph II.K.1.a. below. All analytical results will be recorded and reported. Reports shall be on the form provided in Figure 10.

   e. Reports of releases detected by this inspection shall be made in accordance with permit paragraph II.K.2.c. below.

   f. In the event water samples cannot be obtained at one or more sites, the attempt to obtain samples will be documented in the facility record and the Secretary notified in writing within 30 days of each unsuccessful attempt.

## II.F. PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.16. This training program shall follow Permit Attachment C, which shall be updated by the Permittee whenever necessary so as to remain current and accurate. A dated copy of the revised training program will be submitted to the Secretary for the permit files and permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.42 prior to its implementation. The Permittee shall maintain training documents and records, as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.16(d) and (e).

## II.G. REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee shall comply with the requirements of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.17.

## II.H. PREPAREDNESS AND PREVENTION

1. Required Equipment At a minimum, the Permittee shall equip the facility with the equipment set forth in Permit Attachments B. and D or the functional equivalent.

2. Testing and Maintenance of Equipment The Permittee shall test and maintain the equipment specified in permit paragraph II.H.1. above annually or more often if necessary to assure its proper operation in time of emergency.

3. Access to Communications or Alarm System The Permittee shall maintain access to the communications or alarm system(s) as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.34.

4. Required Aisle Space The Permittee shall maintain aisle space as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.35. The minimum aisle shall be twenty four inches. All containers in storage shall be accessible for inspection.

## II.I. CONTINGENCY PLAN

1. Implementation of Plan The Permittee shall immediately carry out the provisions of Permit Attachment D. whenever there is an unplanned fire, explosion, or unpermitted release of hazardous waste or hazardous constituents which threatens or could threaten human health or the environment.

2. Amendment of the Plan The Permittee shall review, as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.54., and immediately amend if necessary, the Contingency Plan.

3. Copies of the Plan The Permittee shall comply with the requirements of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.53. A dated copy of any amended Contingency Plan will be submitted to the Secretary for the permit files and permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.42 prior to its implementation.

4. Emergency Coordinator The Permittee shall comply with the requirements of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.55 concerning the emergency coordinator.

II.J. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of HWMR-5, as amended 1989, Part V, 40 CFR Sections 264.71 and 264.72 for any hazardous wastes received from or shipped off-site by the Permittee for treatment, storage or disposal.

II.K.RECORD KEEPING AND REPORTING

1. Facility Operating Record The Facility Operating Record maintained pursuant to HWMR-5, as amended 1989, Part V, 40 CFR Section 264.73 shall be maintained in such manner that any information required to be in the record shall be readily available to an inspector. Readily available means that, upon request by an inspector, the Permittee can provide the requested information within 24 hours or before the end of the inspection, whichever is less; or upon a schedule designated by the inspector.

   a. In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(j), the Permittee shall maintain at the facility until the end of the last closure period, a written record of waste and decontamination wash-water analyses. The following information shall be recorded:

      (i) The dates, exact place, and times of sampling or measurements;

      (ii) The individual who performed the sampling or measurements;

      (iii) The dates analyses were performed;

      (iv) The individuals or off-site laboratory who performed the analyses;

      (v) The analytical techniques or methods used; and

      (vi) The results of such analyses. The results shall include range, mean, standard deviation and detection limits as applicable to facilitate data analysis.

   b. The Permittee shall maintain pursuant to HWMR-5, as amended 1989, Part V, 40 CFR Section 264.73(b) at the facility until the end of the last closure period, a written record of waste disposal activities. Current EPA approved nomenclature and codes shall be used where appropriate. The following information shall be recorded:

      (i) Waste Source;

      (ii) Waste Description;

      (iii) Waste Quantity;

(iv) Current Storage Location; and

(v) Disposal. Properly completed hazardous waste manifests will suffice for wastes shipped off-site.

c. The Permittee shall maintain at the facility a written record of Contingency Plan implementation reports. The record shall contain at least the information required in permit paragraph II K.2.b. below. These records shall be kept until the end of the last closure period.

d. The Permittee shall keep at the facility a written record of all inspections conducted in accordance with Permit Attachment B. and permit paragraph II.E. above. These records shall be maintained for a minimum period of three years from the date of the inspection. Records of inspections leading to corrective action shall be retained for three years after the corrective action taken as a result of the inspection.

e. The Permittee shall keep at the facility training documents and records as required by HWMR-5, as amended 1989, Part V, 40 CFR Sections 264.16(d) and 264.1 6(e), and Permit Attachment C. Records of training shall be kept on all current employees and for three years after an employee leaves the facility owner's or operator's employ.

f. The Permittee shall maintain at the facility a copy of all biennial reports submitted in accordance with permit paragraph II.K.2. below. These copies shall be kept until the end of the last closure period.

g. The Permittee shall keep sufficient monitoring records and documentation to demonstrate compliance with this permit. Records unique to one activity may be kept in the vicinity of that activity, subject to the availability requirement in permit paragraph II.K.1. above.

h. In accordance with HWMR-5, as amended 1989, part V, 40 CFR Section 264.74(b), the retention period for all records required by this permit is extended automatically during the course of any unresolved enforcement action regarding the facility, or as directed by the Secretary.

2. <u>Reports</u>

a. The Permittee shall comply with the Biennial Report requirements of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.75.

b. In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(l)(6), the Permittee shall report to the Secretary any noncompliance with the permit which may endanger human health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

(i) Information concerning the release of any hazardous waste which may endanger public or private drinking water supplies.

(ii) Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health. The description of the occurrence and its cause shall include:

(a) Name, address, and telephone number of the owner or operator;

(b) Name, address, and telephone number of the facility;

(c) Date, time, and type of incident;

(d) Name and quantity of materials involved;

(e) The extent of injuries, if any;

(f) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

(g) Estimated quantity and disposition of recovered material that resulted from the incident.

The 24-hour report shall be made by calling (505) 827-4358 during normal duty hours or (505) 827-9329, the 24-hour emergency line.

c. The Permittee shall provide to the Secretary within five (5) working days of the time the Permittee becomes aware of the circumstances, a written report on the event(s) reported orally in permit paragraph II.K.2.b. above. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance, including exact dates and times; whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply with the five-day written notice requirement if the Secretary waives the requirement and the Permittee submits a written report within fifteen (15) calendar days

of the time the Permittee becomes aware of the circumstances. The written report shall be submitted by certified mail to:

Secretary
New Mexico Environment Department
1190 St. Francis Drive, P.O.Box 26110
Harold Runnels Building
Santa Fe, NM 87502-6110~~87503~~

d. In accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.30(l)(10), the Permittee shall report all other instances of noncompliance, not otherwise required to be reported above, in the annual Environmental Surveillance Report. The reports shall contain the information listed in permit paragraph II.K.2.b. above.

## II.L. CLOSURE

The provisions of this permit section apply to individual units for partial closure of the facility, as well as total closure of the entire facility. Closure of one unit may or may not affect the remaining units. The impact of such sequential or partial closure may depend on the sequence and circumstances in existence at the time of closure. The Secretary may direct or the Permittee may request appropriate revisions to the closure plan at that time.

1. Performance Standard The Permittee shall close the facility as required by HWMR-5, as amended 1989, Part V, 40 CFR Section 264.111 and in accordance with each closure plan, Permit Attachment E.

2. Amendment of Closure Plans The Permittee shall amend each closure plan in accordance with HWMR-5 as amended 1989, Part V, 40 CFR Section 264.112(c) whenever necessary.

3. Notification of Closure The Permittee shall notify the Secretary at least 60 days prior to the date he expects to begin closure under any Permit Attachment E. closure plan.

4. Time Allowed For Closure After receiving the final volume of hazardous waste, the Permittee shall treat or remove from site all hazardous waste in accordance with the schedule specified in the closure plan. After receiving the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the closure plan.

5. Disposal or Decontamination of Equipment The Permittee shall properly dispose of or decontaminate all facility equipment, structures, and soils, as required by the closure plan.

6. Certification of Closure The Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan.

## II.M. MOVEMENT RESTRICTION

The Permittee shall not transport bulk liquid hazardous wastes in quantities per container in excess of 110 gallons over public roads between the hours of 7:00 AM to 8:30 AM, 12:15 PM to 1:30 PM or 4:00 PM to 5:45 PM on normal duty days. Off-site transportation under U.S. Department of Transportation regulations by EPA-registered transporters is not subject to this restriction. On-site transportation of waste~~s~~ generated as a result of an emergency cleanup in accordance with Permit Attachment D are not subject to this restriction.

## II.N. Spills

The Permittee shall take corrective action, as required by Section 74-4-4.2B NMSA 1978, (as amended 1989), for all releases of hazardous wastes or constituents from any solid waste management unit at his facility. Corrective action may include, but shall not be limited to, the following: decontamination and/or removal of all releases, spills and leaks; immediate cleanup of release or spillage of hazardous wastes, or constituent residue or listed chemicals which become wastes; prevention of surface-water or ground-water contamination which could result from a release or spill; and, cleanup of any surface-water or ground-water contamination which results from a release or spill.

**TABLE II-1**

**ENVIRONMENTAL MONITORING LOCATIONS**

| STATION | N-S Coordinate (LANL Grid) | E-W Coordinate (LANL Grid) | Map No. |
|---|---|---|---|
| Los Alamos Reservoir | N105 | W090 | 7 |
| Frijoles | S280 | E180 | 9 |
| Canada del Buey | N010 | E150 | 46 |
| Water Canyon at Beta | S090 | E090 | 48 |
| Acid Weir | N125 | E070 | 49 |
| Pueblo - 2 | N120 | E155 | 51 |
| Pueblo - 3 | N085 | E315 | 53 |
| DPS - 1 | N090 | E160 | 57 |
| SCS - 2 | N060 | E140 | 66 |
| Pajarito Stream | S180 | E140 | 35 |
| Ancho Stream | S295 | E340 | 36 |
| Frijoles Stream | S365 | E235 | 37 |
| Pajarito Canyon (PCO-3) | S098 | E293 | 104 |
| LAO-4.5 | N065 | E270 | 64 |
| MCO-3 | N040 | E110 | 69 |
| MCO-8 | N030 | E190 | 74 |
| Basalt Spring | N065 | E395 | 56 |

**TABLE II-2**

**SAMPLING PARAMETERS**

| TOTAL METALS | ORGANICS | OTHER |
|---|---|---|
| Arsenic | Halogenated volatile organics | Cyanide |
| Barium | Nonhalogenated volatile organics | pH |
| Cadmium | Acid-extractable semivolatile | |
| Chromium | organics Base-neutral extractable | |
| Lead | semivolatile organics Phenols | |
| Mercury | | |
| Selenium | | |
| Silver | | |
| Nickel | | |
| Beryllium | | |
| Copper | | |
| Zinc | | |
| Iron | | |

All methods are as published in US EPA SW-846, 3rd Edition or later.

If any metal's total concentration exceeds that metal's standard for Toxicity Characteristic Leachate Procedure (TCLP) toxicity , a determination of the TCLP toxicity concentration for that metal will be performed. Both data will be recorded and reported.

**TABLE II-3**

**List of Off-Site Potential Release Site (PRS) and/or Off-Site Solid Waste Management Units (SWMU) that may have Investigative Derived Waste (IDW) or Remediation Waste (RW) brought on to Los Alamos National Laboratory.**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 00-003 | 0 | 1071 | Container Storage |
| 00-005 | 0 | 1071 | Landfill |
| 00-011(a) | 0 | 1071 | Mortar Impact Area |
| 00-011(c) | 0 | 1071 | Mortar Impact Area |
| 00-011(d) | 0 | 1071 | Mortar Impact Area |
| 00-011(e) | 0 | 1071 | Mortar Impact Area |
| 00-012 | 0 | 1071 | Underground Storage Tank |
| 00-016 | 0 | 1071 | Firing Range |
| 00-017 | 0 | 1071 | Waste Lines |
| 00-018(a) | 0 | 1071 | Pueblo Waste Water Treatment Plant |
| 00-019 | 0 | 1071 | Waste Water Treatment Plant |
| 00-028(a) | 0 | 1071 | Effluent Discharge |
| 00-028(b) | 0 | 1071 | Effluent Discharge |
| 00-030(a) | 0 | 1071 | Septic System |
| 00-030(b) | 0 | 1071 | Septic System (6th St.) |
| 00-030(g) | 0 | 1071 | Septic System |
| 00-030(l) | 0 | 1071 | Septic System |
| 00-030(m) | 0 | 1071 | Septic System |
| 00-033 | 0 | 1071 | Warehouse |
| 00-039 | 0 | 1071 | Underground Storage Tank |
| 01-001(a) | 01 | 1078 | Septic System |

**Table II-3**
**(Continued)**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 01-001(b) | 01 | 1078 | Septic System |
| 01-001(c) | 01 | 1078 | Septic System |
| 01-001(d) | 01 | 1078 | Septic System |
| 01-001(e) | 01 | 1078 | Septic System |
| 01-001(f) | 01 | 1078 | Septic System |
| 01-001(g) | 01 | 1078 | Septic System |
| 01-001(h) | 01 | 1078 | Septic System |
| 01-001(i) | 01 | 1078 | Septic System |
| 01-001(j) | 01 | 1078 | Septic System |
| 01-001(k) | 01 | 1078 | Septic System |
| 01-001(l) | 01 | 1078 | Septic System |
| 01-001(m) | 01 | 1078 | Septic System |
| 01-001(n) | 01 | 1078 | Septic Tank #276 |
| 01-001(o) | 01 | 1078 | Ind. or Sm Waste Water Treatment |
| 01-001(s) | 01 | 1078 | Septic System |
| 01-001(t) | 01 | 1078 | Septic System |
| 01-001(u) | 01 | 1078 | Septic System |
| 01-002 | 45 | 1079 | Outfall TA-01 |
| 01-003(a) | 01 | 1078 | Landfill |
| 01-003(d) | 01 | 1078 | Surface Disposal Site |
| 01-003(e) | 01 | 1078 | Surface Disposal Site |
| 01-006(a) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(b) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(c) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(d) | 01 | 1078 | Drain, Liner and Outfall |

**Table II-3**
**(Continued)**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 01-006(h) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(n) | 01 | 1078 | Drain, Liner and Outfall |
| 01-006(o) | 01 | 1078 | Drain, Liner and Outfall |
| 01-007(a) | 01 | 1078 | Soil Contamination Area |
| 01-007(b) | 01 | 1078 | Soil Contamination Area |
| 01-007(c) | 01 | 1078 | Soil Contamination Area |
| 01-007(d) | 01 | 1078 | Soil Contamination Area |
| 01-007(e) | 01 | 1078 | Soil Contamination Area |
| 01-007(j) | 01 | 1078 | Soil Contamination Area |
| 01-007(l) | 01 | 1078 | Soil Contamination Area |
| 10-001(a) | 10 | 1079 | Firing Site |
| 10-001(b) | 10 | 1079 | Firing Site |
| 10-001(c) | 10 | 1079 | Firing Site |
| 10-001(d) | 10 | 1079 | Firing Site |
| 10-002(a) | 10 | 1079 | Disposal Pit |
| 10-002(b) | 10 | 1079 | Disposal Pit |
| 10-003(c) | 10 | 1079 | Disposal Pit |
| 10-003(d) | 10 | 1079 | Disposal Pit |
| 10-003(e) | 10 | 1079 | Disposal Pit |
| 10-003(f) | 10 | 1079 | Disposal Pit |
| 10-003(g) | 10 | 1079 | Manholes |
| 10-003(h) | 10 | 1079 | Manholes |
| 10-003(i) | 10 | 1079 | Septic Tank |
| 10-003(j) | 10 | 1079 | Tank |
| 10-003(k) | 10 | 1079 | Tank |

**Table II-3**
**(Continued)**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 10-003(l) | 10 | 1079 | Tank |
| 10-003(m) | 10 | 1079 | Waste Line |
| 10-003(n) | 10 | 1079 | Leach Field |
| 10-003(o) | 10 | 1079 | Leach Field |
| 10-004(a) | 10 | 1079 | Septic System |
| 10-004(b) | 10 | 1079 | Septic System |
| 10-005 | 10 | 1079 | Surface Disposal Area |
| 10-007 | 10 | 1079 | Landfill |
| 19-001 | 19 | 1071 | Septic System |
| 19-002 | 19 | 1071 | Septic System |
| 19-003 | 19 | 1071 | Septic System |
| 31-001 | 31 | 1079 | Septic System |
| 32-001 | 32 | 079 | Incinerator |
| 32-002(a) | 32 | 1079 | Septic System |
| 32-002(b) | 32 | 1079 | Septic System |
| 45-001 | 45 | 1079 | Waste Water Treatment Facility |
| 45-002 | 45 | 1079 | Vehicle Decontamination Area |
| 45-003 | 45 | 1079 | Waste Line |
| 45-004 | 45 | 1079 | Sanitary Sewer Outfall |
| 73-001(a) | 73 | 1071 | Landfill |
| 73-001(b) | 73 | 1071 | Surface Disposal Area |
| 73-001(c) | 73 | 1071 | Landfill |
| 73-001(d) | 73 | 1071 | Landfill |
| 73-002 | 73 | 1071 | Incinerator and Surface Disposal Area |

**Table II-3**
**(Continued)**

| PRS/SWMU Number | Technical Area | Operational Unit | Unit Type |
|---|---|---|---|
| 73-004(a) | 73 | 1071 | Septic System |
| 73-004(b) | 73 | 1071 | Septic System |
| 73-004(c) | 73 | 1071 | Septic System |
| 73-005 | 73 | 1071 | Septic System |
| 73-006 | 73 | 1071 | Industrial or Sanitary Waste Water Treatment\Facility |

**MODULE II**
**TABLE 2-2**

List of Off-Site Waste Management Facilities that may return treatment derived waste or waste residuals to Los Alamos National Laboratory.

| **Off-Site Facility** | **E.P.A. Identification Number** |
|---|---|
| Argonne National Laboratory, Argonne, IL | IL38900089 |
| Catholic University, Washington, D.C. | DCD980204879 |
| Consolidated Incineration Facility, Savannah River Site, SC | SC1890008989 |
| Diversified Scientific Services, Inc., Kingston, TN | TND982109142 |
| Envirocare, Clive, UT | UTI982598898 |
| Waste Experimental Reduction Facility, Idaho National Engineering Laboratory, Idaho Falls, ID | ID4890008952 |
| M4 Environmental Management, Inc., Oak Ridge, TN | RD&D Permit |
| EG&G Mound Applied Technologies, Miamisburg, OH | OH6890008984 |
| Nuclear Fuel Services, Erwin, TN | TND003095635 |
| Nuclear Sources & Services, Inc., Houston, TX | TXD982560294 |
| Toxic Substance Control Act Incinerator, Oak Ridge National Laboratory, Oak Ridge, TN | TN0890090004 |
| International Technology Corporation, Technology Center, Knoxville, TN | TND000770479 |
| International Technology Corporation, Biotech Applications Center, Knoxville, TN | TND987782521 |
| International Technology Corporation, Environmental Technology Development Center, Oak Ridge, TN | TND981933120 |
| Perma-Fix, Albuquerque, NM | NM0000182121 |
| Perma-Fix, Gainesville, FL | FLG980711071 |

# MODULE III STORAGE IN CONTAINERS

## III.A. DESIGNATED STORAGE UNITS

1. Technical Area 54, Area L The Permittee may store for more than ninety days hazardous wastes in containers only in the following designated storage areas:

   a. Containers containing free liquids may be stored on the concrete containment structure, Facility Number 54-32 and 54-58.

   b. Containers containing free liquids may be stored in the packaging building, Facility Number 54-31.

   c. Containers not containing free liquids may be stored, on pallets or otherwise elevated four inches, in a single layer in cleared areas within the fenced portion of Area L, subject to the limitations of HWMR-5, as amended 1989, Part V, 40 CFR Sections 264.175(c) and 264.175(d). Such containers shall not be stored within five feet of the perimeter fence, nor five feet of any structure, nor five feet of the paved or unpaved roadway. Disposal unit covers designed to serve as storage areas are not subject to this exclusion. See Figure 6.

   d. Gas cylinders will be stored in cylinder racks, or on specially constructed pallets that provide support and restraint, under a self-supporting canopy located in cleared areas within the fenced portion of Area L, within the restrictions of permit paragraph II.G. above.

   e. The fence line around Area L as shown in permit Figure 6 shall not be altered without prior notice to the Secretary and permit modification in accordance with HWMR-5, as amended 1989, Part IX, 40 CFR Section 270.41 or 270.42 as appropriate.

   f. Containers containing free liquids may be stored in the modular storage buildings, Model 22 or equivalent, Facility Numbers 54-68 and 54-69, 54-70 for container storage located as shown in Figure 6.

2. Technical Area 50 The Permittee may store for more than ninety days hazardous wastes in containers only in the following designated storage areas:

   b. Building 50-37. Containers may be stored within storage room 115, 117, and 118 of the of TA-50-37 as shown in Figure 4.

   c. Containers containing free liquids may be stored in the modular storage buildings, 0Model 22 or equivalent, Facility Number 50-114.

3. Technical Area 50 The Permittee may store for more than ninety days hazardous and/or mixed wastes in containers only in the following designated storage areas:

b. Containers not containing free liquids may be stored on pallets, dollies, or otherwise elevated in Building 50-69, Indoor Container Storage Area ( Rooms 102 and 103), and at the Building 50-69 Outdoor Container Storage Area (CSA). Containers containing suspect or known free liquids may be stored on self-containment pallets in Building 50-69, Rooms 102 and 103, and at the Building 50-69 Outdoor CSA. Containers will not be stacked at the Building 50-69, Rooms 102 and 103, storage areas. Containers may be stacked two high at the Building 50-69 Outdoor CSA. See Figure 12.

4. Technical Area 54 West The Permittee may store for more than ninety days mixed wastes in containers only in the following designated storage areas.

a. Building 54-38 Low Bay CSA. Containers not containing free liquids may be stored on pallets or dollies in the Low Bay CSA. Containers containing suspect or known liquids may be stored on self-containment pallets in the Low Bay CSA. Containers will not be stacked at this storage area. See Figure 13.

b. Building 54-38 High Bay CSA. Containers not containing free liquids may be stored on pallets or dollies or otherwise elevated in the High Bay CSA. Containers containing suspect or known liquids may be stored on self-containment pallets in the High Bay CSA. Containers will not be stacked at this storage area. See Figure 13.

c. Building 54-38 Loading Dock CSA. Containers may be stored on self-containment pallets in the Loading Dock CSA. Containers will not be stacked at this storage area. See Figure 13.

d. Building 54-38 Outdoor CSA. Drums of waste may be stored on self-containment pallets in the Outdoor CSA. Other types of waste containers that are elevated by design may be stored in the Outdoor CSA. Containers will not be stacked at this storage area. See Figure 13.

3. Technical Area 54, Area G The Permittee may store for more than ninety days mixed wastes in containers only in the following designated storage areas:

a. Mixed waste containers potentially containing free liquids may be stored at TA-54-230. See Figure 11.

b. Mixed waste containers not containing free liquids may be stored at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and on Storage Pad 10. See Figure 11.

c. All mixed waste containers stored at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and on Storage Pad 10 will be placed on pallets or otherwise elevated four inches. Palletized 55-gallon containers may be stored in groups of four and stacked three high. Palletized overpack containers may be stacked two high. Large containers (80-, 83-, 85-, and 99-gallon drums) will also be stored on pallets but will not be stacked. Fiberglass-reinforced plywood (FRP) boxes may be stacked two high, at a maximum.

III.B. AUTHORIZED WASTES

1. Identification Only hazardous and/or mixed wastes identified in Permit Attachment G. with the process code "S01" in column D.1. "Processes" shall be stored.

2. Quantities The cumulative quantity of individual hazardous and/or mixed wastes in storage at any one time at the facility shall not exceed the quantity indicated in Permit Attachment G. Column B. "Estimated Annual Quantity of Waste".

3. Land Ban The Permittee must also comply with the following regarding storage of its wastes in containers which are prohibited from land disposal. These restrictions are imposed on any waste as it becomes prohibited from land disposal. (New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20 NMAC 4.1), Subpart VIII, 268.50, revised November 1, 1995)

   a. A storage period of one year is permitted. A storage period beyond one year is permitted provided there is proof that such storage is solely for the purpose of accumulation of such quantities as are necessary to facilitate proper recovery, treatment or disposal.

   b. Each container must be clearly marked as to its contents and the date each period of accumulation begins.

   c. Hazardous wastes meeting the treatment standards in 20 NMAC 4.1, Subpart VIII, 268.41, 268.42, 268.43, revised November 1, 1995, are not subject to the storage prohibition. Hazardous wastes meeting the treatment standards specified under the variance in 20 NMAC 4.1, Subpart VIII, 268.44, revised November 1, 1995, are not subject to the storage prohibition.

III.C. CONTAINERS

1. Capacity

   a. Lab-packed wastes shall be stored in containers not to exceed 55-gallon nominal capacity.

   b. Bulk liquids may be stored in drums of a nominal capacity of 55-gallons or less.

   c. Solidified hazardous and/or mixed wastes not containing free liquids may be stored in containers meeting U.S. Department of Transportation (DOT) requirements for transportation.

   d. Compressed gases may be stored in any sized cylinder. Small cylinders may be packed in drums or crates complying with DOT shipping regulations.

   e. Polyethylene containers of 220-gallon or 330-gallon capacity may be used in place of 55-gallon drums as long as secondary containment capacity criteria of HWMR-5, as amended 1989, Part V, 40 CFR Section 264.175(b)(3) are not exceeded.

2. Type Containers must be of a type specified in the DOT hazardous materials regulations, 49 CFR parts 171 to 179, which specify authorized containers for the waste. As applicable, the containers shall be either: (1) previously unused or reused according to DOT requirements; (2) the original shipping containers in which the material was first marketed; or (3) any other suitable container which satisfies the requirements of permit paragraph III.C. If the hazardous and/or mixed wastes are to be received and stored in their original shipping containers, the Permittee must ensure that the requirements of permit paragraph III.C. are satisfied. Polyethylene bulk containers shall meet or exceed DOT requirements. Compressed gas cylinders not meeting DOT requirements shall be segregated in a safe area.

3. Quantity The following quantities include all stored liquid materials, whether regulated or not. Solid materials which do not displace containment capacity may be collocated without affecting these volumes. Solid materials which displace containment volume shall be included in calculating the stored volume as if they were liquids. The Permittee shall keep current accurate records of the quantity of waste in storage at each location below to ensure that these capacities are not exceeded.

   a. No more than 440 gallons of liquid shall be stored at Technical Area 54, Area L, Building Number 54-31.

   b. No more than 17,220 gallons of liquid shall be stored at each concrete containment structure: facility Number 54-32.

   c. No more than 3600 containers of 55-gallon capacity or less, or the equivalent volume of 26,470 cubic feet, 980 cubic yards or 749 cubic meters, shall be used to store solidified wastes at Technical Area 54, Area L.

   d. No more than 3,630 gallons of liquid shall be stored in Building 50-37, Rooms 115, 117, and 118 combined.

   e. No more than 1,650 gallons of waste shall be stored in each modular storage unit.

   h. No more than 1,500 gallons of waste shall be stored at the Building 50-69 Indoor CSA (Rooms 102 and 103). No more than 30,000 gallons of waste shall be stored at the Building 50-69 Outdoor CSA.

   i. No more than 2,200 gallons of waste shall be stored at the Building 54-38 High Bay CSA. No more than 880 gallons of waste shall be stored at the Building 54-38 Low Bay CSA. No more than 660 gallons of waste shall be stored at the Building 54-38 Loading Dock CSA. No more than 7,920 gallons of waste shall be stored at the Building 54-38 Outdoor CSA.

   g. No more than 970,000 gallons of waste shall be stored at TA-54-226. No more than 790,000 gallons of waste shall be stored at each of the following locations: TA-54-229, TA-54-230, TA-54-231, and TA-54-232. Of the 790,000-gallon total that may be stored in

TA-54-230, no more than 93,995 gallons shall be potential liquid-bearing waste. No more than 970,000 gallons of waste shall be stored at TA-54, Area G, Pad 10.

4. Condition

   a. If a container holding hazardous or mixed waste is not in good condition (e.g. severe rusting, structural defects) or if it begins to leak, the Permittee shall transfer the hazardous or mixed waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit.

   b. The Permittee may use overpack containers of more than 55-gallon capacity to manage defective waste storage containers. Each overpacked container shall be recorded in the facility record.

5. Compatibility of Waste with Containers

   a. The Permittee shall assure, as required by 20 NMAC 4.1, Subpart V, 264.172, revised November 1, 1995, that the ability of the container to contain the waste is not impaired. When necessary, this shall include procedures for determining whether the hazardous or mixed waste is no longer compatible with the shipping container if it is to be stored in its original container (e.g. determination of container adequacy for chemicals that have a finite shelf life or may change in composition upon aging).

   b. The Permittee shall not place into the polyethylene containers described in permit paragraph III.C.1.e. above, any material for which the manufacturer does not rate the container suitability as "Good" or "Excellent" in the current compatibility technical bulletin issued by the manufacturer. A copy of the current bulletin shall be available at the facility~~any location where the polyethylene container(s) is (are) filled or stored with contained wastes for more than thirty days~~.

6. Management The Permittee shall manage containers as required by 20 NMAC 4.1, Subpart V, 264.173, revised November 1, 1995, and Permit Attachment F.

III.D. CONTAINMENT

The Permittee shall construct and maintain the containment systems for each storage unit in permit paragraphs III.A. above in accordance with the requirements of 20 NMAC 4.1, Subpart V, 264.175, revised November 1, 1995.

III.E. IGNITABLE OR REACTIVE WASTES

The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility property line.

III.F. INCOMPATIBLE WASTES

The Permittee shall manage incompatible wastes or incompatible wastes and materials in accordance with the requirements of 20 NMAC 4.1, Subpart V, 264.177, revised November 1, 1995.

III.G. CLOSURE

The Permittee shall comply with the Closure Plan, Permit Attachment E. and permit paragraph II.L. above, for closure of any permitted storage area.

III.H. INSPECTION

1. Inspection Plan The Permittee shall inspect the storage areas in accordance with Permit Attachment B.

2. Spill Kits The type, presence, location and quantity of spill kits shall be verified and annotated monthly. If spill kits are locked up, the location of access keys shall be verified.

3. Warning Signs The legibility and condition of warning signs shall be included in the weekly inspection. Missing or illegible signs shall be promptly replaced within 24 hours of discovery.

    a. Signs shall be at the entrances to the hazardous and mixed waste units. Collocated units may be included within one signed area.

    b. Signs shall say "Danger, Unauthorized Personnel Keep Out" and "Hazardous Waste Storage Area".

    c. Signs shall be in both English and Spanish.

    d. Signs on approachable perimeter fences shall be spaced no more than 50 feet apart.

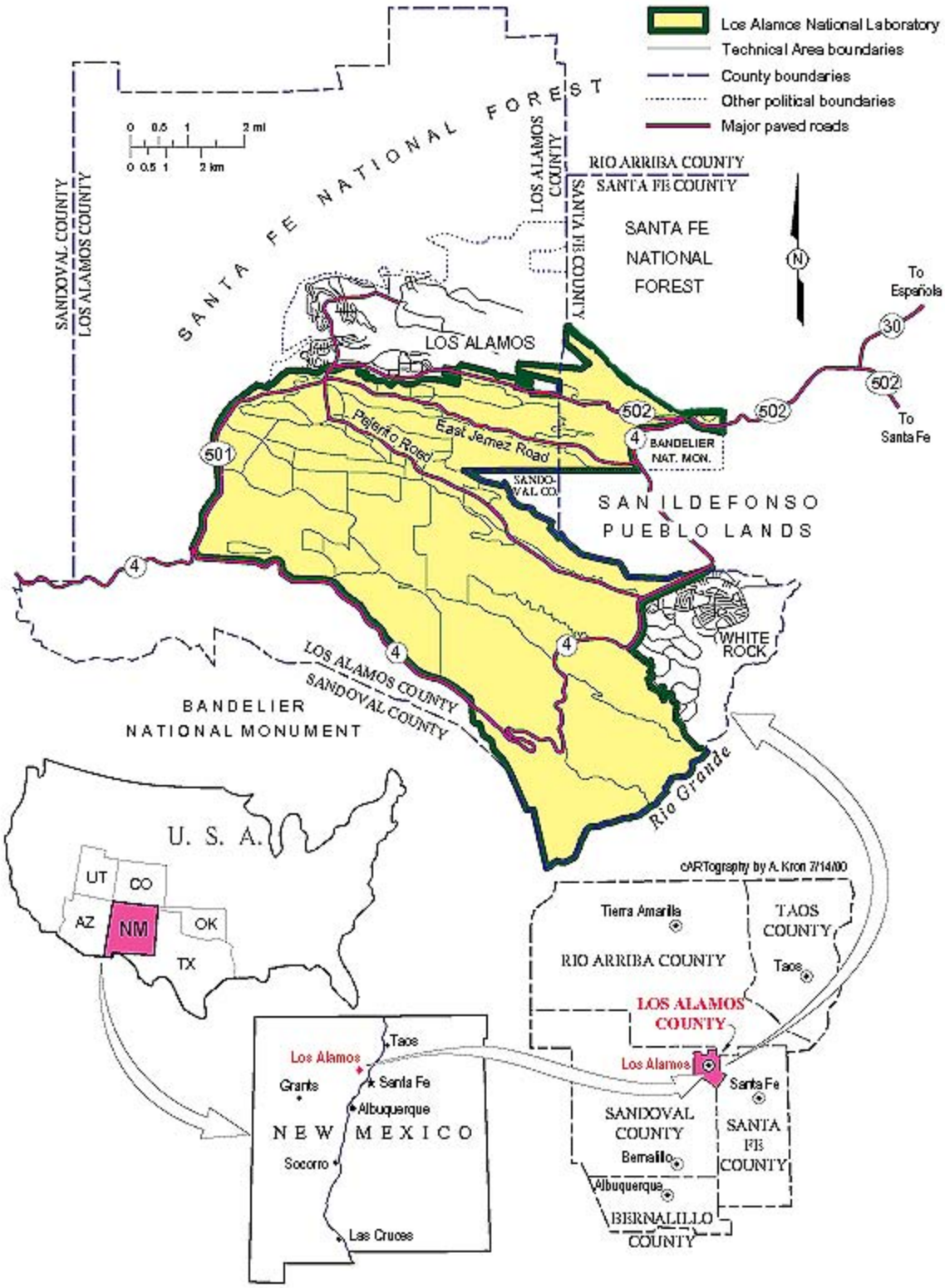



**Figure 1**

Regional Location Map of Los Alamos National Laboratory and Surrounding Land Use

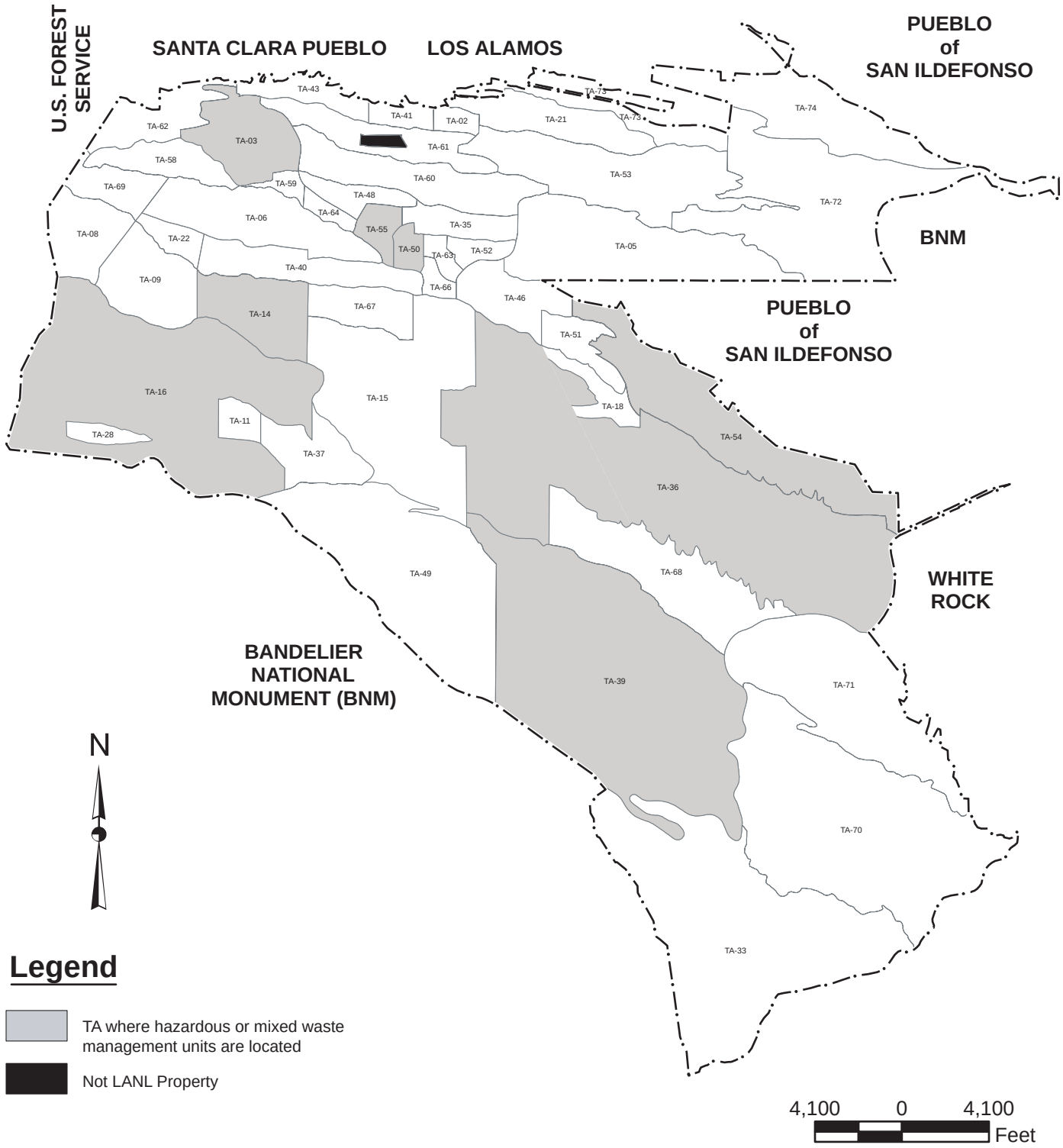



**Figure 2**
Location Map of Los Alamos National Laboratory (LANL) Technical Areas (TA)

State Plane Coordinate System New Mexico Central Zone North American Datum 1983 (ft)

Disclaimer: Neither the United States Government nor the University of California nor any of their employees, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

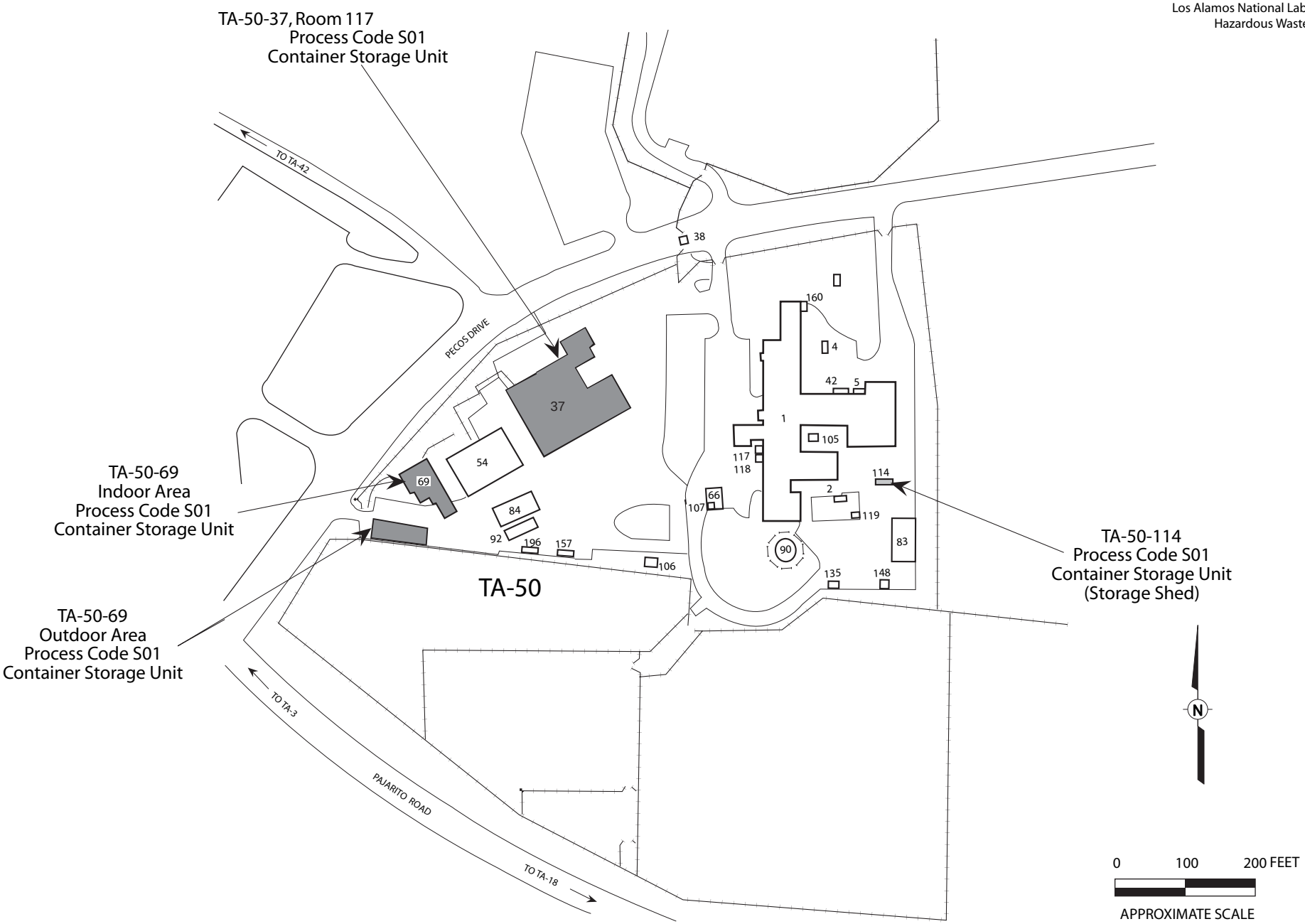



Figure 4
Container Storage Area Locations at Technical Area (TA) 50

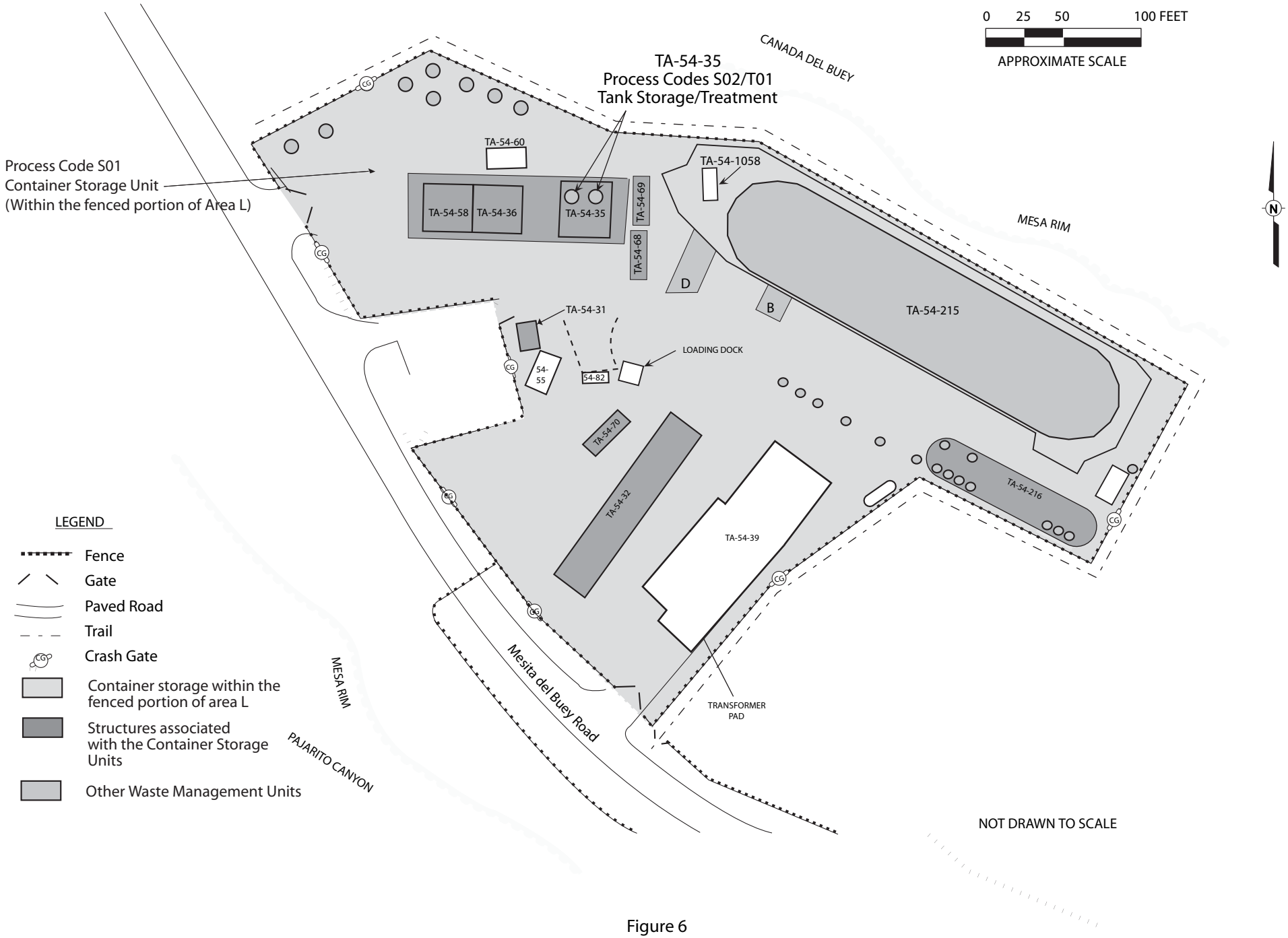



Figure 6
Technical Area (TA) 54, Area L, Container Storage Area and Storage/Treatment Tanks

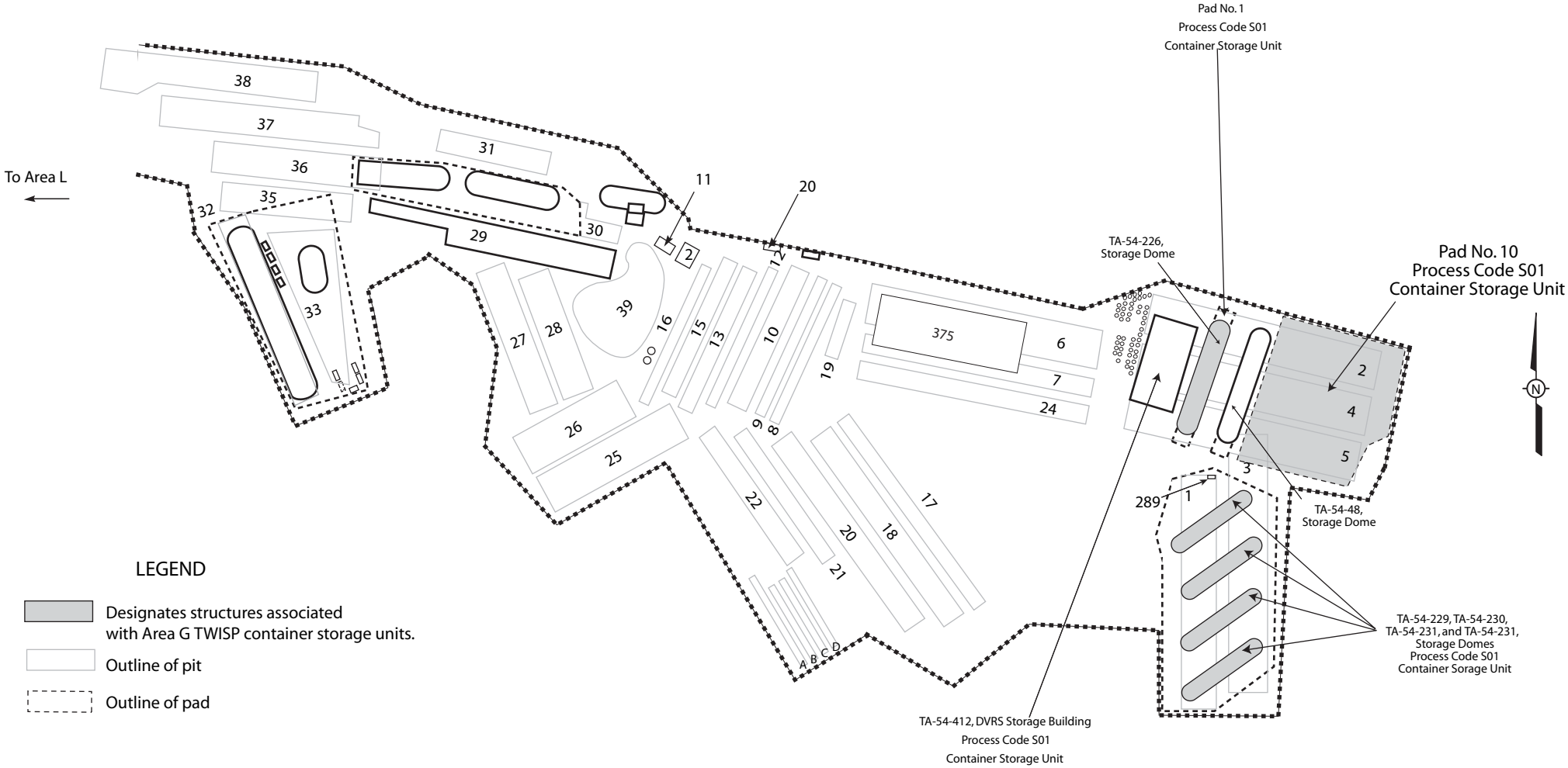
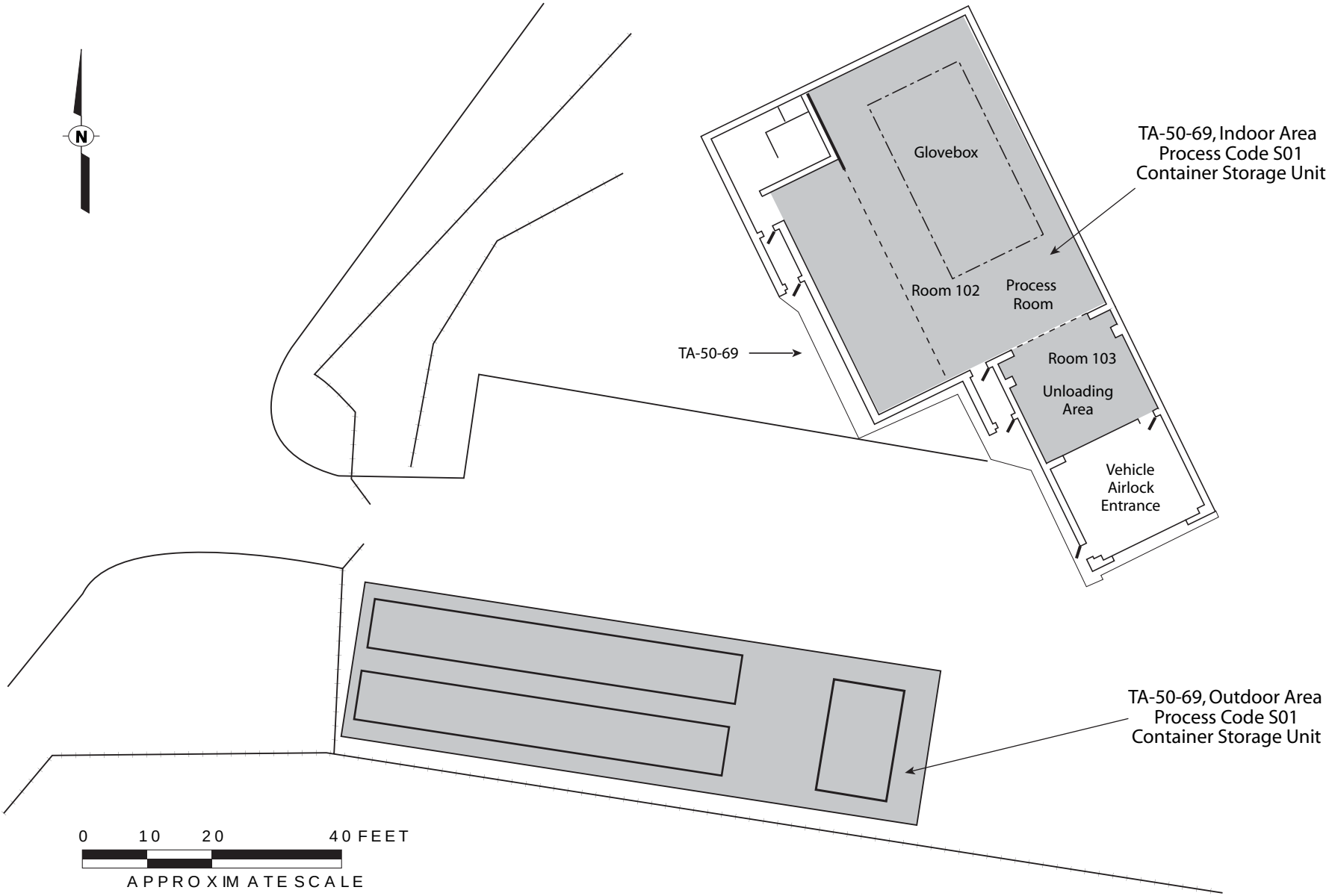



Figure 11

Container Storage at Technical Area (TA) 54, Area G
TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Storage Pad 10




***Note: Container Storage Area in Building 69 does not include mezzanine.**

Figure 12
Container Storage at Technical Area (TA) 50, Building 69

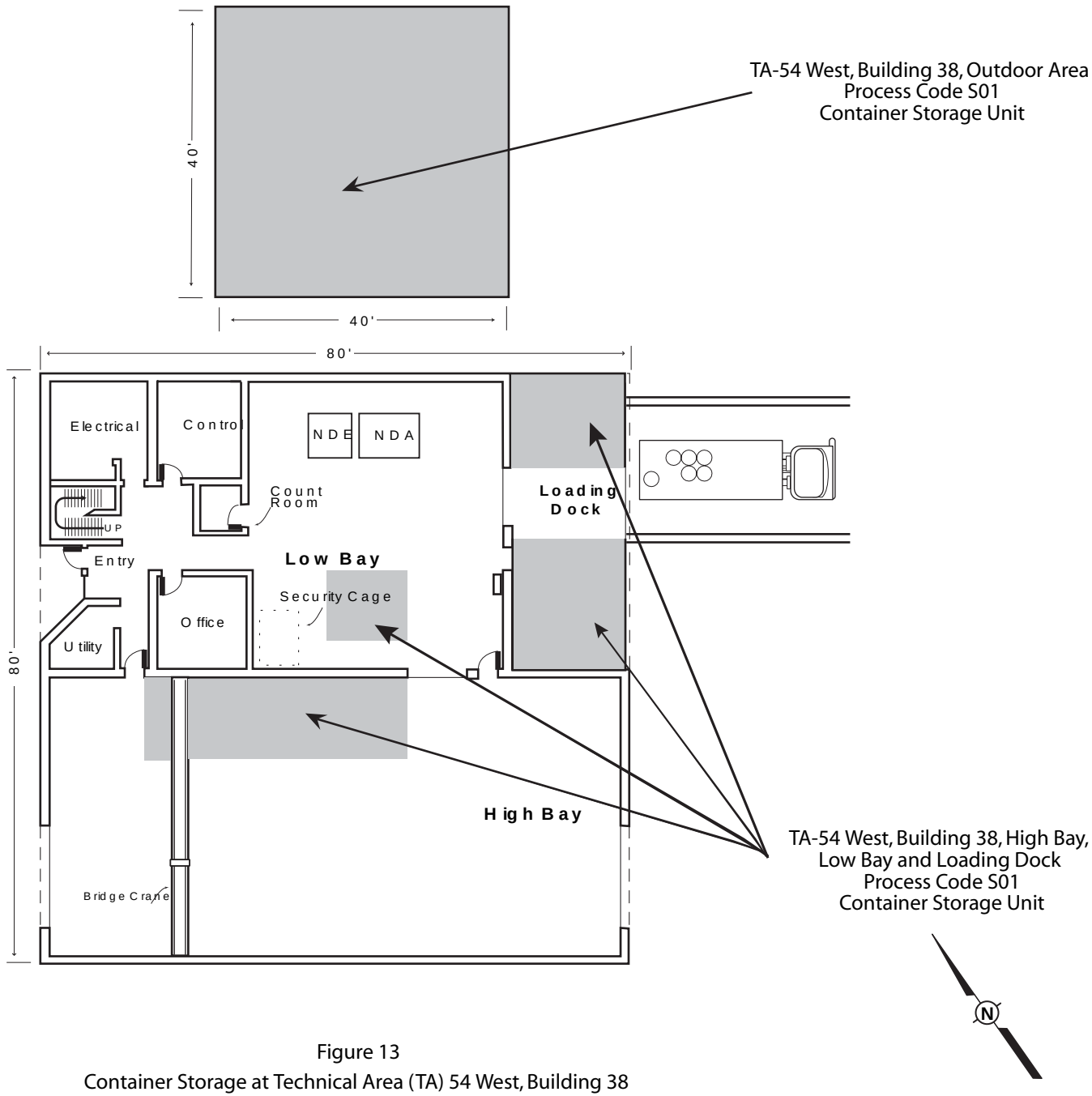



Figure 13
Container Storage at Technical Area (TA) 54 West, Building 38

# INSPECTION PLAN

## PERMIT ATTACHMENT B
## NM0890010515-1

INSPECTION PLAN
PERMIT ATTACHMENT B
NM 0890010515-1

## B.1 TA-50 MODULAR CONTAINER STORAGE BUILDINGS POTENTIAL PROBLEMS

The modular container storage area is routinely inspected for potential problems with safety and emergency equipment, security devices, containers, and container storage facilities. Potential problems are listed on an inspection checklist. Potential problems include containment failure, fire, explosion, exposure, and system leakage.

### B.1.1 Frequency and Content of Inspection

The modular container storage units are inspected weekly by visually inspecting containers for waste leakage and for corrosion.

### B.1.2 Remedial Action

Leaks from containers in the modular storage buildings will collect in the 500-gallon sump within the unit. In the case of small spills, vermiculite or other compatible absorbent is poured or placed over the spill area and once the liquid is absorbed, it is swept or shoveled into drums or other appropriate containers. For spills involving larger liquid volumes, free liquids are pumped into drums and absorbent is used as above to remove the remaining liquid. Once liquids are removed, the sump is cleaned using appropriate cleaning agents. All expended cleaning material ~~will be considered hazardous waste and handled accordingly~~that is hazardous waste will be handled accordingly.

In the case of exposure, remedial actions include treating the exposed personnel at the ~~ESH-2~~HSR-2 Medical Facility and determining the cause of exposure by observation, Laboratory records, and/or sampling.

Similar to hazardous waste releases, the extent of damage from fire and explosion is assessed by visual observations, Laboratory records, and if necessary, sampling. Equipment damaged or contaminated by fire, explosion, or spills is identified by visual inspections and sampling, if necessary.

## B.2 TA-50 ROOM 117 STORAGE AREA POTENTIAL PROBLEMS

The Room 117 storage area is routinely inspected for potential problems with safety and emergency equipment, security devices, containers, container storage facilities, and loading and unloading facilities. Inspections of specific equipment and systems are conducted with a frequency appropriate to current operations, as well as appropriate to the equipment and systems. Potential problems include containment failure, fire, explosion, exposure, equipment deterioration or malfunction, and leaks from the incinerator.

B.2.1 Frequency and Content of Inspection

The storage area, building and emergency equipment are inspected according to the schedule in Table B-1.

B.2.2 Remedial Action

If any defects, deterioration, damage or hazards are discovered during inspection, appropriate remedial actions including repairs, maintenance and replacement will be completed as soon as practical to preclude further damage and reduce the need for emergency repairs. If a hazard is found imminent or if a hazardous situation already exists, remedial action will be initiated immediately and the unit not reused until corrective action is complete. Any remedial action taken due to an inspection will be noted on the operating log.

Remedial actions in the case of containment failure, fire, explosion, or exposure are identical to the measures at the TA-50 modular container storage area. See Section B.1.2 above.

B.2.3 Inspection Logs

General inspections are conducted by the operating group according to checklists associated with the operating log. Results of the inspection (Attachment B-1-), the inspector's name~~ and title~~, and date and time of inspection are recorded on the inspection log sheet. A copy is sent for records to ~~ESH-19~~the Solid Waste Regulatory Compliance Group (SWRC) and kept for at least three years after all remedial action is complete. The waste storage room will be inspected using Figures B-5 and B-6.

## B.3 TA-54, AREA L WASTE TRANSFER, PACKAGING AND CONTAINER STORAGE FACILITIES AND TREATMENT TANKS

### B.3.1 Potential Problems

Area L is routinely inspected for potential problems with safety and emergency equipment, security devices, containers, container storage facilities, treatment tanks, and loading and unloading facilities. Potential problems are listed on the weekly inspection checklist. The container storage areas will be inspected weekly. The treatment tanks will be inspected weekly and after storms to detect any leakage, free board, damage, overflow, or cracks. In addition, the interior of each treatment tank will be inspected yearly for thin spots or excessive corrosion. Prior to the interior inspection, the treatment tank will be emptied by pumping into drums following standard procedures. After it is empty, any liner is removed and the tank must be thoroughly cleaned and checked to be sure it is free of flammable, toxic and corrosive vapors and materials before entry. If this requires steaming, the tank must be cooled after cleaning and the rinse water checked to be sure it is essentially neutral. Any nearby operations considered hazardous to tank entry are shut down. The atmosphere in the tank must be tested for the presence of combustible or toxic vapors and for oxygen content. A sufficient number of standby personnel must be present to give aid in case of trouble. Protective clothing or equipment may be required in some instances. Potential problems at Area L include containment failure, fire, explosion, and exposure.

### B.3.2 Frequency and Content of Inspection

Area L is inspected according to the schedule in Table B-1. In addition, the treatment tank's shell and liner will be inspected annually to ensure that the tanks walls and liner have not experienced damage due to corrosion or erosion. For the annual inspection, the tank KYNAR (@) lining will be tested for pinholes, cracks, or other failures using a Holiday Detector (@) spark test or equivalent. The Holiday Detector (@) works by sweeping an electrically charged brush over the liner surface. If a pinhole or crack is present, the liner no longer insulates the metal tank shell from the current, and a spark is produced, thus identifying the failed surface. The tank shell and liner wall thickness will also be acoustically analyzed annually to determine the extent of deterioration (ASME NDT Section IX). The acoustic analytic analysis utilizes the travel time or changes of wall thickness. Should the liner wall exhibit considerable (unexpected) thinning, the inspection frequency will be increased. The results of the annual inspection will be maintained in the permanent operating record.

Prior to the interior inspection, the treatment tank is emptied by discharging in the normal manner. After it is empty, the tank must be thoroughly cleaned and checked to be sure it is free of flammable, toxic, and corrosive vapors and materials before entry. If this requires steaming, the tank must be cooled after cleaning and the rinse water checked to be sure it is essentially neutral. Any nearby operations considered hazardous to tank entry are shut down. Respiratory protection shall be used as necessary. Protective clothing or equipment may be required in some instances. A sufficient number of standby men must be present to give aid in case of trouble.

### B.3.3 Remedial Action

If any defects, deterioration, damage or hazards are discovered during inspection, appropriate remedial actions including repairs, maintenance and replacement will be completed as soon as practical to preclude further damage and reduce the need for emergency repairs. If a hazard is found imminent or if a hazardous

situation already exists, remedial action will be initiated immediately and the unit will be taken out of service until corrective action is complete. Any remedial action taken due to an inspection will be noted on the operating log.

In the case of failure of run-on or run-off control measures, the ~~CST-5 Group Leader~~Waste Facility Management (FWO-WFM) facility manager or his qualified designee will assess the damage by visual observations and sampling and monitoring to determine the type and extent of contamination. Mitigation procedures and repairs, such as sandbagging and building berms, will be instituted immediately. All such action will be entered in the site log.

Remedial action in the case of drum or container failure, fire, explosion, or exposure is handled as described for the TA-50 modular storage unit. If there has been a release to the environment~~In addition~~, soil and water samples will be taken down gradient from the release. At the transfer, packaging and storage facilities in Area L, releases from drum or container failure collect in sumps as well as berms.

If leakage, corrosion, overflow or any other damage is detected in the treatment tanks, the contents will be pumped into a drum or another treatment tank. At least 33 empty drums are always available to hold the maximum amount of liquid in a treatment tank in the unlikely event that the tank is completely full and the contents cannot be pumped into another treatment tank. The portable pumps used for emptying the tank are the same pumps used to draw down the tanks and have adequate capacity to fill 55-gallon drums. The pumps and hose used are compatible with the hazardous wastes they handle and are decontaminated after use by flushing with water. The wash water is handled as hazardous waste. The pumps are located at TA-54, Area L.

### B.3.4 Inspection Logs

Each inspection is conducted by the operating groups according to the checklist in the inspection log (Attachment B-1). Results of the inspection, the inspector's name~~ and title~~, and date and time of inspection are recorded on the inspection log sheet. A copy is sent to ~~ESH-19~~SWRC for records and kept for at least three years after the completion of all remedial action.

## B.5 PREPAREDNESS AND PREVENTION REQUIREMENTS

### B.5.1 Internal Communication/Alarm Equipment

The following internal communication/alarm equipment, or the functional equivalent, is available at LANL to provide emergency instruction for rapid evacuation and to initiate emergency response:

- Centrex telephone system
- Medium range radio nets (30-60 miles)
- Limited range radio nets (3-10-miles)
- Telephone/radio paging

- Two-way hand held radios
- Emergency central alarm system
- Mechanical central alarm system

Because this equipment is laboratory-wide, it allows all personnel to contact Emergency Managers in all areas of the laboratory. All hazardous and/or mixed waste handling personnel have immediate access to internal alarms or emergency communication devices. Communication/alarm equipment available at TA-50 and TA-54 can be found in Appendix D-1.

~~The trailer at Area L is equipped with a telephone. A radio-equipped vehicle is available for use at Area L. In addition, Area L is equipped with an alarm system and intercom to area G for evacuation. These are the nearest communication sources for use in the case of an emergency. Because of the proximity of the modular storage units to other TA-50 facilities and because only contained waste is handled at these facilities, individual emergency equipment is not required.~~

~~Personnel working at the Indoor and Outdoor CSAs at TA-50-69 have access to three telephones and two fire alarm pull stations inside the building. The telephones have PA capabilities. Different alarms sound in case of a fire or an evacuation.~~

~~Personnel working at the TA-54-38 CSAs have access to three telephones, one emergency telephone, and four fire alarm pull boxes. The three telephones, located on the first floor of the building, have PA capabilities. The emergency telephone is located outside the main entrance. Different alarms sound in case of a fire or an evacuation.~~

~~A pole-mounted telephone for communication outside of TA-54, Area G, is located at TA-54-226. Public address (PA) telephones will be located at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pad 10. The PA system may be used locally to notify personnel of an emergency within TA-54, Area G. When handling waste in these container storage areas, personnel are equipped with cellular telephones and hand-held radios, which may be used to summon assistance in case of an emergency. Fire and heat detection alarm systems and fire alarm pull stations will be located inside TA-54-226, TA-54-229, TA-54-230, TA-54-231, and TA-54-232, and at Pad 10. Different alarms sound in case of a fire or an evacuation.~~

B.5.2 External Communication/Alarm Equipment

The Laboratory has established external communication capabilities with the Los Alamos Police Department and the Los Alamos Medical Center. The following external communication/alarm equipment, or the functional equivalent, is available at LANL:

- Centrex telephone system
- Private telephone lines (if Centrex fails)
- Medium range radio nets (30-60 miles)

- Limited range radio nets (3-10 miles)
- Two national Warning System (NAWAS) stations
- Direct lines from Emergency Operations Centers to KRSN (local radio station)
- Local cable television
- A Community Alert Network

B.5.3 Emergency Equipment

A list of emergency equipment available at LANL, including types of equipment, locations, and contact phone numbers is shown in Permit Attachment D.

Emergency vehicles are inspected quarterly, according to the schedule in Table B-1. Medical supplies include self-contained breathing apparatuses, wheel chairs, manual resuscitation, portable oxygen units, blankets, blood supplies, and medical kits.

B.5.4 Water for Fire Control

The Department of Energy (DOE) is responsible for overall water production, transmission, and storage for the Laboratory and Los Alamos County. Storage capacity is adequate to provide water for fire fighting purposes.

Hydrant flow tests and block valve inspections are performed annually. Pressure regulating valves are inspected and adjusted every 60 days. Flow rates for hydrants are specified by FSS-21, an experienced fire protection engineering staff, and are dependent upon site needs, including size of building and presence of sprinkler systems.

B.6 AISLE SPACE REQUIREMENTS

Aisle space between waste containers at all container storage areas is inspected weekly to insure it is adequate to provide access for inspection purposes, and movement of personnel, containers, and equipment.

There are no ramps provided for fork lifts or drum handling equipment at the TA-50 modular container storage area. Drums are placed in the container storage using drum slings or hydraulically powered drum tongs on a forklift.

Aisles between rows of drums at the Area L transfer, packaging and storage facilities are maintained at a minimum width of two feet to permit access for inspection and handling.~~ Much of the bermed or curbed areas are ramped to facilitate access of forklifts and drum handling equipment.~~

When waste volumes necessitate aisle spacing at the TA-50-69 Outdoor CSA; and the CSAs at TA-54-38, a minimum aisle space of 26 inches is maintained to permit access for inspection and handling. The limited number of containers in the TA-50-69 Indoor CSA does not require aisle spaces. Containers are placed in the storage areas either manually or with hoists, cranes, forklifts, or dollies.A minimum aisle space of 28

inches will be maintained between rows of containers at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Storage Pad 10. In addition, 44-inch-wide emergency egress aisles will be located at every 100 feet of dome length. Curbed storage dome areas will be ramped at the entrance to each dome to facilitate access of forklifts and drum handling equipment.

## B.7 TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, AND PAD 10 STORAGE AREAS

### B.7.1 Potential Problems

The container storage areas (CSA) located at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pad 10 will be routinely inspected for various items, including integrity of containers and self-containment systems as well as conditions of safety and emergency equipment, security devices, and loading/unloading areas. Potential problems may include leaks, containment failure, and equipment deterioration or malfunction. Identified problems will be recorded in Part II of the Inspection Record Form (IRF). The IRF may be revised, as needed.

### B.7.2 Frequency and Content of Inspection

CSAs and associated equipment located at TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, and Pad 10 will be inspected in accordance with the schedule in Table B-1. Items to be inspected daily include structural integrity of containers, condition of secondary containment structures, appropriate aisle space and stacking, and conditions of loading/unloading areas. Items to be inspected weekly include conditions of safety equipment, security devices, emergency equipment, and pallets. Inspectors will use the IRF when conducting daily and weekly inspections.

### B.7.3 Preventive and Remedial Action

If any defects, deterioration, damage, or potential hazards are discovered during inspections, appropriate corrective measures (e.g., transfer of waste from a defective container to an appropriate container in good condition) will be completed promptly to minimize further damage and prevent the need for emergency response. If a hazardous condition is imminent or has already occurred, remedial actions (including cleanup, repairs, maintenance, and/or replacement) will be completed immediately. Any remedial action taken as a result of an inspection will be recorded in Part II of the IRF.

In the case of small spills, compatible sorbent is poured over the spill area and once the liquid is sorbed, it is swept or shoveled into appropriate containers. For spills involving larger liquid volumes, free liquids are pumped or HEPA vacuumed into appropriate containers and sorbent is used as above to remove the remaining liquid. Once liquids are removed, the spill area is cleaned using appropriate cleaning agents. All expended cleaning material will be sampled to determine appropriate waste management procedures.

In the case of exposure, remedial actions include treating exposed personnel at the ~~ESH-2~~HSR-2 central medical facility and determining the cause of exposure by observation, Laboratory records, and/or sampling.

The extent of damage from fire and/or explosion is assessed by visual observations, Laboratory records, and, if necessary, sampling.

Equipment damaged or contaminated by fire, explosion, or spills is identified by visual inspections and, if necessary, sampling.

## B.8 TA-50-69 INDOOR AND OUTDOOR STORAGE AREAS

### B.8.1 Potential Problems

The TA-50-69 Indoor and Outdoor CSAs are routinely inspected for various items, including integrity of containers and self-containment systems as well as conditions of safety and emergency equipment, security devices, and loading/unloading areas. Potential problems include leaks, containment failure, and equipment deterioration or malfunction. Identified problems are recorded in Part II of the IRF.

### B.8.2 Frequency and Content of Inspection

The TA-50-69 Indoor and Outdoor CSAs and associated equipment are inspected in accordance with the schedule in Table B-1. Items inspected daily include structural integrity of containers, condition of self-containment systems, appropriate aisle space and stacking, and conditions of loading/unloading areas. Items inspected weekly include conditions of safety equipment, security devices, emergency equipment, and pallets. Inspectors will use the IRF when conducting daily and weekly inspections.

### B.8.3 Preventive and Remedial Action

If any defects, deterioration, damage, or potential hazards are discovered during inspections, appropriate corrective measures (e.g., transfer of waste from a defective container to an appropriate container in good condition) will be completed promptly to minimize further damage and prevent the need for emergency response. If a hazardous condition is imminent or has already occurred, remedial actions (including cleanup, repairs, maintenance, and/or replacement) will be completed immediately. Any remedial action taken as a result of an inspection will be recorded in Part II of the IRF.

In the case of small spills, compatible sorbent is poured over the spill area and once the liquid is sorbed, it is swept or shoveled into appropriate containers. For spills involving larger liquid volumes, free liquids are pumped or HEPA vacuumed into appropriate containers and sorbent is used as above to remove the remaining liquid. Once liquids are removed, the spill area is cleaned using appropriate cleaning agents. All expended cleaning material will be sampled to determine appropriate waste management procedures.

In the case of failure of runoff control measures (e.g., self-containment system failure) at the TA-50-69 Outdoor CSA, damage will be assessed by visual observations and sampling to determine the type and extent of contamination. Mitigation procedures (e.g., sandbagging, placing portable berms) will be instituted immediately.

In the case of exposure, remedial actions include treating exposed personnel at the ~~ESH-2~~HSR-2 central medical facility and determining the cause of exposure by observation, Laboratory records, and/or sampling.

The extent of damage from fire and/or explosion is assessed by visual observations, Laboratory records, and, if necessary, sampling.

Equipment damaged or contaminated by fire, explosion, or spills is identified by visual inspections and, if necessary, sampling.

B.8.4 Inspection Logs

Each inspection is conducted by the operating group responsible for the waste management unit and is recorded on the IRF. ~~The original r~~Records are maintained by the operating group in inspection logbooks for a minimum of three years. A copy of the IRF is sent weekly to ~~ESH-19~~SWRC and maintained at ~~ESH-19~~ SWRC for a minimum of three years.

B.9 TA-54-38 STORAGE AREAS

B.9.1 Potential Problems

The TA-54-38 CSAs are routinely inspected for various items, including integrity of containers and self-containment systems as well as conditions of safety and emergency equipment, security devices, and loading/unloading areas. Potential problems include leaks, containment failure, and equipment deterioration or malfunction. Identified problems are recorded in Part II of the IRF.

B.9.2 Frequency and Content of Inspection

The TA-54-38 CSAs and associated equipment are inspected in accordance with the schedule in Table B-1. Items inspected daily include structural integrity of containers, condition of self-containment systems, appropriate aisle space and stacking, and conditions of loading/unloading areas. Items inspected weekly include conditions of safety equipment, security devices, emergency equipment, and pallets. Inspectors will use the IRF when conducting daily and weekly inspections.

B.9.3 Preventive and Remedial Action

If any defects, deterioration, damage, or potential hazards are discovered during inspections, appropriate corrective measures (e.g., transfer of waste from a defective container to an appropriate container in good condition) will be completed promptly to minimize further damage and prevent the need for emergency response. If a hazardous condition is imminent or has already occurred, remedial actions (including cleanup, repairs, maintenance, and/or replacement) will be completed immediately. Any remedial action taken as a result of an inspection will be recorded in Part II of the IRF.

In the case of small spills, compatible sorbent is poured over the spill area and once the liquid is sorbed, it is swept or shoveled into appropriate containers. For spills involving larger liquid volumes, free liquids are pumped or HEPA vacuumed into appropriate containers and sorbent is used as above to remove the remaining liquid. Once liquids are removed, the spill area is cleaned using appropriate cleaning agents. All expended cleaning material will be sampled to determine appropriate waste management procedures.

In the case of failure of runoff control measures (e.g., self-containment system failure) at the TA-54-38 Outdoor CSA, damage will be assessed by visual observations and sampling to determine the type and extent of contamination. Mitigation procedures (e.g., sandbagging, placing portable berms) will be instituted immediately.

In the case of exposure, remedial actions include treating exposed personnel at the ~~ESH-2~~HSR-2 central medical facility and determining the cause of exposure by observation, Laboratory records, and/or sampling.

The extent of damage from fire and/or explosion is assessed by visual observations, Laboratory records, and, if necessary, sampling.

Equipment damaged or contaminated by fire, explosion, or spills is identified by visual inspections and, if necessary, sampling.

B.9.4 Inspection Logs

Each inspection is conducted by the operating group responsible for the waste management unit and is recorded on the IRF. ~~The original r~~Records are maintained by the operating group in inspection logbooks for a minimum of three years. A copy of the IRF is sent weekly to ~~ESH-19~~SWRC and maintained at ~~ESH-19~~ SWRC for a minimum of three years.

**TABLE B-1**
**INSPECTION SCHEDULE**

| | |
|---|---|
| MODULAR STORAGE UNITS | |
| Daily when conducting waste handling operations~~Daily when loading or unloading~~ | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, 13, 14, 18, 22, and 23 |
| Weekly | Inspection Record Form Boxes 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| CONCRETE CONTAINMENT STRUCTURES | |
| Daily when conducting waste handling operations~~Daily when loading or unloading~~ | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, and 18 |
| Weekly | Inspection Record Form Boxes 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| TA-50-37 STORAGE AREA | |
| Daily when conducting waste handling operations~~Daily when loading or unloading~~ | Inspection Record Form Boxes 7, 8, 22, 33, and 34 |
| Weekly | Inspection Record Form Boxes 9, 12, 13, 14, 15, 16, 20, 21, 22, 23, 26, and 32 |
| WASTE TRANSFER/STORAGE UNIT | |
| Daily when conducting waste handling operations~~Daily when loading or unloading~~ | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, and 18 |
| Weekly | Inspection Record Form Boxes 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| SOLID WASTE STORAGE AREA | |
| Daily when conducting waste handling operations~~Daily when loading or unloading~~ | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, and 18 |
| Weekly | Inspection Record Form Boxes 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| TA-54 AREA L WASTE TREATMENT/STORAGE TANKS | |
| Daily when conducting waste handling operations~~Daily when in use with hazardous waste~~ | Inspection Record Form Boxes 7, 8, 9, 10, 11, 12, and 18 |
| Weekly | Inspection Record Form Boxes 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32 |
| Annually | Special Report |

| | |
|---|---|
| After Storms | Special Report |
| EMERGENCY VEHICLES | |
| Quarterly | Special Report |
| FIRE CONTROL SYSTEM | |
| Annually | Special Report |
| TA-50-69 INDOOR AND OUTDOOR STORAGE AREAS | |
| Daily when conducting waste handling operations~~Daily for areas subject to spills and when new containers of waste are placed in the storage area~~ | IRF |
| Weekly | IRF |
| TA-54-38 STORAGE AREAS | |
| Daily when conducting waste handling operations ~~Daily for areas subject to spills and when new containers of waste are placed in the storage area~~ | IRF |
| Weekly | IRF |
| TA-54-226, TA-54-229, TA-54-230, TA-54-231, TA-54-232, AND PAD 10 STORAGE AREAS | |
| Daily when conducting waste handling operations~~Daily for areas subject to spills and when new containers of waste are placed in the storage area~~ | Inspection Record Form (IRF) |
| Weekly | IRF |

**ATTACHMENT B-1**

**Hazardous and Mixed Waste Facility**

**Inspection Record Form**

**HAZARDOUS AND MIXED WASTE FACILITY INSPECTION RECORD FORM**

| [1]FACILITY | [2] <90 DAY, GENERATOR STORAGE TREATMENT, STORAGE, DISPOSAL | [3]START DATE | [4]END DATE |
|---|---|---|---|
| [5] Containers Incinerator | Landfill Misc. Unit | Surface Impoundment Tank | Waste Pile UST |
| Thermal Treatment Land Treatment | Chem/Phys./Bio. Treat. Underground Inj. | | |

**PART I** - Enter condition of item inspected (OK or AR [action required]) in column for day inspected.

| ITEM | INSPECTED FOR | SUN | MON | TUE | WED | THU | FRI | SAT |
|---|---|---|---|---|---|---|---|---|
| [6]No use | Check if no waste is present | | | | | | | |
| [7](Un)loading area tanks/ containers | Spills and deterioration | | | | | | | |
| [8]Communication equipment (phone/radio/alarms) | Properly functioning | | | | | | | |
| [9]Tanks (all above ground portions) monitoring data | Discharge controls condition, leaks, level (6 freeboard), corrosion | | | | | | | |
| [10]Surface impoundments and containment | Freeboard (2 ft) sudden drops in level | | | | | | | |
| [11]Porta berm | Leaks condition | | | | | | | |
| [12]Eye wash safety showers | Leaks, functioning | | | | | | | |
| [13]Structural integrity of containers/tanks, valves, pipes, and flanges | Deterioration and leaks, corrosion, damage | | | | | | | |
| [14]Cover/lid of containers | Closed and secured | | | | | | | |
| [15]Warning signs | Posted and readable (bilingual) | | | | | | | |
| [16]Labels | "HAZARDOUS WASTE" present on all containers/tanks | | | | | | | |
| [17]Accumulation start date (<90 day storage) | Present on all containers, tanks, none exceed 90 days | | | | | | | |
| [18]Run on/off control (Area L, G, H, P) landfills, detonation pads | Integrity, erosion, ponding | | | | | | | |
| [19]Cover integrity (Area L, G, H, P) landfills | Erosion, subsidence water intrusion | | | | | | | |
| [20]Security | Condition, fence/gates/locks | | | | | | | |
| [21]Site lighting | Functions properly | | | | | | | |

**HAZARDOUS AND MIXED WASTE FACILITY INSPECTION RECORD FORM, Continued**

| ITEM | INSPECTED FOR | SUN | MON | TUE | WED | THU | FRI | SAT |
|---|---|---|---|---|---|---|---|---|
| [22]Containment structures | Integrity, standing water, vegetation, erosion | | | | | | | |
| [23]Management of containers | Segregated according to compatibility, 2 ft aisle space | | | | | | | |
| [24]Hose bibs, water supply | Leaks, functioning | | | | | | | |
| [25]Storage Shed (Area L) | Floor damage, liquid | | | | | | | |
| [26]Road/work surfaces | Cracks/potholes | | | | | | | |
| [27]Wind sock | Damage, functioning | | | | | | | |
| [28]Shaft cover and rail | Present, damage | | | | | | | |
| [29]Pallets | Integrity, damage | | | | | | | |
| [30]Treatment tanks | Proper operation, leaks | | | | | | | |
| [31]Refrigerator | Damaged containers | | | | | | | |
| [32]Spill control, fire, and emergency equipment | Present and in good working order | | | | | | | |
| [33]Incinerator emergency waste feed cutoff/alarms | Proper operating condition of all shutdown controls | | | | | | | |
| [34]Incinerator pumps valves, pipes, monitoring controls | Leaks/spills/tampering operating within specifications | | | | | | | |
| [35]Pressure vessels (S-site) | Deterioration and sand condition | | | | | | | |
| [36]Oil burn pans (S-site) | Deterioration and leaks | | | | | | | |
| [37]HE burn pads (S-site) | Deterioration, vegetation, sand condition, erosion | | | | | | | |
| [38]Radiation safety | Signs, monitoring ( ß $^{3}H$) | | | | | | | |
| [39]Date | Date of inspection | | | | | | | |
| [40]Time | Time of inspection | | | | | | | |
| [41]Inspector | Initials of inspector | | | | | | | |

**PART II** - For any AR (Action Required) in PART I above, describe below: action required, action taken, date of action. Attach additional sheets if necessary.

| [42]INSPECTOR | [43]GROUP | [44]DATE | [45]TIME |
|---|---|---|---|
| | | | |

**Part I**

1. FACILITY: Location information including Technical Area (TA), building, and room if applicable. Other location descriptors may be necessary. (e.g., TA-59-3-114 or TA-59-1-S). Dock)

2. <90 Day, Generator Storage should be checked if this location is intended for operation in accordance with generator requirements for storage of hazardous waste for less than 90 days.

   Treatment, Storage, Disposal should be checked if this location is listed in LANL's Hazardous Waste Facility Permit or Part A Application as a permitted or interim status TSD operation.

3. START DATE: The date of the first inspection for the week on that inspection sheet. (Usually the first working day of the week)

4. END DATE: The date of the last inspection for the week on that inspection sheet. (Usually the last working day of the week, however, if handling of hazardous waste occurs during the weekend inspections must be conducted.)

5. Check the appropriate box for the type of operation. Several boxes may be checked if necessary for those locations where inspections are combined on a single sheet. You must have prior approval from ~~ESH-19~~SWRC to combine inspections for more than one unit.

6. NO USE: May be checked if the unit did not store, treat, dispose, or otherwise handle hazardous waste for the day/week in question. The individual responsible for the inspection must then only complete boxes 39, 40, 41 for that day/week. If any hazardous waste is subsequently placed at the site for any reason, a full inspection must be performed immediately, and every working day thereafter until all waste is properly disposed of.

7. Loading and unloading areas must be inspected daily when in use for signs of damage or deterioration that may lead to an accident or spill. This includes asphalt pads, and areas where containers or tanks are handled or contents thereof are transferred.

8. Communication equipment: Includes all telephones, two-way radios, and alarms for the area being inspected. Consult with ~~ESH-19~~SWRC to determine what equipment is necessary at any particular location.

9. For tanks systems used for treatment or storage of hazardous waste, all above ground portions of the tank system, including any and all ancillary plumbing, must be inspected daily for signs of leaking, corrosion, deterioration, or improper operation. Tanks must be operated with a minimum freeboard of 6 inches. If the tank system includes discharge controls, overtopping controls, tank level alarms, or other monitoring equipment including leak detection equipment, all controls and relevant data must be checked to ensure they are operating properly and that operation is within design specifications for the system.

10. Surface impoundments must be operated with a minimum of 24 inches (60 cm) of freeboard from the top of the dike or berm to the surface of the waste therein. Inspectors must look for signs of leaks,

deterioration, and erosion of dikes and berms, and any associated plumbing or valves. These could include dying vegetation, guilies and sudden changes in level.

11. For those locations where inflatable "Porta-Berms" are used as secondary containment for tanks and containers of hazardous waste, inspectors must ensure that they are adequately inflated. Inspectors must also check for the presence of liquids in the containment unit which could indicate leaks or spills of hazardous waste. All monitoring and leak detection systems must also be checked.

12. Where required, eye-wash and safety showers must be inspected to ensure proper operating condition. Outside locations must be checked for freezing.

13. All containers and tanks must be checked for structural integrity, leaks, corrosion, or damage. This item includes checking condition of all construction materials, fixtures, seams, and auxiliary equipment. See 9 above.

14. All tanks and containers used for treating or storing hazardous waste must have the cover or lid securely in place. Containers are not considered to be closed unless the lid/cover is fastened in the manner the manufacturer originally intended.

15. Required signs must be readable and prominently posted. TSD facilities and <90 day storage areas must be equipped with bilingual (english/spanish) signs with the legend "DANGER UNAUTHORIZED PERSONNEL KEEP OUT." TSDs must be identified with signs that read "HAZARDOUS WASTE STORAGE AREA." <90 day storage areas must be identified with a sign with the legend "<90 DAY HAZARDOUS WASTE STORAGE AREA."

16. All containers and tanks must be labeled with the words "HAZARDOUS WASTE" and with other words that identify the contents. Mixed waste must also be labeled as "RADIOACTIVE."

17. All containers and tanks of hazardous waste in TSDs or <90 day storage areas must be marked with the accumulation start date. At TSDs, containers without dates must be dated when they arrive at the facility. At <90 day storage areas, containers must be marked with the accumulation start date at the time the container first receives any waste. For <90 day storage areas, no containers may exceed 90 days from accumulation start date to the time they are delivered to a permitted treatment, storage, or disposal unit. Transportation is by ~~CST-5~~FWO-SWO or its representatives only.

18. Landfills and detonation pads must have run-on and run-off controls inspected wherever present. Leachate collection systems, where present, must also be inspected. Items to be inspected for are proper operating condition, damage, erosion, contaminant migration, ponding, etc. Detonation pads must be inspected for unburned or undetonated explosives, ordnance, and debris.

19. Landfill covers must be inspected at least weekly and after storms for evidence of erosion, subsidence, and water intrusion.

20. Site security must be verified. Items such as fences, gates, locks, etc. should be checked for proper condition and adequacy.

21. Site lighting must be adequate to prevent accidents related to hazardous waste operations and for any other night operations that may take place within the boundaries of the hazardous waste unit.

22. Secondary containment structures for hazardous waste operations must be inspected to verify proper operating condition and to ensure adequate capacity. Structures must also be inspected for the presence of standing water or hazardous waste. For incinerators and certain operations at TA-55, secondary containment includes inspections of gloves and gloveboxes, hoods, and ventilation systems where necessary.

23. All hazardous waste containers holding materials that may be incompatible with any other materials at that location must be separated from those materials by dikes, berms, or other physical barriers to prevent a possible reaction. All containers of hazardous waste must be stored in a manner that ensures a minimum of 2 feet of aisle space between containers. Drums containing free liquids or those holding hazardous waste (excluding mixed wastes) may not be stacked over two high.

24. TSD facilities must have water at adequate volume and pressure for fire protection available. Hose bibs should be inspected for proper operating condition and adequate pressure. Outside water supplies must be checked for freezing.

25. The storage shed at Area L must be inspected for damage, free liquids that might indicate a leak, and chemical compatibility of materials stored therein.

26. Road and work surfaces, process floors, or other work surfaces at TSDs must be inspected for damage or erosion that could lead to a spill or accident, and for adequate secondary containment.

27. Wind socks, where required, at TSDs must be inspected to ensure that they are present and in proper operating condition.

28. Disposal shafts and shafts used for retrievable storage should have their covers securely in place and guard rails must be installed and in good condition.

29. Hazardous waste containers at TSDs and <90 day storage areas must be stored on pallets if they are stored outside without a roof.

30. Hazardous waste treatment tanks must be operated within design specifications and in accordance with SOPs and work plans. Tanks must be inspected for leaks or damage prior to operation.

31. Refrigerators used for storing hazardous waste, or samples thereof, must be inspected for proper operating condition and leaking or damaged containers.

32. Hazardous waste TSDs and <90 day storage areas must have adequate fire and spill control equipment for the types and volumes of waste present. Equipment must be present, in good working order, and appropriate for the material in question.

33. Incinerator waste feed cutoffs, emergency shutdown controls, and associated alarms or warning systems must be inspected for proper operating condition.

34. Incinerators, ancillary plumbing and equipment, and all monitoring controls must be inspected to ensure that they are in proper operating condition, and are being operated within design specifications. Inspectors must also look for evidence of leaks, corrosion, spills, or tampering.

35. Pressure vessels must be inspected for signs of deterioration or damage. Condition of the sand and loading must also be checked to ensure adequacy.

36. Oil burn pans must be inspected for deterioration, damage, or leaks. Inspectors must also inspect for unburned explosives and debris.

37. HE burn pads must be inspected for deterioration, damage, leaks, or vegetation that could catch fire. Condition of the sand must also be checked. Inspectors must also inspect for unburned explosives and debris.

38. Radioactive materials must be properly placarded, labeled, and stored within controlled areas. Containers should be monitored/swiped for outside contamination if suspected and all leaks or spills must be monitored to ensure adequate cleanup.

39. Inspectors will record the date of the current inspection.

40. Inspectors will record the time of the current inspection.

41. Inspectors will initial each daily inspection.

**Part II**

Inspectors must explain in detail, any deficiency noted above. Items to be included are: type of problem, any action taken, and the date/time of the action. Additional sheets may be attached as necessary.

42. Signature of individual performing inspection.
43. Organization responsible for this location.
44. Date record was signed and completed.
45. Time record was signed and completed.

# PERSONNEL TRAINING

## PERMIT ATTACHMENT C
## NM0890010515-1

# ATTACHMENT C
# PERSONNEL TRAINING

This attachment describes the personnel training program for Los Alamos National Laboratory (LANL) in accordance with the regulatory requirements of the New Mexico Administrative Code, Title 20, Chapter 4, Part 1 (20 NMAC 4.1), Subpart V, 264.16, "Personnel Training," revised November 1, 1995. The information presented outlines the personnel training program at LANL. The primary objective of the training program is to prepare persons to operate and maintain safely those areas managing hazardous and/or mixed waste in accordance with 20 NMAC 4.1, Subpart V, revised November 1, 1995. This training program applies to all employees of the U.S. Department of Energy, the University of California, and any of their subcontractors who work regularly at LANL and who handle or generate hazardous and/or mixed waste. The degree of training varies with the job duties. However, all personnel who may handle or generate hazardous and/or mixed waste receive an introduction to RCRA.

## C.1 HAZARDOUS AND MIXED WASTE MANAGEMENT/RESPONSIBILITIES

Waste management groups within the ~~Chemical Science and Technology~~Facility Waste Operations Division (~~CST~~FWO) and the ~~Hazardous and Solid Waste Group~~ Risk Reduction and Environmental Stewardship Division (~~ESH-19~~RRES) are responsible for most waste management activities at LANL. Waste management activities associated with high-explosive waste treatment are handled by the Engineering Sciences and Applications Division (ESA) and the Dynamic Experimentation Division (DX). The Nuclear Materials Technology Division (NMT) is responsible for waste management activities at Technical Area 55. With the noted exceptions, ~~CST~~FWO waste management groups are responsible for all day-to-day operational aspects of waste management. ~~ESH-19 is responsible for providing waste management regulatory guidance to CST personnel and to waste generators at LANL.~~

Other LANL groups and various support personnel assist in waste management activities and provide support to RRES~~ESH-19~~ and ~~CST~~FWO Divisions. Laboratory-contracted support services (e.g., KBR-Shaw-LATA [KSL]) ~~Johnson Controls World Services Inc. (JCI)~~ provide~~s~~ trained personnel to assist CST in waste-handling activities. Personnel in the Health Physics Operations Group~~ (ESH-1)~~, Occupational Medicine Group~~ (ESH-2)~~, Industrial Hygiene and Safety Group ~~(ESH-5)~~, Occurrence Investigation Group~~ (ESH-7)~~, Hazardous Materials Response Group (~~ESH-10~~S-10), Meteorology and Air Quality Group~~ (ESH-17)~~, Water Quality and Hydrology Group ~~(ESH-18)~~, ~~Environmental Assessments and Resource Evaluations~~Ecology Group~~ (ESH-20)~~, and personnel in the Solid Waste Regulatory Compliance Group (RRES-SWRC)~~ESH-19~~ are trained in their ~~specialities~~specialties to provide emergency response support. Protection Technology Los Alamos (PTLA) is responsible for LANL security, traffic control, and site access control.

The Emergency Management and Response (EM&R) Office provides emergency planning and response at LANL and has the overall responsibility for LANL's Emergency Management Plan (EMP) training. The ~~Environment, Safety, and Health~~ Performance Surety (~~ESH~~PS) Division Training Group (~~ESH-13~~PS-13) is responsible for developing and delivering LANL-wide Environment, Safety, and Health (ES&H) training. Environmental courses are designed with substantial input from ~~ESH-19~~RRES-SWRC, the ~~CST~~FWO waste management groups, and others, as appropriate.

## C.2 TRAINING CONTENT, FREQUENCY, AND TECHNIQUES

The training program instituted at LANL includes a combination of LANL-wide courses (received internally or through external vendors and usually classroom-based), facility-specific training (developed and delivered within a particular facility), and on-the-job training (OJT) (performance-based courses that focus primarily on procedures performed by individual workers). Each of these types of training is described briefly in Sections C.2.1 through C.2.3. All LANL~~, JCI, and PTLA~~ and LANL contract employees will receive the appropriate level of training within six months of their date of hire or transfer. Personnel will not work in unsupervised positions until they successfully complete the appropriate level of training for their positions and responsibilities.

Records of LANL-wide training currently sponsored or administered by ~~ESH-13~~PS-13 are entered by that group into the Employee Development System (EDS), the official LANL training database. These records document that the required training has been successfully completed by the worker. Training records of former workers are kept for at least three years from the date last worked at the facility. It is required that records documenting successful completion of facility-specific, on-the-job, or externally provided training be entered into the EDS by sponsoring organizations. Group or section training personnel or document control custodians will maintain, at a minimum, hard copies of training records for currently employed workers until the facility closes.

Table C-1 summarizes the components of the LANL-wide training program as administered through ~~ESH-13~~PS-13. This table includes a listing of the relevant training courses, a summary of topics, and a designation of the relevant courses for each job category. Categories of workers summarized in Table C-1 include hazardous/mixed waste workers, managers and supervisors of hazardous/mixed waste workers, emergency responders, and uncontrolled area potential release site workers. Table C-2 summarizes the components of facility-specific training and OJT that workers must receive. Each training element was designed to ensure that every worker involved in hazardous and/or mixed waste operations is properly trained in procedures relevant to the positions in which they are employed. Tracking the completion of training is possible through the EDS training plans.

The responsibilities of the worker categories summarized in Table C-1 are presented herein. Hazardous/mixed waste workers are responsible for handling and/or managing hazardous/mixed wastes and assisting in spill and emergency response activities, as required. Managers and supervisors of hazardous/mixed waste workers are directly responsible for day-to-day operations related to waste management activities and ensuring that personnel safety and training requirements are met. Emergency responders are trained emergency response personnel (e.g., ~~ESH-10~~S-10) that respond to emergencies (e.g., spills, fires, explosions) involving hazardous and/or mixed wastes that provide support for emergency response activities. Uncontrolled area potential release site workers conduct investigations and remedial activities at potential release sites and are responsible for proper waste management from generation to disposal, including waste characterization, treatment, and storage.

Training materials of LANL-wide training courses are on file in the ES&H Training Center and are available for review by all hazardous/mixed waste management and handling personnel, emergency response personnel, and regulatory agencies. Course content will be reviewed annually and updated as required to remain current with RCRA regulations. Alternative forms of training (e.g., paper-based self-study courses, computer-based training) may be taken to meet specific training requirements. Such alternate forms of training must be approved by ~~ESH-13~~PS-13 personnel and

determined to be equivalent in content to more traditional classroom-based training courses. Files listing the requisite skills, education, and training for workers who handle hazardous and/or mixed waste and the duties and responsibilities for each job description, as well as the name of each worker filling a job description, are maintained, as required by 20 NMAC 4.1, Subpart V, 264.16(d)(2), revised November 1, 1995. This information is located in the EDS as well as maintained at the facility by the group or section document control custodian.

C.2.1 LANL-Wide Training

The RCRA Personnel Training course provides an overview of RCRA regulations and emphasizes compliance with the RCRA requirements that apply to job-related activities, such as the safe handling of hazardous and mixed waste. Program instructors are trained in hazardous and mixed waste management programs and procedures and in RCRA provisions. The course is designed to provide training that is appropriate for the worker's responsibilities. ~~ESH-13~~PS-13, with guidance from ~~ESH-19~~RRES-SWRC, provides an annual refresher of applicable RCRA requirements. Personnel who handle hazardous/mixed waste and/or clean up spills or releases of hazardous/mixed waste and the managers and supervisors of these workers receive instruction on appropriate topics listed in Table C-1. In addition, personnel responsible for requisitioning the transport, treatment, or storage of hazardous and/or mixed waste receive supplemental training, as necessary, as listed in Table C-1. Training is typically provided by LANL training instructors or by external vendors knowledgeable about a particular subject.

C.2.2 Facility-Specific Training

All waste-handling personnel will participate in facility-specific training at their work locations. Table C-2 addresses program requirements that ensure that hazardous and mixed waste management and handling personnel know the specific requirements for their facilities and are able to respond effectively to emergencies. Personnel will become familiar with emergency and monitoring equipment use, inspection, repair, and replacement at their facility. In addition, they will receive instruction on contingency plan contents and implementation (as they apply to their facility) including, but not limited to, communications or alarm systems, response to fires and explosions at their facility, and key parameters for automatic waste-feed cutoff systems and shutdown of facility operations.

C.2.3 On-the-Job Training

Performance-based OJT is developed in conformance with LANL standards. Supervisors or other experts who can evaluate worker proficiency provide training appropriate for the procedures required of each function-specific position. To become proficient in hazardous and/or mixed waste procedures, workers receive this performance-based training, as necessary.

OJT topics include implementing facility-specific procedures, maintaining operating records, fulfilling reporting requirements, and conducting inspections specific to the facility. Workers whose duties include packaging and transportation support receive training on packaging, labeling, recordkeeping, and waste segregation for transportation within their facility. Emergency responders receive facility-specific training regarding emergency response and shutdown procedures at the facility to which they are assigned.

C.2.4 Training Coordinator

The ~~ESH-13~~PS-13 Group Leader directs the LANL-wide ES&H training program. The Group Leader is trained in the operation of hazardous and mixed waste management facilities, waste management practices, and emergency procedures and is responsible for coordinating training courses. Line managers are responsible for ensuring that personnel under their supervision receive necessary training.

## C.3 EMERGENCY TRAINING

If called upon by the EM&R Office, additional non-LANL emergency response personnel (e.g., ~~JCI~~KSL, PTLA) may assist the LANL Emergency Manager at the scene of a hazardous or mixed waste emergency. These professionals are trained in their specialties (e.g., heavy equipment operation, hazardous material cleanups, traffic control, security). ~~JCI~~ LANL contract personnel are also trained in personal safety. At all times during an emergency, these workers are under the direct supervision of the Incident Commander in the Unified Command or the designated Crisis Manager, as appropriate. A more detailed discussion of emergency procedures, personnel, and equipment is provided in Permit Attachment D.

To ensure maximum protection of life and property and to mitigate the consequences of an emergency situation, facility personnel involved in waste handling and emergency response must be knowledgeable about appropriate building and operating area emergency procedures. These workers receive training in facility-specific emergency procedures or participate in the LANL-wide emergency training program. Group leaders and immediate supervisors are responsible for ensuring that education and training in facility-specific emergency procedures are provided to all personnel under their supervision. Training in facility-specific emergency procedures is given by the operating group. Periodic announced and unannounced emergency drills and exercises are used to familiarize workers with emergency procedures. Training is also provided to workers through prominent instructional displays and through presentations and discussions in safety meetings.

Each new or transferred worker is indoctrinated by an immediate supervisor regarding the general and specific emergency procedures related to the work area. The immediate supervisor also advises each worker of changes to any emergency procedures and provides an annual refresher of procedures affecting the work area. The organization that develops and delivers facility-specific training maintains these training records.

Specialized training is given to personnel assigned special functions or specific emergency duties. Emergency response personnel are required to attend courses on implementation of the RCRA contingency plan, spill response, and Occupational Safety and Health Administration (OSHA) emergency response provisions. The EM&R Office provides training related to implementing LANL's EMP. All waste management and handling personnel participate in a training program in which they are instructed in emergency procedures pertinent to their work areas. The operating group provides this site-specific instruction.

## C.4 IMPLEMENTATION OF TRAINING PROGRAMS

General Employee Training (GET), an ES&H orientation course, is given ~~on the first day of employment~~ to all new employees. GET is also required of contract workers and visitors who work on site at LANL for ten or more consecutive days. GET includes, but is not limited to, ES&H policy, OSHA rights and regulations, industrial safety, waste minimization, general radiation

protection, industrial hygiene, emergency management, and fire protection. Personnel who will handle or be associated with hazardous waste are required to take the hazard communications and waste generator training courses. All workers who will handle or be associated with mixed waste also receive courses in hazard communications and waste generator training as well as radiation worker protection. Workers will not work without direct supervision or at a new position until they have been trained.

The Waste Generation Overview training course provides hazardous and mixed waste generators with information needed to identify wastes that are subject to RCRA regulations in 20 NMAC 4.1, Subpart II, revised November 1, 1995. The training defines hazardous waste and hazardous constituents (including hazardous components in mixed waste) and addresses how to identify hazardous waste and hazardous constituents. A second course, Waste Documentation Forms, focuses on documenting characterized waste according to RCRA and LANL requirements. Both training courses inform hazardous and mixed waste generators of their responsibilities and requirements and supports the documentation of process knowledge, which generators may use to characterize hazardous and mixed waste. All workers who handle hazardous and/or mixed waste are required to have RCRA Personnel Training, and those who work at treatment, storage, or disposal units are required to have Hazardous Waste Operations and Emergency Response (HAZWOPER) Occasional Site Worker training.

All hazardous and mixed waste management and handling personnel must attend annual refresher courses. These courses are intended to update personnel on LANL procedures and changes in RCRA provisions and to provide them with an overview of their introductory training. Line managers and group leaders will ensure that personnel participate in the appropriate introductory and annual training courses.

**TABLE C-1**
**LOS ALAMOS NATIONAL LABORATORY-WIDE TRAINING PROGRAM**

| **COURSES**[a] | **Hazardous/Mixed Waste Worker** | **Manager/Supervisor of Hazardous/Mixed Waste Workers** | **Emergency Responder** | **Uncontrolled Area Potential Release Site Worker** |
|---|---|---|---|---|
| **Criticality Safety Training** (presents nuclear theory, criticality reactions, characteristics, exposure protection principles, and criticality prevention measures) | *[b] | * | * | * |
| **General Employee Training** (includes familiarization with standard operating safety guidelines) | X[c] | X | X | X |
| **Hazard Communication Introduction** (includes information on explosion/fire hazards, chemical burns, chemical compatibility, eye/skin hazards and protection, respiratory hazards and protection) | X | X | X | X |
| **HAZWOPER[d]: First Responder (Operations Level)** (provides an overview of hazardous materials emergency response including recognition and identification of hazardous materials and associated risks, required actions, and relationships with other emergency responders) | | | X | |
| **HAZWOPER: General Site Worker** (provides general information on hazardous waste operations and emergency response for general site workers engaged in corrective action, remediation, or decontamination and decommissioning activities) | | | | X |
| **HAZWOPER: Occasional Site Worker** (provides general information on hazardous waste operations and emergency response for occasional and regular site workers) | X | X | | |

**TABLE C-1**
**LOS ALAMOS NATIONAL LABORATORY-WIDE TRAINING PROGRAM**
**(continued)**

| **COURSES[a]** | **Hazardous/Mixed Waste Worker** | **Manager/Supervisor of Hazardous/Mixed Waste Workers** | **Emergency Responder** | **Uncontrolled Area Potential Release Site Worker** |
|---|---|---|---|---|
| **HAZWOPER: Refresher for General Site Workers** (provides general information on hazardous waste operations to general site workers) | | | | X |
| **HAZWOPER: Refresher for TSD[e] Workers** (provides general information on hazardous waste operations to TSD workers) | X | X | | |
| ~~**OSHA[f] Rights and Responsibilities** (provides general information on worker's rights in relation to OSHA)~~ | ~~X~~ | ~~X~~ | ~~X~~ | ~~X~~ |
| **RCRA[g] Personnel Training** (includes an overview of Code of Federal Regulations Title 40, Parts 260-265, 268; New Mexico Administrative Code, Title 20, Chapter 4, Part 1, revised November 1, 1995; Department of Transportation shipping regulations; internal and external protocol for facility inspections; operating equipment, communication systems, security systems; contingency plan; and emergency equipment use, inspection, and repair) | X | X | * | * |
| **RCRA Refresher Training** (includes regulatory and legislative updates, occurrence reports and lessons learned, audit findings, modification/review of the contingency plan; provides required retraining) | X | X | * | * |
| **Refresher General Employee Radiological Training** (provides refresher general radiological training) | ~~X~~* | ~~X~~* | ~~X~~* | ~~X~~* |
| **Radiological Worker I and II Training** (requires recertification every two years) | * | * | X | X |

**TABLE C-1**
**LOS ALAMOS NATIONAL LABORATORY-WIDE TRAINING PROGRAM**
**(continued)**

| COURSES[a] | Hazardous/Mixed Waste Worker | Manager/Supervisor of Hazardous/Mixed Waste Workers | Emergency Responder | Uncontrolled Area Potential Release Site Worker |
|---|---|---|---|---|
| **Refresher Radiological Worker I and II Training** (provides refresher radiological training) | * | * | X | X |
| **Waste Generation Overview** (includes waste management regulations and policies, definition of hazardous waste, waste minimization, cycle of waste management at Los Alamos National Laboratory, storage and disposal) | X | X | X | X |
| **Waste Management Coordinator Requirements** (provides training on waste management to coordinators) | * | * | | * |
| **Cardiopulmonary Resuscitation: Adult** (requires annual recertification) | * | * | * | * |
| **First Aid: Standard** (requires recertification every three years) | * | * | * | * |
| **Health Physics Checklist Indoctrination** (provides health physics information to new workers) | * | * | X | X |
| **HMPT[h] Training - General** (includes introduction to HMPT regulations, identification and segregation of hazardous materials, packaging, placarding/labeling, manifesting/recordkeeping) | * | * | | |
| **Lockout/Tagout** (provides information on lockout/tagout procedures and policy) | * | * | * | * |
| **Respirators: Air-Purifying** (provides required annual retraining for operation and inspection of device, changing filters, donning and doffing) | * | * | X | * |

**TABLE C-1**
**LOS ALAMOS NATIONAL LABORATORY-WIDE TRAINING PROGRAM**
**(continued)**

| **COURSES**[a] | **Hazardous/Mixed Waste Worker** | **Manager/Supervisor of Hazardous/Mixed Waste Workers** | **Emergency Responder** | **Uncontrolled Area Potential Release Site Worker** |
|---|---|---|---|---|
| **Respirators: Self-Contained Breathing Apparatus** (provides required annual retraining for operation and inspection, changing compressed air bottles, donning and doffing, safety features, care and cleaning, fitting) | * | * | X | * |
| **Waste Documentation Forms** (includes use of Waste Profile Form, use of waste disposal forms, use of manifest system, as applicable) | * | * | | * |

[a] Additional training courses (not listed in this attachment) may also be taken by personnel depending on the types of hazards (e.g., chemical) associated with a particular job description.
[b] * indicates that a course may be required for specific job tasks and/or work areas.
[c] X indicates a required course.
[d] HAZWOPER = Hazardous waste operations and emergency response
[e] TSD = Treatment, storage, and disposal
[f] OSHA = Occupational Safety and Health Act
[g] RCRA = Resource Conservation and Recovery Act
[h] HMPT = Hazardous materials packaging and transportation

**TABLE C-2**
**FACILITY-SPECIFIC AND ON-THE-JOB**
**TRAINING FOR**
**HAZARDOUS AND MIXED WASTE HANDLING OPERATIONS**

The following categories of facilities will provide facility-specific training for all workers and on-the-job training on procedures directly applicable to an individual's work assignment:

- Treatment units
- Open burning and explosives detonation areas
- Container and tank storage areas
- Other categories, as necessary.

**Facility-specific training** will include the following topics:

- Supervised operation of the facility
- Emergency shutdown and evacuation procedures
- Accidental release and spill response procedures
- Familiarization with emergency equipment use, inspection, and repair
- Use of communication/alarm system
- Contingency plan training
- Operations manual specific to the facility
- Specialized equipment at the facility
- Information about the particular chemical and radioactive hazards present at the facility.

**On-the-job training** will consist of training individuals to be familiar with and use the standard operating procedures that apply to their jobs.

# CONTAINER MANAGEMENT
# PERMIT ATTACHMENT F
# NM0890010515-1

# ATTACHMENT F
# CONTAINER MANAGEMENT

## F.1 CONTAINER PACKAGING, SAMPLING and LABELING

### F.1.1 Container Packaging and Transport

When chemical substances are declared to be in excess, the originating group completes Waste Profile Form (WPF, see Permit Attachments A.2 and A.3) and sends the form to the ~~Chemical and Mixed Waste Management~~ Solid Waste Operations Group (~~CMWM~~FWO-SWO). The WPF provides waste characterization information for subsequent management of material. The WPF is reviewed for adequacy of information and assignation of segregation codes, Department of Transportation information, and Environmental Protection Agency (EPA) Hazardous Waste Numbers. When the WPF is approved, the waste generator submits a Chemical Waste Disposal Request (CWDR) to ~~CMWM~~FWO-SWO. The CWDR lists the chemical waste the generating group needs to dispose of, the quantity of the wastes, and other pertinent information about the containers.

A uniform waste manifest is prepared for use when the waste is collected, packaged, and transported. All waste materials are packaged and transferred in accordance with DOT regulations and the Laboratory's On-Site Transportation Manual.

~~CST-5~~FWO-SWO personnel review the waste disposal request for adequacy of information and assignation of segregation codes, DOT information, and EPA codes. ~~CST-5~~FWO-SWO personnel then use the waste disposal request to complete the shipping papers for waste collection. Also, ~~CST-5~~FWO-SWO use the waste disposal request to create a second record as part of the Hazardous Waste Database. ~~CST-5~~FWO-SWO personnel visit the generating site to package the waste and transport it to TA-54, Area L. All waste is transferred in accordance with DOT regulations and Laboratory procedures.

Containers will be visually inspected for integrity before transport. If the container is unacceptable, it will be repackaged or overpacked prior to transport. The wastes are transported by vehicles ranging from half-ton to trucks to semitrailers with maximum capacities of up to 80,000 pounds.

Upon arrival at a hazardous or mixed waste management unit, the wastes are unloaded from the transport vehicle and placed into appropriate storage areas. Lab pack waste will be temporary placed at the packaging building for labeling or compositing. Drums and Tuff-Tanks will be placed on either the sampling pad or storage pad for sampling and labeling.

### F.1.2 Drum Labeling, Recording, and Sampling System

Each unique package of waste is labeled with the following information:

—chemical segregation group number

—unique record number

—date of generation ~~(if this information is not already on the container, the date from the CWDR form is used)~~

—either an EPA hazardous waste label or the words "hazardous waste."

—DOT Hazard class and shipping information, as appropriate

— EPA hazardous waste code(s) or the hazardous constituent(s)

This information and the data from the CWDR are entered into a chemical and mixed waste database. All records are then maintained in accordance with the requirements of this permit.

Sampling of the waste is then performed as outlined in Permit Attachment A. The sampling pad at TA-54, Area L, is restricted to one compatibility group of chemicals at a time (e.g., organics). The group allowed at the time will be posted on the pad. This ensures that incompatible chemicals do not react in the containment basin of the pad. Before a new compatibility group of chemicals is placed on the pad, the containment area will be cleaned. For this reason, the main sampling pad will generally be used for organic waste and acid/base waste will be sampled at the appropriate storage cell.

After all packages are labeled and/or sampled, they are moved to one of the Laboratory's storage areas. The permitted areas are defined in Permit Module III.

## F.2 STORAGE AREA PRACTICES

### F.2.1 Storage Areas at TA-50 and TA-54

The Laboratory has the following storage areas that are the subject of this permit: ~~two~~ modular storage units and the main storage pad at TA-54, Area L; the modular storage unit at TA-50, the storage room; the TA-50-69 indoor and outdoor storage units ~~(two total)~~; and the TA-54-38 storage units ~~(four total)~~; and TA-54-226, -229, -230, -231, -232, and Pad 10 at TA-54, Area G. The usage of each of these units is discussed below.

#### F.2.1.1 Modular Storage Units, TA-54, Area L (TA-54-68 and -69 and -70)

The primary usage of the modular units will be for the storage of lab pack waste, particularly those in fiberboard containers. After labeling, the lab packs are placed directly in the appropriate storage cell. Each modular unit has two or three cells allowing single chemical family group to be stored in each cell at any one time~~a maximum of six chemical family groups to be stored at any one time~~. However, more than one cell may be used for the same chemical type~~However, multiple cells may be used for the same chemical family, such as two cells containing organic waste~~. Each cell will be labeled as to the chemical family stored there. If at any time the cell designation changes, such as from organic to reactive, the cell will first be cleaned to ensure that no hazardous waste constituent residues~~organic residues~~ remain that would create an incompatibility problem during a spill.

#### F.2.1.2 Storage Pad at TA-54, Area L (TA-54-32)

Material stored on the storage pad at TA-54, Area L, will generally be placed there after labeling and sampling. This may not be the case for acids and bases where the storage cell is also used as the sampling

pad. The pad is divided into six cells allowing the storage of six ~~families of chemicals~~chemical family groups. However, more than one cell may be used for the same chemical type. All cells will be labeled as to which chemical type is stored there. If at any time it is necessary to change the designation of a cell, it will first be cleaned to remove any residues that might produce an unfavorable reaction with the new chemical type.

F.2.1.3 Modular Storage Unit at TA-50 (TA-50-114)

The modular storage units at TA-50 will be used primarily to store acid and base wastes. Each cell will be labeled acid or base to indicate the type of waste stored there. If at any time the designation of a cell needs to be changed, the cell will first be cleaned to ensure that incompatible residues have been removed.~~ All waste stored here will have been labeled and sampled at TA-54, Area L.~~

F.2.1.5 Storage Room at TA-50-37, Room 117

The storage room at TA-50-37 is divided into two areas, one for solids and one for liquids. The liquid side is further divided into two cells. Therefore, up to three chemical types may be stored at any one time. Cells will be labeled as to the chemical type stored there. If at any time the cell designation needs to be changed, the cell will be cleaned to remove any incompatible residues.

F.2.1.6 Storage Pads at TA-54, Area L (TA-54-36 and –58)

The primary activities at TA-54-36 and TA-54-58 will fall into two categories. The first is sorting, surveying, and decontaminating certain waste currently in storage and labeled "suspect mixed waste." All of the waste found to contain no radioactive component will be repackaged, shipped off-site, and disposed of at a permitted Hazardous Waste Treatment, Storage and Disposal Facility.

The second is typically associated with hazardous and mixed waste streams ~~directed at specific mixed waste streams~~ for which commercial treatment and/or disposal is currently available. These ~~mixed~~ waste streams will be staged, inspected, sampled, and analyzed to provide complete hazardous waste and radiological characterization. When these steps are completed, the ~~mixed~~ waste streams will be profiled into the commercial facilities and shipped for ultimate treatment and/or disposal.

The activities at pads #58 and #36 consist of opening the drums, surveying the contents for radiological content, decontaminating the material as warranted, repackaging the material for either return to storage, shipment off-site for disposal, or disposal as low level waste at TA-54, Area G.

Pads #58 and #36 consist of two cement pads that are sloped toward a dry containment sump at the centerline of the rear wall to facilitate pumping of any captured liquids. The walls encircling the pads vary from approximately 4 inches in height at the drive over entrance to the pad to approximately eleven and one-half inches in height at the edge of the dry sump. The "dry sump" in each pad is to provide secondary containment only, has no discharge and must be pumped in the

event any liquid is captured. The pads are coated with an impermeable epoxy coating and are covered by a single, metal "pole barn."

Pad #36 has a temporary modular containment structure constructed over it. This structure provides containment and protection for the sampling and repackaging activities. The sides of the structure have been equipped with slanted sheets of plywood to direct the snow and rain away from the secondary containment. The modular containment structure is secured to the beams supporting the "pole barn" wit guy wires. Whenever this temporary structure is removed from Pad #36, it will be decontaminated according to the procedures of Permit Attachment E.3, E.3.3 and E.3.4: Closure Procedures and Decontamination and Decontamination Verification.

F.2.1.6 TA-54, Area G, Container Storage Areas (TA-54-226, -229, -230, -231, -232, and Pad 10)

The container storage areas (CSA) at TA-54, Area G (TA-54-226, -229, -230, -231, -232, and Pad 10) will be used for the storage of transuranic (TRU) mixed waste containers retrieved from under earthen cover at Pad 1 (TA-54-226) and Pads 2 and 4. The waste containers, including drums and fiberglass-reinforced plywood (FRP) boxes, will be segregated by LANL waste code prior to being placed in a storage dome. If any of the retrieved containers require overpacking or repackaging, the overpack or repackaging container will be labeled with barcodes that identify the original waste container. None of the wastes to be placed in the storage domes will be ignitable or reactive, no incompatible wastes will be mixed, and no wastes will be placed in containers that previously held incompatible wastes. TA-54-230 will be used to store drums and FRP crates that potentially contain liquids. The remaining CSAs will store only solid TRU mixed waste.

F.2.1.7 TA-50-69 Indoor and Outdoor Container Storage Areas

The indoor and outdoor storage areas associated with TA-50-69 are used for storage of TRU mixed waste, low-level mixed waste, and hazardous waste. Potentially incompatible wastes will be segregated on self-containment pallets at both the indoor and outdoor storage areas. Potential liquid-bearing waste containers will be stored on self-containment pallets at both the indoor and outdoor storage areas.

F.2.1.8 TA-54-38 Container Storage Areas

The four container storage areas at TA-54-38 are used for storage of TRU mixed waste and low-level mixed waste. Potentially incompatible wastes will be segregated on self-containment pallets at each storage area. Potential liquid-bearing waste containers will be stored on self-containment pallets at each storage area.

F.2.2 General Container Management Practices

All hazardous recyclable materials are stored as hazardous waste until such time as they are recycled. They are placed in the same segregated storage areas as the other waste.

Any bulging drums are handled in accordance with accepted practice and Laboratory procedures. Generally this means that personnel will follow such practices as slowly venting the drum as it is being opened and personnel wearing protective clothing and splash guards.

Any spills resulting from the transfer/storage of waste will be cleaned up in accordance with Attachment D.

Inspections will be conducted and aisle space will be maintained in accordance with Permit Attachment B.

Off-site shipments of waste will occur at either the given storage area directly or from the transport pad at TA-54, Area L. This will avoid unnecessary transport on Pajarito Road.

Repackaging of waste will generally occur adjacent to the storage area the waste was removed from. Other possible areas include the TA-54, Area L, sampling pad (TA-54-36~~31~~), and transport pad (TA-54-58)~~, and TA-54-59~~; and the TA-50-69 indoor storage area. Repackaging can range from overpacking a leaking container to off-site contractors repackaging the lab pack waste to meet incinerator specifications.

Permit Module III provides additional requirements all container storage areas.

**ATTACHMENT G**
**Authorized Wastes**
**NM0890010515-1**

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 0 | 0 | 1 | 100,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 0 | 2 | 320,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 3 | 35,000 | P | S | 0 | 1 | T | 0 | 1 | | | | ~~Reacted at TA-16 (see IIIc)~~ |
| ~~D~~ | ~~0~~ | ~~0~~ | ~~3~~ | ~~5,000~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | ~~T~~ | ~~0~~ | ~~1~~ | | | | ~~Lithium hydride only~~ |
| D | 0 | 0 | 4 | 2,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 5 | 60,000 | P | S | 0 | 1 | S | 0 | 2 | T | 0 | 1 | ~~Sand from cleanout of explosives burn pads~~ |
| D | 0 | 0 | 6 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 7 | 1,500 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 0 | 8 | 100,000 | P | S | 0 | 1 | T | 0 | 1 | | | | ~~May contain other metals (D004-D011)~~ |
| D | 0 | 0 | 9 | 15,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 1 | 0 | 7,500 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 1 | 1 | 7,500 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| D | 0 | 1 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 3 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 4 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 5 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 7 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 8 | 15,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 1 | 9 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 0 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 1 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 2 | 3,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 3 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 4 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 5 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 7 | 500 | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | 0 | 2 | 8 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 2 | 9 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 0 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 1 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 2 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 3 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 4 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 5 | 2,500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 6 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 7 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 8 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 3 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 4 | 0 | 2,500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 4 | 1 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 4 | 2 | 500 | P | S | 0 | 1 | | | | | | | |
| D | 0 | 4 | 3 | 500 | P | S | 0 | 1 | | | | | | | |
| | | | | END OF D DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F | 0 | 0 | 1 | 360,000 | P | S | 0 | 1 | S | 0 | 2 | | | | Solidified if treatment standards are met |
| F | 0 | 0 | 2 | 75,000 | P | S | 0 | 1 | S | 0 | 2 | | | | |
| F | 0 | 0 | 3 | 150,000 | P | S | 0 | 1 | S | 0 | 2 | | | | |
| F | 0 | 0 | 4 | 2,000 | P | S | 0 | 1 | | | | | | | |
| F | 0 | 0 | 5 | 100,000 | P | S | 0 | 1 | S | 0 | 2 | | | | |
| F | 0 | 0 | 6 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| F | 0 | 0 | 7 | 12,500 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| F | 0 | 0 | 8 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| F | 0 | 0 | 9 | 6,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| F | 0 | 2 | 7 | 700 | P | S | 0 | 1 | | | | | | | |
| F | 0 | 2 | 8 | 700 | P | S | 0 | 1 | | | | | | | |
| | | | | END OF F DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K | 0 | 4 | 4 | 20,000 | P | S | 0 | 1 | | | | | | | |
| K | 0 | 4 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| K | 0 | 4 | 5 | 2,000 | P | S | 0 | 1 | | | | | | | |
| | | | | END OF K DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | 0 | 0 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| ~~P~~ | ~~0~~ | ~~0~~ | ~~4~~ | ~~1,000~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | ~~T~~ | ~~0~~ | ~~3~~ | | | | |
| P | 0 | 0 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 0 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 3 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 1 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 1 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 1 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 2 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 2 | 9 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 3 | 0 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 3 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 4 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | 0 | 3 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 3 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 4 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 4 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 5 | 6 | 6,000 | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 5 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 6 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 0 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | 0 | 7 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 3 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 7 | 4 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 7 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 6 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 7 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 7 | 8 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 8 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 8 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 0 | 9 | 8 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 0 | 9 | 9 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 0 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 4 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 0 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 6 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| ~~P~~ | ~~1~~ | ~~0~~ | ~~7~~ | ~~500*~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | | | | | | | |
| P | 1 | 0 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 0 | 9 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P | 1 | 1 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 3 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 1 | 4 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 1 | 5 | 500* | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 1 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 1 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 2 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| P | 1 | 2 | 1 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| P | 1 | 2 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| P | 1 | 2 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| | | | | END OF P DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 0 | 0 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 0 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 1 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 2 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 2 | 1,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |
| U | 0 | 3 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 0 | 3 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 3 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 4 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 5 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 6 | 8 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 0 | 6 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 7 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 8 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 0 | 9 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 1 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 1 | 0 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 0 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 1 | 9 | 500 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 2 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 4 | 10,000 | P | S | 0 | 1 | T | 0 | 1 | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 1 | 3 | 5 | 500* | P | S | 0 | 1 | | | | T | 0 | 1 | |
| U | 1 | 3 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 3 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| ~~U~~ | ~~1~~ | ~~3~~ | ~~9~~ | ~~1,000~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | | | | | | | |
| U | 1 | 4 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 4 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 4 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 5 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 6 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 7 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 5 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 2 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 6 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 1 | 6 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 6 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 7 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 8 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 1 | 8 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 1 | 9 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 2 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 2 | 0 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 0 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 1 | 1,000 | P | S | 0 | 1 | | | | | | | |
| ~~U~~ | ~~2~~ | ~~1~~ | ~~2~~ | ~~500*~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | | | | | | | |
| U | 2 | 1 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 1 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 0 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 1 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 2 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 3 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 6 | 1,500 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 2 | 8 | 2,000 | P | S | 0 | 1 | | | | | | | |
| ~~U~~ | ~~2~~ | ~~3~~ | ~~0~~ | ~~500*~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | | | | | | | |
| ~~U~~ | ~~2~~ | ~~3~~ | ~~1~~ | ~~500*~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | | | | | | | |
| ~~U~~ | ~~2~~ | ~~3~~ | ~~2~~ | ~~500*~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | | | | | | | |
| ~~U~~ | ~~2~~ | ~~3~~ | ~~3~~ | ~~500*~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | | | | | | | |
| U | 2 | 3 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 3 | 5 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 3 | 6 | 500* | P | S | 0 | 1 | | | | | | | |

| A. EPA Hazardous Waste No. (enter code) | | | | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | (1) Process Codes (enter) | | | | | | | | | (2) Process Description [if a code is not entered in D(1)] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 2 | 3 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 3 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 3 | 9 | 1,000 | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 0 | 500* | P | S | 0 | 1 | | | | | | | |
| ~~U~~ | ~~2~~ | ~~4~~ | ~~2~~ | ~~500*~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | | | | | | | |
| U | 2 | 4 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 4 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 6 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 7 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 8 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 2 | 4 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| ~~U~~ | ~~3~~ | ~~2~~ | ~~6~~ | ~~500*~~ | ~~P~~ | ~~S~~ | ~~0~~ | ~~1~~ | | | | | | | |
| U | 3 | 5 | 3 | 500* | P | S | 0 | 1 | | | | | | | |
| U | 3 | 5 | 9 | 500* | P | S | 0 | 1 | | | | | | | |
| | | | | END OF U DESIGNATOR | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| **Technical Area 50, Building 69, Indoor and Outdoor Container Storage Area** | | | | | | | |
| 263 | D001 | 1,170 | K | S01 | | | Low-level Mixed Waste (LLMW) and Transuranic Mixed Waste (TRUMW) |
| 264 | D002 | 610 | K | S01 | | | LLMW and TRUMW |
| 265 | D003 | 60 | K | S01 | | | LLMW and TRUMW |
| 266 | D004 | 390 | K | S01 | | | LLMW and TRUMW |
| 267 | D005 | 360 | K | S01 | | | LLMW and TRUMW |
| 268 | D006 | 57,130 | K | S01 | | | LLMW and TRUMW |
| 269 | D007 | 59,610 | K | S01 | | | LLMW and TRUMW |
| 270 | D008 | 135,280 | K | S01 | | | LLMW and TRUMW |
| 271 | D009 | 4,120 | K | S01 | | | LLMW and TRUMW |
| 272 | D010 | 430 | K | S01 | | | LLMW and TRUMW |
| 273 | D011 | 480 | K | S01 | | | LLMW and TRUMW |
| 274 | D018 | 20 | K | S01 | | | LLMW and TRUMW |
| 275 | D019 | 450 | K | S01 | | | LLMW and TRUMW |
| 276 | D021 | 170 | K | S01 | | | LLMW and TRUMW |
| 277 | D022 | 100 | K | S01 | | | LLMW and TRUMW |
| 278 | D027 | 70 | K | S01 | | | LLMW and TRUMW |
| 279 | D028 | 18,250 | K | S01 | | | LLMW and TRUMW |
| 280 | D029 | 18,160 | K | S01 | | | LLMW and TRUMW |
| 281 | D030 | 410 | K | S01 | | | LLMW and TRUMW |
| 282 | D031 | 10 | K | S01 | | | LLMW and TRUMW |
| 283 | D032 | 260 | K | S01 | | | LLMW and TRUMW |
| 284 | D033 | 180 | K | S01 | | | LLMW and TRUMW |
| 285 | D034 | 90 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity Of Waste | C. Unit of Measure (enter code) | D. PROCESSES (1) PROCESS CODES (enter) | | | D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)) |
|---|---|---|---|---|---|---|---|
| 286 | D035 | 10 | K | S01 | | | LLMW and TRUMW |
| 287 | D036 | 30 | K | S01 | | | LLMW and TRUMW |
| 288 | D037 | 50 | K | S01 | | | LLMW and TRUMW |
| 289 | D038 | 10 | K | S01 | | | LLMW and TRUMW |
| 290 | D039 | 120 | K | S01 | | | LLMW and TRUMW |
| 291 | D040 | 280 | K | S01 | | | LLMW and TRUMW |
| 292 | D041 | 10 | K | S01 | | | LLMW and TRUMW |
| 293 | D042 | 90 | K | S01 | | | LLMW and TRUMW |
| 294 | D043 | 40 | K | S01 | | | LLMW and TRUMW |
| 295 | F001 | 35,050 | K | S01 | | | LLMW and TRUMW |
| 296 | F002 | 4,540 | K | S01 | | | LLMW and TRUMW |
| 297 | F003 | 2,300 | K | S01 | | | LLMW and TRUMW |
| 298 | F004 | 130 | K | S01 | | | LLMW and TRUMW |
| 299 | F005 | 20,430 | K | S01 | | | LLMW and TRUMW |
| 300 | P003 | 10 | K | S01 | | | LLMW and TRUMW |
| 301 | P012 | 10 | K | S01 | | | LLMW and TRUMW |
| 302 | P015 | 10 | K | S01 | | | LLMW and TRUMW |
| 303 | P029 | 10 | K | S01 | | | LLMW and TRUMW |
| 304 | P030 | 10 | K | S01 | | | LLMW and TRUMW |
| 305 | P031 | 10 | K | S01 | | | LLMW and TRUMW |
| 306 | P038 | 10 | K | S01 | | | LLMW and TRUMW |
| 307 | P056 | 20 | K | S01 | | | LLMW and TRUMW |
| 308 | P063 | 10 | K | S01 | | | LLMW and TRUMW |
| 309 | P068 | 10 | K | S01 | | | LLMW and TRUMW |
| 310 | P073 | 110 | K | S01 | | | LLMW and TRUMW |
| 311 | P076 | 10 | K | S01 | | | LLMW and TRUMW |
| 312 | P078 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity Of Waste | C. Unit of Measure (enter code) | D. PROCESSES (1) PROCESS CODES (enter) | | | D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1)) |
|---|---|---|---|---|---|---|---|
| 313 | P095 | 10 | K | S01 | | | LLMW and TRUMW |
| 314 | P096 | 10 | K | S01 | | | LLMW and TRUMW |
| 315 | P098 | 10 | K | S01 | | | LLMW and TRUMW |
| 316 | P106 | 10 | K | S01 | | | LLMW and TRUMW |
| 317 | P113 | 10 | K | S01 | | | LLMW and TRUMW |
| 318 | P120 | 10 | K | S01 | | | LLMW and TRUMW |
| 319 | U001 | 10 | K | S01 | | | LLMW and TRUMW |
| 320 | U002 | 10 | K | S01 | | | LLMW and TRUMW |
| 321 | U003 | 10 | K | S01 | | | LLMW and TRUMW |
| 322 | U012 | 10 | K | S01 | | | LLMW and TRUMW |
| 323 | U019 | 10 | K | S01 | | | LLMW and TRUMW |
| 324 | U022 | 10 | K | S01 | | | LLMW and TRUMW |
| 325 | U029 | 10 | K | S01 | | | LLMW and TRUMW |
| 326 | U031 | 10 | K | S01 | | | LLMW and TRUMW |
| 327 | U037 | 10 | K | S01 | | | LLMW and TRUMW |
| 328 | U044 | 10 | K | S01 | | | LLMW and TRUMW |
| 329 | U045 | 10 | K | S01 | | | LLMW and TRUMW |
| 330 | U052 | 10 | K | S01 | | | LLMW and TRUMW |
| 331 | U056 | 10 | K | S01 | | | LLMW and TRUMW |
| 332 | U057 | 10 | K | S01 | | | LLMW and TRUMW |
| 333 | U075 | 10 | K | S01 | | | LLMW and TRUMW |
| 334 | U077 | 10 | K | S01 | | | LLMW and TRUMW |
| 335 | U080 | 10 | K | S01 | | | LLMW and TRUMW |
| 336 | U108 | 10 | K | S01 | | | LLMW and TRUMW |
| 337 | U112 | 10 | K | S01 | | | LLMW and TRUMW |
| 338 | U115 | 10 | K | S01 | | | LLMW and TRUMW |
| 339 | U117 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 340 | U121 | 10 | K | S01 | | | LLMW and TRUMW |
| 341 | U122 | 10 | K | S01 | | | LLMW and TRUMW |
| 342 | U123 | 10 | K | S01 | | | LLMW and TRUMW |
| 343 | U131 | 10 | K | S01 | | | LLMW and TRUMW |
| 344 | U133 | 10 | K | S01 | | | LLMW and TRUMW |
| 345 | U134 | 10 | K | S01 | | | LLMW and TRUMW |
| 346 | U135 | 10 | K | S01 | | | LLMW and TRUMW |
| 347 | U140 | 10 | K | S01 | | | LLMW and TRUMW |
| 348 | U144 | 10 | K | S01 | | | LLMW and TRUMW |
| 349 | U145 | 10 | K | S01 | | | LLMW and TRUMW |
| 350 | U151 | 10 | K | S01 | | | LLMW and TRUMW |
| 351 | U154 | 10 | K | S01 | | | LLMW and TRUMW |
| 352 | U159 | 10 | K | S01 | | | LLMW and TRUMW |
| 353 | U160 | 10 | K | S01 | | | LLMW and TRUMW |
| 354 | U161 | 10 | K | S01 | | | LLMW and TRUMW |
| 355 | U165 | 10 | K | S01 | | | LLMW and TRUMW |
| 356 | U169 | 10 | K | S01 | | | LLMW and TRUMW |
| 357 | U188 | 10 | K | S01 | | | LLMW and TRUMW |
| 358 | U190 | 10 | K | S01 | | | LLMW and TRUMW |
| 359 | U196 | 10 | K | S01 | | | LLMW and TRUMW |
| 360 | U204 | 10 | K | S01 | | | LLMW and TRUMW |
| 361 | U210 | 10 | K | S01 | | | LLMW and TRUMW |
| 362 | U211 | 10 | K | S01 | | | LLMW and TRUMW |
| 363 | U213 | 10 | K | S01 | | | LLMW and TRUMW |
| 364 | U216 | 10 | K | S01 | | | LLMW and TRUMW |
| 365 | U218 | 10 | K | S01 | | | LLMW and TRUMW |
| 366 | U219 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 367 | U220 | 10 | K | S01 | | | LLMW and TRUMW |
| 368 | U225 | 10 | K | S01 | | | LLMW and TRUMW |
| 369 | U226 | 10 | K | S01 | | | LLMW and TRUMW |
| 370 | U227 | 10 | K | S01 | | | LLMW and TRUMW |
| 371 | U228 | 10 | K | S01 | | | LLMW and TRUMW |
| 372 | U239 | 10 | K | S01 | | | LLMW and TRUMW |
| 373 | U246 | 10 | K | S01 | | | LLMW and TRUMW |
| 374 | D001 | 25,360 | K | S01 | | | Hazardous Waste (HW) |
| 375 | D002 | 20,550 | K | S01 | | | HW |
| 376 | D003 | 1,200 | K | S01 | | | HW |
| 377 | D004 | 1,700 | K | S01 | | | HW |
| 378 | D005 | 1,900 | K | S01 | | | HW |
| 379 | D006 | 5,250 | K | S01 | | | HW |
| 380 | D007 | 9,400 | K | S01 | | | HW |
| 381 | D008 | 39,200 | K | S01 | | | HW |
| 382 | D009 | 16,400 | K | S01 | | | HW |
| 383 | D010 | 2,150 | K | S01 | | | HW |
| 384 | D011 | 11,700 | K | S01 | | | HW |
| 385 | D016 | 10 | K | S01 | | | HW |
| 386 | D017 | 20 | K | S01 | | | HW |
| 387 | D018 | 2,270 | K | S01 | | | HW |
| 388 | D019 | 40 | K | S01 | | | HW |
| 389 | D021 | 110 | K | S01 | | | HW |
| 390 | D022 | 1,450 | K | S01 | | | HW |
| 391 | D026 | 180 | K | S01 | | | HW |
| 392 | D027 | 80 | K | S01 | | | HW |
| 393 | D028 | 18,400 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 394 | D029 | 18,300 | K | S01 | | | HW |
| 395 | D030 | 730 | K | S01 | | | HW |
| 396 | D031 | 10 | K | S01 | | | HW |
| 397 | D032 | 300 | K | S01 | | | HW |
| 398 | D033 | 210 | K | S01 | | | HW |
| 399 | D034 | 120 | K | S01 | | | HW |
| 400 | D035 | 670 | K | S01 | | | HW |
| 401 | D036 | 50 | K | S01 | | | HW |
| 402 | D037 | 50 | K | S01 | | | HW |
| 403 | D038 | 580 | K | S01 | | | HW |
| 404 | D039 | 200 | K | S01 | | | HW |
| 405 | D040 | 570 | K | S01 | | | HW |
| 406 | D041 | 10 | K | S01 | | | HW |
| 407 | D042 | 100 | K | S01 | | | HW |
| 408 | D043 | 60 | K | S01 | | | HW |
| 409 | F001 | 51,170 | K | S01 | | | HW |
| 410 | F002 | 46,030 | K | S01 | | | HW |
| 411 | F003 | 12,770 | K | S01 | | | HW |
| 412 | F004 | 660 | K | S01 | | | HW |
| 413 | F005 | 61,650 | K | S01 | | | HW |
| 414 | F009 | 20 | K | S01 | | | HW |
| 415 | F027 | 20 | K | S01 | | | HW |
| 416 | P003 | 10 | K | S01 | | | HW |
| 417 | P006 | 10 | K | S01 | | | HW |
| 418 | P011 | 10 | K | S01 | | | HW |
| 419 | P012 | 10 | K | S01 | | | HW |
| 420 | P015 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 421 | P029 | 10 | K | S01 | | | HW |
| 422 | P030 | 10 | K | S01 | | | HW |
| 423 | P031 | 10 | K | S01 | | | HW |
| 424 | P033 | 10 | K | S01 | | | HW |
| 425 | P038 | 10 | K | S01 | | | HW |
| 426 | P043 | 10 | K | S01 | | | HW |
| 427 | P048 | 10 | K | S01 | | | HW |
| 428 | P056 | 1,030 | K | S01 | | | HW |
| 429 | P063 | 10 | K | S01 | | | HW |
| 430 | P068 | 10 | K | S01 | | | HW |
| 431 | P073 | 10 | K | S01 | | | HW |
| 432 | P076 | 60 | K | S01 | | | HW |
| 433 | P078 | 70 | K | S01 | | | HW |
| 434 | P092 | 10 | K | S01 | | | HW |
| 435 | P095 | 10 | K | S01 | | | HW |
| 436 | P096 | 10 | K | S01 | | | HW |
| 437 | P098 | 10 | K | S01 | | | HW |
| 438 | P104 | 10 | K | S01 | | | HW |
| 439 | P105 | 10 | K | S01 | | | HW |
| 440 | P106 | 10 | K | S01 | | | HW |
| 441 | P112 | 10 | K | S01 | | | HW |
| 442 | P113 | 10 | K | S01 | | | HW |
| 443 | P119 | 10 | K | S01 | | | HW |
| 444 | P120 | 10 | K | S01 | | | HW |
| 445 | U001 | 10 | K | S01 | | | HW |
| 446 | U002 | 310 | K | S01 | | | HW |
| 447 | U003 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity Of Waste | C. Unit of Measure (enter code) | D. PROCESSES | | | |
|---|---|---|---|---|---|---|---|
| | | | | (1) PROCESS CODES (enter) | | | (2) PROCESS DESCRIPTION (If a code is not entered in D(1)) |
| 448 | U007 | 10 | K | S01 | | | HW |
| 449 | U008 | 10 | K | S01 | | | HW |
| 450 | U009 | 10 | K | S01 | | | HW |
| 451 | U012 | 10 | K | S01 | | | HW |
| 452 | U018 | 10 | K | S01 | | | HW |
| 453 | U019 | 90 | K | S01 | | | HW |
| 454 | U022 | 10 | K | S01 | | | HW |
| 455 | U029 | 10 | K | S01 | | | HW |
| 456 | U031 | 10 | K | S01 | | | HW |
| 457 | U033 | 10 | K | S01 | | | HW |
| 458 | U037 | 10 | K | S01 | | | HW |
| 459 | U041 | 10 | K | S01 | | | HW |
| 460 | U044 | 10 | K | S01 | | | HW |
| 461 | U045 | 10 | K | S01 | | | HW |
| 462 | U052 | 10 | K | S01 | | | HW |
| 463 | U055 | 10 | K | S01 | | | HW |
| 464 | U056 | 10 | K | S01 | | | HW |
| 465 | U057 | 10 | K | S01 | | | HW |
| 466 | U067 | 10 | K | S01 | | | HW |
| 467 | U068 | 10 | K | S01 | | | HW |
| 468 | U070 | 20 | K | S01 | | | HW |
| 469 | U075 | 50 | K | S01 | | | HW |
| 470 | U077 | 10 | K | S01 | | | HW |
| 471 | U080 | 1,690 | K | S01 | | | HW |
| 472 | U085 | 10 | K | S01 | | | HW |
| 473 | U091 | 180 | K | S01 | | | HW |
| 474 | U092 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 475 | U103 | 10 | K | S01 | | | HW |
| 476 | U108 | 10 | K | S01 | | | HW |
| 477 | U109 | 10 | K | S01 | | | HW |
| 478 | U112 | 10 | K | S01 | | | HW |
| 479 | U115 | 10 | K | S01 | | | HW |
| 480 | U117 | 10 | K | S01 | | | HW |
| 481 | U121 | 10 | K | S01 | | | HW |
| 482 | U122 | 230 | K | S01 | | | HW |
| 483 | U123 | 10 | K | S01 | | | HW |
| 484 | U124 | 10 | K | S01 | | | HW |
| 485 | U131 | 10 | K | S01 | | | HW |
| 486 | U133 | 10 | K | S01 | | | HW |
| 487 | U134 | 180 | K | S01 | | | HW |
| 488 | U135 | 80 | K | S01 | | | HW |
| 489 | U136 | 10 | K | S01 | | | HW |
| 490 | U140 | 10 | K | S01 | | | HW |
| 491 | U144 | 10 | K | S01 | | | HW |
| 492 | U145 | 10 | K | S01 | | | HW |
| 493 | U151 | 240 | K | S01 | | | HW |
| 494 | U153 | 10 | K | S01 | | | HW |
| 495 | U154 | 40 | K | S01 | | | HW |
| 496 | U159 | 20 | K | S01 | | | HW |
| 497 | U160 | 10 | K | S01 | | | HW |
| 498 | U161 | 90 | K | S01 | | | HW |
| 499 | U162 | 10 | K | S01 | | | HW |
| 500 | U163 | 10 | K | S01 | | | HW |
| 501 | U165 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 502 | U167 | 10 | K | S01 | | | HW |
| 503 | U168 | 10 | K | S01 | | | HW |
| 504 | U169 | 10 | K | S01 | | | HW |
| 505 | U170 | 10 | K | S01 | | | HW |
| 506 | U188 | 10 | K | S01 | | | HW |
| 507 | U190 | 10 | K | S01 | | | HW |
| 508 | U196 | 10 | K | S01 | | | HW |
| 509 | U204 | 10 | K | S01 | | | HW |
| 510 | U210 | 100 | K | S01 | | | HW |
| 511 | U211 | 40 | K | S01 | | | HW |
| 512 | U213 | 10 | K | S01 | | | HW |
| 513 | U216 | 10 | K | S01 | | | HW |
| 514 | U218 | 10 | K | S01 | | | HW |
| 515 | U219 | 10 | K | S01 | | | HW |
| 516 | U220 | 100 | K | S01 | | | HW |
| 517 | U223 | 10 | K | S01 | | | HW |
| 518 | U225 | 10 | K | S01 | | | HW |
| 519 | U226 | 2,540 | K | S01 | | | HW |
| 520 | U227 | 10 | K | S01 | | | HW |
| 521 | U228 | 420 | K | S01 | | | HW |
| 522 | U239 | 170 | K | S01 | | | HW |
| 523 | U240 | 10 | K | S01 | | | HW |
| 524 | U246 | 10 | K | S01 | | | HW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| **Technical Area 54 West, Building 38, Container Storage Area** | | | | | | | |
| 525 | D001 | 4,210 | K | S01 | | | Low-level Mixed Waste (LLMW) and Transuranic Mixed Waste (TRUMW) |
| 526 | D002 | 2,180 | K | S01 | | | LLMW and TRUMW |
| 527 | D003 | 200 | K | S01 | | | LLMW and TRUMW |
| 528 | D004 | 1,400 | K | S01 | | | LLMW and TRUMW |
| 529 | D005 | 1,280 | K | S01 | | | LLMW and TRUMW |
| 530 | D006 | 205,660 | K | S01 | | | LLMW and TRUMW |
| 531 | D007 | 214,580 | K | S01 | | | LLMW and TRUMW |
| 532 | D008 | 487,000 | K | S01 | | | LLMW and TRUMW |
| 533 | D009 | 14,840 | K | S01 | | | LLMW and TRUMW |
| 534 | D010 | 1,540 | K | S01 | | | LLMW and TRUMW |
| 535 | D011 | 1,720 | K | S01 | | | LLMW and TRUMW |
| 536 | D018 | 80 | K | S01 | | | LLMW and TRUMW |
| 537 | D019 | 1,600 | K | S01 | | | LLMW and TRUMW |
| 538 | D021 | 610 | K | S01 | | | LLMW and TRUMW |
| 539 | D022 | 380 | K | S01 | | | LLMW and TRUMW |
| 540 | D027 | 230 | K | S01 | | | LLMW and TRUMW |
| 541 | D028 | 65,680 | K | S01 | | | LLMW and TRUMW |
| 542 | D029 | 65,350 | K | S01 | | | LLMW and TRUMW |
| 543 | D030 | 1,480 | K | S01 | | | LLMW and TRUMW |
| 544 | D031 | 20 | K | S01 | | | LLMW and TRUMW |
| 545 | D032 | 940 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 546 | D033 | 630 | K | S01 | | | LLMW and TRUMW |
| 547 | D034 | 330 | K | S01 | | | LLMW and TRUMW |
| 548 | D035 | 30 | K | S01 | | | LLMW and TRUMW |
| 549 | D036 | 100 | K | S01 | | | LLMW and TRUMW |
| 550 | D037 | 160 | K | S01 | | | LLMW and TRUMW |
| 551 | D038 | 20 | K | S01 | | | LLMW and TRUMW |
| 552 | D039 | 440 | K | S01 | | | LLMW and TRUMW |
| 553 | D040 | 990 | K | S01 | | | LLMW and TRUMW |
| 554 | D041 | 20 | K | S01 | | | LLMW and TRUMW |
| 555 | D042 | 320 | K | S01 | | | LLMW and TRUMW |
| 556 | D043 | 120 | K | S01 | | | LLMW and TRUMW |
| 557 | F001 | 126,190 | K | S01 | | | LLMW and TRUMW |
| 558 | F002 | 16,330 | K | S01 | | | LLMW and TRUMW |
| 559 | F003 | 8,270 | K | S01 | | | LLMW and TRUMW |
| 560 | F004 | 490 | K | S01 | | | LLMW and TRUMW |
| 561 | F005 | 73,530 | K | S01 | | | LLMW and TRUMW |
| 562 | P003 | 10 | K | S01 | | | LLMW and TRUMW |
| 563 | P012 | 10 | K | S01 | | | LLMW and TRUMW |
| 564 | P015 | 10 | K | S01 | | | LLMW and TRUMW |
| 565 | P029 | 10 | K | S01 | | | LLMW and TRUMW |
| 566 | P030 | 10 | K | S01 | | | LLMW and TRUMW |
| 567 | P031 | 10 | K | S01 | | | LLMW and TRUMW |
| 568 | P038 | 10 | K | S01 | | | LLMW and TRUMW |
| 569 | P056 | 80 | K | S01 | | | LLMW and TRUMW |
| 570 | P063 | 10 | K | S01 | | | LLMW and TRUMW |
| 571 | P068 | 10 | K | S01 | | | LLMW and TRUMW |
| 572 | P073 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 573 | P076 | 10 | K | S01 | | | LLMW and TRUMW |
| 574 | P078 | 10 | K | S01 | | | LLMW and TRUMW |
| 575 | P095 | 10 | K | S01 | | | LLMW and TRUMW |
| 576 | P096 | 10 | K | S01 | | | LLMW and TRUMW |
| 577 | P098 | 10 | K | S01 | | | LLMW and TRUMW |
| 578 | P106 | 10 | K | S01 | | | LLMW and TRUMW |
| 579 | P113 | 10 | K | S01 | | | LLMW and TRUMW |
| 580 | P120 | 10 | K | S01 | | | LLMW and TRUMW |
| 581 | U001 | 10 | K | S01 | | | LLMW and TRUMW |
| 582 | U002 | 10 | K | S01 | | | LLMW and TRUMW |
| 583 | U003 | 10 | K | S01 | | | LLMW and TRUMW |
| 584 | U012 | 10 | K | S01 | | | LLMW and TRUMW |
| 585 | U019 | 10 | K | S01 | | | LLMW and TRUMW |
| 586 | U022 | 10 | K | S01 | | | LLMW and TRUMW |
| 587 | U029 | 10 | K | S01 | | | LLMW and TRUMW |
| 588 | U031 | 10 | K | S01 | | | LLMW and TRUMW |
| 589 | U037 | 10 | K | S01 | | | LLMW and TRUMW |
| 590 | U044 | 10 | K | S01 | | | LLMW and TRUMW |
| 591 | U045 | 10 | K | S01 | | | LLMW and TRUMW |
| 592 | U052 | 10 | K | S01 | | | LLMW and TRUMW |
| 593 | U056 | 10 | K | S01 | | | LLMW and TRUMW |
| 594 | U057 | 10 | K | S01 | | | LLMW and TRUMW |
| 595 | U075 | 10 | K | S01 | | | LLMW and TRUMW |
| 596 | U077 | 10 | K | S01 | | | LLMW and TRUMW |
| 597 | U080 | 30 | K | S01 | | | LLMW and TRUMW |
| 598 | U108 | 10 | K | S01 | | | LLMW and TRUMW |
| 599 | U112 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 600 | U115 | 10 | K | S01 | | | LLMW and TRUMW |
| 601 | U117 | 10 | K | S01 | | | LLMW and TRUMW |
| 602 | U121 | 10 | K | S01 | | | LLMW and TRUMW |
| 603 | U122 | 10 | K | S01 | | | LLMW and TRUMW |
| 604 | U123 | 10 | K | S01 | | | LLMW and TRUMW |
| 605 | U131 | 10 | K | S01 | | | LLMW and TRUMW |
| 606 | U133 | 10 | K | S01 | | | LLMW and TRUMW |
| 607 | U134 | 10 | K | S01 | | | LLMW and TRUMW |
| 608 | U135 | 10 | K | S01 | | | LLMW and TRUMW |
| 609 | U140 | 10 | K | S01 | | | LLMW and TRUMW |
| 610 | U144 | 10 | K | S01 | | | LLMW and TRUMW |
| 611 | U145 | 10 | K | S01 | | | LLMW and TRUMW |
| 612 | U151 | 60 | K | S01 | | | LLMW and TRUMW |
| 613 | U154 | 20 | K | S01 | | | LLMW and TRUMW |
| 614 | U159 | 30 | K | S01 | | | LLMW and TRUMW |
| 615 | U160 | 10 | K | S01 | | | LLMW and TRUMW |
| 616 | U161 | 10 | K | S01 | | | LLMW and TRUMW |
| 617 | U165 | 10 | K | S01 | | | LLMW and TRUMW |
| 618 | U169 | 10 | K | S01 | | | LLMW and TRUMW |
| 619 | U188 | 10 | K | S01 | | | LLMW and TRUMW |
| 620 | U190 | 10 | K | S01 | | | LLMW and TRUMW |
| 621 | U196 | 10 | K | S01 | | | LLMW and TRUMW |
| 622 | U204 | 10 | K | S01 | | | LLMW and TRUMW |
| 623 | U210 | 10 | K | S01 | | | LLMW and TRUMW |
| 624 | U211 | 10 | K | S01 | | | LLMW and TRUMW |
| 625 | U213 | 10 | K | S01 | | | LLMW and TRUMW |
| 626 | U216 | 10 | K | S01 | | | LLMW and TRUMW |

| EPA I.D. Number *(Enter from Page 1)* | Secondary ID Number *(Enter from Page 1)* |
|---|---|
| NM0890010515 | |

**XIV. Description of Hazardous Wastes *(Continued)***

| *Line Number* | *A. EPA Hazardous Waste No. (enter code)* | *B. Estimated Annual Quantity Of Waste* | *C. Unit of Measure (enter code)* | *D. PROCESSES* | | | |
|---|---|---|---|---|---|---|---|
| | | | | *(1) PROCESS CODES (enter)* | | | *(2) PROCESS DESCRIPTION (If a code is not entered in D(1))* |
| 627 | U218 | 10 | K | S01 | | | LLMW and TRUMW |
| 628 | U219 | 10 | K | S01 | | | LLMW and TRUMW |
| 629 | U220 | 10 | K | S01 | | | LLMW and TRUMW |
| 630 | U225 | 10 | K | S01 | | | LLMW and TRUMW |
| 631 | U226 | 260 | K | S01 | | | LLMW and TRUMW |
| 632 | U227 | 10 | K | S01 | | | LLMW and TRUMW |
| 633 | U228 | 20 | K | S01 | | | LLMW and TRUMW |
| 634 | U239 | 20 | K | S01 | | | LLMW and TRUMW |
| 635 | U246 | 10 | K | S01 | | | LLMW and TRUMW |

EPA I.D. Number (enter from Page 1) NM0890010515

Secondary ID Number (enter from Page 1)

XIV. Description of Hazardous Wastes (Continued)

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | D. Processes | | | |
|---|---|---|---|---|---|---|---|
| | | | | (1) Process Codes (enter) | | | (2) Process Description (If a code is not entered in D[1]) |
| **Technical Area (TA) 54-226, -229, -230, -231, -232, and Pad 10** | | | | | | | |
| 1 | F001 | 1,301 | P | S01 | | | Transuranic Mixed Waste (TRUMW); A15 |
| 2 | F002 | | | | | | |
| 3 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 4 | D007 | 406,940 | P | S01 | | | TRUMW; A25 |
| 5 | D008 | | | | | | |
| 6 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 7 | D006 | 311,765 | P | S01 | | | TRUMW; A26 |
| 8 | D007 | | | | | | |
| 9 | D008 | | | | | | |
| 10 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 11 | D001 | 101,995 | P | S01 | | | TRUMW; A27 |
| 12 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 13 | D003 | 71,062 | P | S01 | | | TRUMW; A28 |
| 14 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 15 | D008 | 96,700 | P | S01 | | | TRUMW; A30 |
| 16 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 17 | D008 | 190,691 | P | S01 | | | TRUMW; A31 |
| 18 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 19 | D008 | 434,743 | P | S01 | | | TRUMW; A61 |
| 20 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 21 | D004 | 2,413,802 | P | S01 | | | TRUMW; A75 |
| 22 | D007 | | | | | | |
| 23 | D008 | | | | | | |
| 24 | D011 | | | | | | |
| 25 | F001 | | | | | | |
| 26 | F002 | | | | | | |

EPA I.D. Number (enter from Page 1) NM0890010515

Secondary ID Number (enter from Page 1)

XIV. Description of Hazardous Wastes (Continued)

| Line Number | A. EPA Hazardous Waste No. (enter code) | B. Estimated Annual Quantity of Waste | C. Unit of Measure (enter code) | D. Processes | | | |
|---|---|---|---|---|---|---|---|
| | | | | (1) Process Codes (enter) | | | (2) Process Description (If a code is not entered in D[1]) |
| 27 | F003 | | | | | | |
| 28 | F005 | | | | | | |
| 29 | THIS LINE INTENTIONALLY LEFT BLANK | | | | | | |
| 30 | D007 | 313,787 | P | S01 | | | TRUMW; A76 |
| 31 | F001 | | | | | | |
| 32 | F002 | | | | | | |
| 33 | F005 | | | | | | |