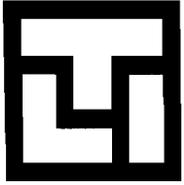


TAS 4



300 UNION BOULEVARD, SUITE 600, LAKEWOOD, CO 80228

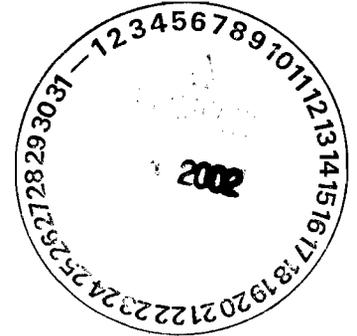
PHONE: (303) 763-7188

FAX: (303) 763-4896

TECHLAW INC.

June 4, 2002

Mr. James Bearzi
Mr. David Cobrain
State of New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East
Building One
Santa Fe, New Mexico 87505-6303



Reference: Work Assignment No. Y515, 06082.350; State of New Mexico Environment Department, Santa Fe, New Mexico; General Permit Support Contract; Research and Permitting Support for the Los Alamos National Laboratory, Permit Conditions and Schedule of Compliance for the Los Alamos National Laboratory Technical Area 54 Part B Permit Renewal Application, Task 3 Deliverable.

Dear Mr. Bearzi and Mr. Cobrain:

Enclosed please find the deliverable for the above-referenced work assignment. The deliverable consists of permit conditions and a schedule of compliance for the "Los Alamos National Laboratory (LANL) Technical Area 54 (TA-54) Part B Permit Renewal Application, Revision 2.0, dated December 2000. The TA-54 permit conditions were formatted and written to conform to the Technical Area 50 (TA-50) permit conditions, which reference the LANL General Permit. The schedules of compliance for the various sections of the TA-54 permit conditions were written to reference the TA-54 Permit Application directly, rather than the General Permit, which will include the appropriate portions of the Permit Application upon their revision and approval. However, the TA-50 permit used the term "chapter" in association with permit conditions (e.g, the General LANL Permit Chapter). The use of this term is not consistent with the TA-54 permit headings or "Modules" nor is it consistent with other NMED permits, such as WIPP and Triassic Park. Therefore, we omitted the use of the term "chapter" in the TA-54 permit conditions.

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Mr. James Bearzi and Mr. David Cobrain
June 4, 2002
Page 2

Several references are made to the LANL General Permit. However, an underlying assumption was made that the information referenced to and provided in the LANL General Permit has been reviewed and deemed adequate. Techlaw did not review the LANL General Permit in order to determine the adequacy of the referenced information and could only incorporate the reference as noted in the TA-54 Permit Application.

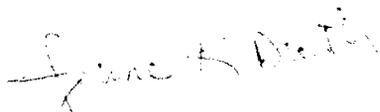
For convenience, references to sections and attachments of the TA-54 Permit Application have been made. However, as information from the Permit Application becomes integrated into the actual Permit, as attachments, these references will need to be modified.

As indicated in the technical review comments of the TA-54 Permit Application, submitted to you in February 2002 as part of task 3 of this work assignment, the TA-54 Permit Application was lacking in detail and was found to be severely deficient and, therefore, most of the technical comments were incorporated into the schedule of compliance. TechLaw remains concerned that the number and magnitude of the compliance issues may be difficult to justify to an administrative hearing officer, as well as the general public. In addition, the lack of information provided in the TA-54 Permit Application is evidenced by weak permit conditions. Where applicable, we have inserted comments where Notice of Deficiency (NOD) comments based upon the technical adequacy review were made (NMED comments dated April 16, 2002). The information provided in LANL's response to comments, once available, will need to be incorporated into the permit. It is also anticipated that if LANL adequately responds to the NODs, many of the issues addressed in the schedule of compliance may no longer be necessary.

The document is formatted in Word. The permit conditions were formatted in a module (Module II) format while the compliance schedule follows the format of an attachment to a module (Attachment A of Module II, General Facility Conditions).

The deliverable was emailed to Mr. Carl Will at Carl_Will@nmenv.state.nm.us on Tuesday, June 4, 2002. If you have any questions, please call me at (303) 763-7188.

Sincerely,



June K. Dreith
Program Manager
Enclosure

cc: Mr. Carl Will, NMED

Mr. James Bearzi and Mr. David Cobrain
June 4, 2002
Page 3

Mr. John Kieling, NMED
Ms. Paige Walton, TechLaw
Mr. B. Jordan, TechLaw Central Files

TASK 3-revised DELIVERABLE

**PERMIT CONDITIONS AND SCHEDULE OF COMPLIANCE FOR THE
LOS ALAMOS NATIONAL LABORATORY TECHNICAL AREA 54
PART B PERMIT RENEWAL APPLICATION**

**NMED-HSW Corrective Action Chapter of the
RCRA Permit Renewal for the Los Alamos National Laboratory**

Submitted by:

**TechLaw, Inc.
300 Union Boulevard, Suite 600
Lakewood, CO 80228**

Submitted to:

**Mr. David Cobrain
Mr. James Bearzi
State of New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East
Building One
Santa Fe, New Mexico 87505**

In response to:

Work Assignment No. Y513, 06082.600

June 3, 2002

MODULE I PERMIT CONDITIONS

I.1 EFFECT OF PERMIT

The Secretary of the New Mexico Environment Department (Secretary) issues this Permit to the United States Department of Energy (DOE), the Owner and co-operator of the Los Alamos National Laboratory (LANL) (Environmental Protection Agency [EPA] ID Number NM0890010515-1), and the University of California (UC), co-operator of LANL. This Permit authorizes LANL and UC (the Permittees) to accept and store hazardous waste at the Technical Area 54 (TA-54) in the Container Storage Areas (CSAs) specified in Permit Module IV, Table IV-1 below and establishes the general and specific standards for these activities, pursuant to the Hazardous Waste Act (Chapter 74, Article 4 NMSA 1978), and 20.4.100 NMAC (New Mexico Administrative Code) *et seq.* Issuance of this TA-54 Permit is conditional on issuance of or having an effective LANL General Permit (herein referred to as the General Permit) in place, as specified in Permit Condition I.2.1 below.

Compliance with this Permit during its term shall constitute compliance for purposes of enforcement with Subtitle C of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6901 *et seq.*, and/or the Hazardous Waste Act (HWA) (Chapter 74, Article 4 NMSA 1978), and/or their implementing regulations. Compliance with this permit shall not constitute a defense to any order issued or any action brought under Sections 74-4-10.E or 74-4-13 NMSA 1978; RCRA Sections 3004(u), 3004(v), 3008(a), 3008(h), 3013, 7112(a)(1), or 7003 (42 U.S.C. 6924(u), 6924(v), 6928(a) and (h), 6934, and 6973); Sections 104, 106(a), and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA - 42 U.S.C. 9601 *et seq.*; or any other law providing for protection of public health or the environment. This Permit does not convey any property rights of any sort or any exclusive privilege, nor authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local laws or regulation, pursuant to 20.4.1.900 NMAC, incorporating 40 CFR §270.4 and §270.30(g).

I.2 PERMIT ACTIONS

I.2.1 Term of Permit

This Permit shall be effective for ten (10) years from its effective date provided that the General Permit is also in effect. [20.4.1.900 NMAC (incorporating 40 CFR §270.50(a))]

I.2.2 Permit Modification, Suspension and Revocation

This Permit may be modified, suspended, or revoked for cause as specified in Section 74-4-4.2 of the HWA and 20.4.1.900 NMAC and 20.4.1.901 NMAC (incorporating 40 CFR §270.41 through §270.43). The filing of a request by the Permittees for a permit modification or the notification by the Permittees of planned changes or anticipated

noncompliance, shall not stay the applicability or enforceability of any permit condition. [20.4.1.900 NMAC (incorporating 40 CFR §270.30(f))]

I.2.3 Permit Renewal

The Permittees may renew this Permit by submitting an application for a new permit at least one hundred eighty (180) calendar days before the expiration date of this Permit in accordance with 20.4.1.901 NMAC, 20.4.1.900 NMAC (incorporating 40 CFR §270.10(h) and §270.30(b)) and Permit Condition I.2.5 below. When renewing this permit, an effective Application must be in place or renewed at the time of the permit. In reviewing any application for a permit renewal, the Secretary may consider improvements in the state of control and measurement technology and changes in applicable regulations. [20.4.1.900 NMAC (incorporating 40 CFR §270.10(h) and §270.30(b))]

I.2.4 Continuation of Expiring Permit

If the Permittees have submitted a timely and complete application for renewal of this Permit and the General Permit, in accordance with 20.4.1.900 NMAC (incorporating 40 CFR §270.10 and §270.13 through §270.28), this Permit shall remain in effect until the effective date of the new permit if, through no fault of the Permittees, the Secretary has not issued a new permit on or before the expiration date of this Permit. [20.4.1.900 NMAC (incorporating 40 CFR §270.51)]

I.2.5 Duty to Reapply

If the Permittees wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittees shall apply for and obtain a new permit. The Permittees shall submit a complete application for a new Permit at least 180 calendar days before the expiration date of this Permit, unless the Secretary has granted permission for a later date. The Secretary will not grant permission for applications to be submitted later than the expiration date of the existing Permit. [20.4.1.900 NMAC (incorporating 40 CFR §270.10(h) and § 270.30(b))]

When applying for a new permit, the Permittees shall ensure that an effective Application will be in place at the time of issuance.

MODULE II GENERAL OPERATING CONDITIONS

HIGHLIGHTS:

Carl – there are several NODs concerning this module. (General Comments 1-4 and Specific Comment #32)

This Module sets forth the standards that the Permittees shall meet for managing and storing hazardous and mixed waste in containers at the TA-54 Container Storage Areas (CSAs): Area G, Area L and TA-54 West. Each of these three CSAs is comprised of several Container Storage Units (CSUs). The Area G CSUs include storage domes, asphalt-covered areas, a storage shaft field, sheds, gas-cylinder storage, and pre-engineered structures (including TA-54-412 Decontamination and Volume Reduction System [DVRS] and TA-54-420 Characterization, High Activity Processing Storage [CHAPS]). The Area L CSUs include asphalt-covered areas, sheds, Storage Dome (TA-54-215), Canopy (TA-54-216), Shafts 36 and 37, a concrete containment structure (TA-54-32), a containment structure (TA-54-35), a sampling pad (TA-54-36), and a transportation pad (TA-54-58). The TA-54 West CSUs consist of an indoor storage area (TA-54-38) and an outdoor storage pad. These CSAs and specific CSUs are addressed in Module IV.

II.1 OPERATION AND MAINTENANCE OF THE CONTAINER STORAGE AREAS

The Permittees shall maintain and operate the TA-54 CSAs to minimize the possibility of a fire, explosion, or any unplanned, sudden or nonsudden release of hazardous waste or hazardous constituents to air, soil, ground water, or surface water that could threaten human health or the environment. [20.4.1.500 NMAC (incorporating 40 CFR §264.31)]

II.2 WASTE SOURCES

II.2.1 Authorized Wastes

Carl – this is an NOD issue. They should be specific about the wastes. (Specific Comments 22 and 23)

The Permittees shall receive and store only hazardous wastes and hazardous constituents with U.S. EPA Hazardous Waste Numbers and as listed in the General Permit.

II.2.2 Hazardous Waste Imports

Carl – this is from TA-50. Is it applicable here?

The Permittees shall not accept hazardous or mixed waste from a foreign source, as defined in the General Permit, Condition I.4. [20.4.1.900 NMAC]

II.2.3 Hazardous Waste From Off-site Sources

Carl – this is from TA-50. Is it applicable here?

The Permittees may receive hazardous waste from an off-site source as defined at Module 1.4 of the General Permit and in accordance with requirements and conditions specified in this Permit. [20.4.1.900 NMAC]

II.2.4 Liquid Hazardous Wastes Containing Polychlorinated Biphenyls (PCBs)

Carl – this is from TA-50. Is it applicable here? Area G has a PCB storage area.

The Permittees are prohibited from storing hazardous waste restricted from land disposal under 20.4.1.700 NMAC (incorporating 40 CFR Part 268, Subpart C) for more than one year from the date such waste was first placed into storage. [20.4.1.700 NMAC (incorporating 40 CFR §268.50)]

The Permittees are prohibited from storing liquid hazardous wastes containing polychlorinated biphenyls (PCB's) at concentrations greater than 50 parts per million (ppm) unless such storage is in compliance with the requirements of 40 CFR §761.65(b). The Permittees are prohibited from storing liquid hazardous wastes containing PCB's at concentrations greater than 50 ppm for more than one year from the date such waste was first placed into storage. If the Permittees handle PCBs at concentrations greater than or equal to 50 ppm, then the Permittees shall submit a copy of their EPA-issued Toxic Substance Control Act (TSCA) Permit for storage of PCBs to the Secretary before accepting the PCB waste, pursuant to 20.4.1.800 NMAC, incorporating 40 CFR §268.50. [20.4.1.700 NMAC (incorporating 40 CFR §268.50(f))]

II.3 GENERAL WASTE ANALYSIS

II.3.1 Waste Analysis Plan

Carl – the application that we reviewed did not include a WAP, although the table of contents indicated Attachment B was the WAP. It is not clear if there is an area-specific WAP for TA-54 or if the general LANL WAP is to be followed. This permit condition may need to be modified.

The Permittees shall follow the waste analysis procedures specified in the General Permit and Attachment B (*Waste Analysis Plan*) of the TA-54 Permit Application, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.13) and 20.4.1.800 NMAC (incorporating 40 CFR §268.7).

II.4 SECURITY

In order to prevent the unknowing entry and to minimize the possibility of unauthorized entry of persons into the TA-54 CSAs, the Permittees shall comply with the security provisions and procedures described in Permit Conditions II.4.1 and II.4.2 and Attachment G (*Container Management, Section G.1.2-Security and Access Control*) of the TA-54 Permit Application. [20.4.1.500 NMAC (incorporating 40 CFR §264.14)]

II.4.1 Barriers and Means to Control Entry

II.4.1.1. TA-54: The Permittees shall maintain in good repair the 8-foot chain link security fence that encompasses the TA-54 Complex as specified in the TA-54 Permit Application, Attachment G (*Container Management, Section G.1.2-Security and Access Control*). The security fence shall be used and maintained in order to control entry and prevent unauthorized personnel and livestock from gaining access to the facility. Access to TA-54 shall be only through the gates designated in the TA-54 Permit Application, Attachment G (*Container Management, Section G.1.2-Security and Access Control*). The TA-54 West access gate shall be upgraded to an electronic gate with a badge reader. [20.4.1.500 NMAC (incorporating 40 CFR §264.14(b)(2)(ii))]

II.4.1.2. Area G: The Permittees shall maintain in good repair the 8-foot chain link fence security fence that encompasses Area G within TA-54, as specified in the TA-54 Permit Application, Attachment G (*Container Management, Section G.3.1-Security and Access Control*).) The security fence shall be used and maintained in order to control entry and prevent unauthorized personnel and livestock from gaining access to the facility. A gate shall control access to the Area G CSAs, where only authorized and badged LANL personnel (residents) may enter. Any visitor shall be badged, signed in the visitor's logbook (located in the administrative area's access control building) and escorted by an authorized resident person.

II.4.1.3. Area L: The Permittees shall maintain in good repair the 8-foot chain link fence security fence that encompasses Area L within TA-54, as specified in the TA-54 Permit Application, Attachment G (*Container Management, Section G.2.1-Security and Access Control*).) The security fence shall be used and maintained in order to control entry and prevent unauthorized personnel and livestock from gaining access to the facility. A gate shall control access to the Area L CSAs, where only authorized and badged LANL personnel (residents) may enter. Any visitor shall be badged, signed in the visitor's logbook (located in the administrative area's access control building) and escorted by an authorized resident person.

II.4.1.4. TA-54 West: The Permittees shall maintain in good repair the 8-foot chain link fence security fence that encompasses TA-54 West within TA-54, as specified in the TA-54 Permit Application, Attachment G (*Container Management, Section G.4.1-Security and Access Control*).) The security fence shall be used and maintained in order to control entry and prevent unauthorized personnel and livestock from gaining access to the facility. Access to the TA-54 West shall be controlled by a gate located on the west side

of the area, which shall be upgraded to an electronically operated gate. Only authorized and badged LANL personnel (residents) may enter. Any visitor shall be badged, signed in the visitor's logbook and escorted by an authorized resident person.

II.4.2 Warning Signs

Warning signs in English and Spanish, for example: DANGER UNAUTHORIZED PERSONNEL KEEP OUT or DANGER – HAZARDOUS WASTE STORAGE AREA, shall be posted at all the gates and around the fence, and at the entrances at each hazardous and mixed waste management area in sufficient numbers to be visible from all angles of approach to TA-54. These bilingual signs must be legible from a distance of at least 25 feet from any approach to the perimeter fence, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.14(c)).

II.5 GENERAL INSPECTION REQUIREMENTS

The Permittees shall inspect the CSAs located at TA-54 following the inspection schedules and requirements specified in the General Permit, Appendix __ (*Inspection Plan*) in order to detect any container and/or equipment malfunctions and deteriorations, operator errors, and discharges. The inspections shall include monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment. [20.4.1.500 NMAC (incorporating 40 CFR §§264.15(a) and (b))]

The Permittees shall remedy any deterioration or malfunction discovered by an inspection, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.15(c)). Records of inspections shall be kept in the Operating Record for each CSA at TA-54 as required under the General Permit, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.15(d)).

II.6 PERSONNEL TRAINING

The Permittees shall follow the personnel training procedures specified in the General Permit, Appendix __ (*Personnel Training Requirements*) in order to train all persons involved in the management of hazardous waste in procedures relevant to the positions in which they are employed. [20.4.1.500 NMAC (incorporating 40 CFR §264.16 and 20.4.1.900 NMAC (incorporating 40 CFR §270.14(b)(12))]

II.7 SPECIAL PROVISIONS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

Carl – this is an NOD issue. (Specific Comments 10 and 40)

The Permittees shall comply with the requirements of 20.4.1.500 NMAC (incorporating 40 CFR §264.17(a), §264.176 and §264.177). The Permittees shall follow the procedures for handling ignitable, reactive, and incompatible wastes specified in this Permit,

Conditions IV.11.1 through 3 and Attachment G (*Container Management*) of the TA-54 Permit Application.

II.7.1 Precautions

The Permittees shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste and follow the procedures specified in TA-54 Permit Application, Attachment G, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.17(a), §264.176 and §264.177).

II.8 PREPAREDNESS AND PREVENTION

Carl – this is an NOD issue (Specific Comment #33)

The Permittees shall ensure that each CSA is designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water that could threaten human health or the environment. [20.4.1.500 NMAC (incorporating 40 CFR §264.31)]

The Permittees shall comply with the preparedness and prevention conditions listed below. [20.4.1.500 NMAC (incorporating 40 CFR §264.32 through §264.37)]

II.8.1 Required Equipment

At a minimum, the Permittees shall maintain at the TA-54 CSAs the equipment set forth in the TA-54 Permit Application Attachment E (*Contingency Plan*), and any general equipment requirements specified in the General Permit, Appendix __, (*Contingency Plan*). [20.4.1.500 NMAC (incorporating 40 CFR §264.32)]

II.8.2 Testing and Maintenance of Equipment

Carl – this is an NOD issue, related to mitigating the effects of power outages. (Specific Comment #37)

The Permittees shall test and maintain the equipment specified in the TA-54 Permit Application Attachment E (*Contingency Plan*), as necessary, to assure its proper operation in time of emergency. [20.4.1.500 NMAC (incorporating 40 CFR §264.33)]

II.8.3 Access to Communications or Alarm System

The Permittees shall maintain access to the communications or alarm system specified in the TA-54 Permit Application Attachment E (*Contingency Plan*). [20.4.1.500 NMAC (incorporating 40 CFR §264.34)]

II.8.4 Required Aisle Space

Carl – this is an NOD issue. (Specific Comments 5 and 34)

At a minimum, the Permittees shall maintain enough aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the CSA operations [20.4.1.500 NMAC (incorporating 40 CFR §264.35)] and as specified in TA-54 Permit Application, Section 2.

II.8.5 Arrangements with Local Authorities

The Permittees shall maintain the arrangements with local authorities requirements as specified in the General Permit, Appendix __ (*Contingency Plan*).

II.9 CONTINGENCY PLAN

II.9.1 Implementation of Plan

The Permittees shall immediately implement the *Contingency Plan* addressed in the General Permit, Appendix __ and TA-54 Permit Application, Attachment E whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents at the CSAs that could threaten human health or the environment. [20.4.1.500 NMAC (incorporating 40 CFR §264.51(b))]

II.9.2 Copies of the Plan

The Permittees shall maintain copies of the *Contingency Plan* (General Permit, Appendix __) and TA-54 specific requirements (TA-54 Permit Application, Attachment E) and all revisions and amendments to the Contingency Plan respective of operations at the TA-54 complex. The Permittees shall provide copies of the most current plan and revisions to the Secretary and all entities with which the Permittees have emergency Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs) required under 20.4.1.500 NMAC (incorporating 40 CFR §264.53).

II.9.3 Amendments to Plan

The Permittees shall review and immediately amend, if necessary, the *Contingency Plan* (General Permit, Appendix __) and the TA-54 Permit Application, Attachment E, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.54).

II.9.4 Emergency Coordinator

An Emergency Coordinator and an Alternate Emergency Coordinator, as specified in the *Contingency Plan* General Permit, Appendix __, shall be available at all times in case of an emergency. The Emergency Coordinator or Alternate Emergency Coordinator shall be thoroughly familiar with the *Contingency Plan* and shall have the authority to commit the resources needed to implement the *Contingency Plan*, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.55). In the event of an imminent or actual emergency, the Emergency Coordinator or Alternate Emergency Coordinator shall activate the internal emergency alarms, notify the appropriate State or local agencies with designated response roles, and implement the other requirements specified under 20.4.1.500 NMAC (incorporating 40 CFR §264.56), and as described in the *Contingency Plan* contained in General Permit, Appendix __.

MODULE III CLOSURE REQUIREMENTS

III.1 PERFORMANCE STANDARD

Carl – this is an NOD issue. It appears that not all of the areas are going to be clean-closed. Some will require post-closure care. However, the application was not clear on which units will be clean closed and which will undergo post-closure care. Also an adequate post-closure plan was not provided. This condition may require updating once more information is received from LANL. (General Comment #5 and Specific Comment #21)

The Permittees shall close the hazardous and mixed waste Container Storage Areas (CSAs) at TA-54 in accordance with their approved Closure Plan (TA-54 Permit Application, Attachment F), and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.110 through §264.115) and the requirements of 40 CFR §264.178. All hazardous and mixed waste, waste residues, and hazardous constituents shall be removed upon closure.

III.1.1 Partial Closure

Carl – this is an NOD issue. LANL is going to be doing phased closure (or partial closure) of the areas. However, the application did not provide enough information to determine which units will be closed while others are left operational, etc. (Specific Comment #25)

III.2 AMENDMENT TO CLOSURE PLAN

The Permittees shall amend the Closure Plan through a Permit modification whenever necessary, as required by 20.4.1.500 NMAC (incorporating 40 CFR § 264.112(c)).

III.3 NOTIFICATION OF CLOSURE

The Permittees shall notify the Secretary in writing at least forty-five (45) calendar days prior to the date on which they expect to begin closure of any unit with a CSA at TA-54, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.112(d)).

III.4 TIME ALLOWED FOR CLOSURE

Carl – this is an NOD issue related to the proposed closure schedule. (Specific Comments 11c, 11d and 26c)

Within ninety (90) calendar days after receiving the final volume of hazardous waste, the Permittees shall remove all hazardous and mixed waste from the CSA(s) to be closed and shall complete closure activities in accordance with the approved *Closure Plan* (TA-54

Permit Application, Attachment F), or as amended, and 20.4.1.500 NMAC (incorporating 40 CFR §264.113). The removed hazardous waste shall be treated and/or disposed of at a permitted treatment, storage or disposal facility.

III.5 DISPOSAL OR DECONTAMINATION OF EQUIPMENT, STRUCTURES, AND SOILS

Carl – this is a big NOD. (Specific Comments 11 and 21-31)

At closure, the Permittees shall decontaminate or dispose of all contaminated equipment, structures, soils and ground water, as specified in the TA-54 Permit Application, Attachment F (*Closure Plan*) and 20.4.1.500 NMAC (incorporating 40 CFR §264.114). By removing hazardous waste or hazardous constituents during closure activities, the Permittees may become a generator of hazardous waste, and shall handle that waste in accordance with all applicable requirements of 20.4.1.300 NMAC (incorporating 40 CFR §264.262).

III.6 CERTIFICATION OF CLOSURE

Within sixty (60) calendar days from the date of completion of closure of each TA-54 CSA, the Permittees shall provide to the Secretary a final closure report and written closure certification, signed by an independent professional engineer registered in New Mexico, that the CSA was closed in accordance with the specifications in the approved *Closure Plan* (TA-54 Permit Application, Attachment F), as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.115).

III.7 POST-CLOSURE

Carl – this is an NOD issue. MDA L is a regulated unit that will be subject to post-closure care requirements. Also NOD issues are the releases at MDAs L and G and the associated post-closure care plans (Specific Comments 15, 16, and 17)

MODULE IV STORAGE OF HAZARDOUS WASTE IN CONTAINERS

DESCRIPTION

Carl – this is an NOD issue. LANL did not address all of the CSUs at each CSA nor did they provide how many of each type of CSU would be at each CSA. (General Comments 1, 2 and 4 and Specific Comments 2-12 and 32-62)

This Module specifies the regulatory requirements that the Permittees shall follow when managing and storing hazardous, mixed low-level, and/or mixed TRU wastes at the TA-54 Container Storage Areas (CSAs). The Permittees are authorized to manage and store only those hazardous wastes listed in Permit Attachment H (*Authorized Wastes*). Specific TA-54 and process information for the management, storage and transfer of hazardous waste and a description of the CSAs are provided in the TA-54 Permit, Section 2 and Attachments F.1, F.2, F.3, and G, and in the General Permit, Appendix ____.

The Permittees are authorized to store containerized hazardous wastes in the following Container Storage Units (CSUs) within the three (3) CSA locations (Area G, Area L and TA-54 West) at TA-54:

Area G CSUs:

- Storage domes
- Asphalt-covered areas
- Storage shaft field
- Sheds
- Gas-cylinder storage
- Pre-engineered structures (including TA-54-412 Decontamination and Volume Reduction System [DVRS] and TA-54-420 Characterization, High Activity Processing Storage [CHAPS])

Area L CSUs:

- Asphalt-covered areas
- Sheds
- Storage Dome (TA-54-215)
- Canopy (TA-54-216)
- Shafts 36 and 37
- Concrete containment structure (TA-54-32)
- Containment structure (TA-54-35)
- Sampling pad (TA-54-36)
- Transportation pad (TA-54-58).

TA-54 West CSUs:

- Indoor storage area (TA-54-38: high bay, low bay and loading dock)

- Outdoor storage pad

Figure A-1 of the TA-54 Permit Application, Attachment A, shows the location of TA-54 within the LANL Facility. The locations of the CSAs within the TA-54 complex are shown in the TA-54 Permit Application, Attachment A, Figures A-2 through A-5.

The Permittees may store a maximum of 7,331,995 total gallons of solid and/or liquid hazardous, mixed low-level and/or mixed TRU waste at Area G, a maximum of 453,810 total gallons of solid and/or liquid of hazardous and/or mixed low-level waste at Area L, and a maximum of 11,660 total gallons of solid mixed low-level and/or mixed TRU waste. The acceptable containers that may be used to store these waste are provided in Permit Conditions VI.1.1.1 through VI.1.1.3.

The Permittees may store only those hazardous, mixed low-level, and/or mixed TRU wastes generated within the LANL Facility boundaries. The Permittees shall dispose of their hazardous and mixed low-level wastes off-site through licensed treatment, storage or disposal contractors; mixed TRU waste shall be disposed of at the U.S. Department of Energy Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico. The Permittees' primary hazardous waste generation activities are associated with research and development activities associated with the laboratory's mission.

IV.1 CONTAINER STORAGE AREAS (CSA)

The Permittees shall manage and store hazardous waste in the CSAs in accordance with this Permit, Attachment G of the TA-54 Permit Application and the following conditions:

IV.1.1 Storage Locations and Quantities

Carl – this is an NOD issue. (General Comments 1, 2, and 4 and Specific Comments 2, 3, 4, 5, 32 and 42-62)

The Permittees shall manage and store hazardous and mixed waste in containers in the designated TA-54 CSAs specified in Table IV-1 below. The Permittees shall not manage and/or store hazardous or mixed waste in excess of the maximum capacities for each individual CSA identified in Table IV-1. The Permittees shall manage and store hazardous and mixed waste in containers in the designated CSUs of each CSA as specified in Tables VI-2 through VI-4.

**TABLE IV-1
TA-54 Hazardous and Mixed Waste Container Storage Areas
Waste Types and Design Capacities**

CSA and Area	General Waste Types^a	Form of Waste	Maximum Volume of Waste	Number of CSUs
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Area G (63 acres)	Hazardous and Mixed Low-level	Solid, Liquid and Liquid- bearing	7,331,995 gallons (equivalent of 133,309 55- gallon drums)	<i>Insert No. when all CSUs have been provided by LANL (NOD issue)</i>
Area L (2.58 acres)	Hazardous and Mixed Low-level	Solid, Liquid and Liquid- bearing	453,810 gallons (equivalent of 8,251 55- gallon drums)	<i>Insert No. when all CSUs have been provided by LANL (NOD issue)</i>
TA-54 West (2 acres)	Mixed Low- level and mixed TRU	Solid Only	11,660 gallons (equivalent of 212 55-gallon drums)	<i>Insert No. when all CSUs have been provided by LANL (NOD issue)</i>
^a Non-RCRA regulated low-level and TRU waste may also be stored at CSA. Specific wastes to be stored at each CSU are provided in Table VI-2 through VI-4.				

The Permittees shall comply with the following conditions:

IV.1.1.1. Area G: The Permittees may store hazardous, mixed low-level and mixed TRU waste in the designated areas within the fence line of Area G: storage domes, asphalt-covered areas, storage shaft field, sheds, gas cylinder storage, and pre-engineered structures (TA-54-412 DVRS, DVRS Modular Containment Structure, and TA-54-420 CHAPS).

The Permittees shall store hazardous, mixed low-level and mixed TRU waste in containers specified in the TA-54 Permit Application, Section 2.1.2.2. These containers are limited to 30-, 55-, 83-, 85-, and 110-gallon steel, polyethylene and fiber drums, FRP boxes, SWBs, steel boxes, metal overpack boxes, wooden boxes, roll-off bins and ten-drum overpacks (TDOPs). Any other container, such as “various small containers” must be specifically identified and provided for approved use as outlined in the Module II, Attachment A Container Storage Area Schedule of Compliance, A.2.3.

Carl – The specific CSUs listed in Table IV-2 are inferred based upon the engineering drawings. This list may need to be modified, as not all of the units listed may be used for container storage and some units may not be listed. Also the design specifications are pretty vague. This is an NOD issue, where we have asked LANL to provide a list of each specific area that will be used for container storage, the specific types and numbers of containers and the volume of waste per CSU.

TABLE IV-2
Area G Hazardous and Mixed Waste Container Storage Units
Waste Types and Design Capacities

CSU and Specific Units	Specific Wastes and EPA Waste Code	Design Specifications	Container Types	Maximum Volume of Waste per Individual Unit
Storage Domes: TA-54-33 TA-54-48 TA-54-49 TA-54-153 TA-54-224 TA-54-226 TA-54-229 TA-54-230 TA-54-231 TA-54-232 TA-54-281 TA-54-283 TA-54-375	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	Typical dome is 50- to 90-ft wide by 100- to 440-ft long and 30- to 38-ft high. Asphaltic concrete or concrete pad floor sloped 1 to 1.5 percent towards one end. Dome is anchored to a concrete ring wall or asphalt berm for secondary containment. A recessed sump area, lined with high-density polyethylene to provide additional containment.	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>
Asphalt Covered Areas Pad No.2	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	4- to 6-ft asphaltic concrete slab, variable dimensions, sloped 1 to 1.5 percent. Some areas have a 6-inch high, 8-inch wide asphaltic concrete berm to prevent run-on/run-off. Containers are elevated by design or place on pallets.	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>
Storage Shaft Field	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	Consists of numerous retrievable storage shafts, each 3- to 5- ft diameter and 14- to 16-ft deep. The shaft field is covered by a concrete pad to prevent infiltration of precipitation and each shaft typically has a concrete mushroom cap.	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>
Sheds	<i>NOD issue. Inset</i>	Typical sheds are	<i>NOD issue. Inset</i>	<i>NOD issue. Inset</i>

TA-54-144 TA-54-145 TA-54-146 TA-54-156 TA-54-177 TA-54-242 TA-54-273 TA-54-371 TA-54-372 TA-54-1027 TA-54-1028 TA-54-1030 TA-54-1041	<i>specific wastes to be stored at each unit and include EPA Waste Codes</i>	constructed of chemical-resistant, coated steel and measure 5- to 20- ft wide, 5- to 40-ft long and 6- to 14-ft high. Typically on sloped asphaltic concrete foundations, some are elevated by design. Sheds typically have a sump covered by metal grating. Some containers placed in containment pallets.	<i>the specific containers that will be stored in each of the CSUs.</i>	<i>the maximum volume of waste that can be stored in each CSU.</i>
Gas- Cylinder Storage	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	<i>NOD issue. No information on this unit was provided.</i>	<i>NOD issue. Insert the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Insert the maximum volume of waste that can be stored in each CSU.</i>
Pre-engineered Structures TA-54-2 TA-54-8 TA-54-11 TA-54-20 TA-54-295 TA-54-306 TA-54-324 TA-54-325 TA-54-412 TA-54-420	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	Typically Butler Buildings®, with concrete floors, built-in containment systems, rigid walls, fire suppression systems and HEPA ventilation. Floors may be coated with an epoxy sealant and are typically sloped towards a sump.	<i>NOD issue. Insert the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Insert the maximum volume of waste that can be stored in each CSU.</i>

IV.1.1.2. Area L: The Permittees may store hazardous and mixed low-level waste in the designated areas within the fence line of Area L: asphalt-covered areas, sheds, storage dome TA-54-215, canopy TA-54-216, concrete containment structure TA-54-32, containment structure TA-54-35, sampling pad TA-54-36, transportation pad TA-54-58 and storage shafts 36 and 37.

The Permittees shall store hazardous and mixed low-level waste in containers specified in the TA-54 Permit Application, Section 2.1.1.2. These containers are limited to 30-, 55-, 83-, 85-, and 110-gallon steel, polyethylene and fiber drums, fiberglass-reinforced plastic on plywood (FRP) boxes, steel standard waste boxes (SWBs), steel boxes, metal overpack boxes, cardboard shipping containers, gas cylinders, roll-off bins, and labpacks. Any other container must be identified and provided for approved use as outlined in the Module II, Attachment A Container Storage Area Schedule of Compliance, A.2.3.

Carl – The specific CSUs listed in Table IV-3 are inferred based upon the engineering drawings. This list may need to be modified, as not all of the units listed may be used for container storage and some units may not be listed. Also the design specifications are

pretty vague. This is an NOD issue, where we have asked LANL to provide a list of each specific area that will be used for container storage, the specific types and numbers of containers and the volume of waste per CSU.

**TABLE IV-3
Area L Hazardous and Mixed Waste Container Storage Units
Waste Types and Design Capacities**

CSU and Specific Units	Specific Wastes and EPA Waste Code	Design Specifications	Container Types	Maximum Volume of Waste per Individual Unit
Asphalt-covered Areas TA-54-39	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	4- to 6-inch thick asphaltic concrete slabs of variable dimensions. Sloped 1 to 1.5 percent. Some have a 6-inch high, 8-inch wide concrete berm to prevent run-on/run-off. Containers are stored on pallets or are elevated by design.	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>
Sheds TA-54-31 TA-54-46 TA-54-50 TA-54-55 TA-54-68 TA-54-69 TA-54-70 TA-54-82 TA-54-1058	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	Typical sheds are constructed of chemical-resistant, coated steel and measure 5- to 20-ft wide, 5- to 40-ft long and 6- to 14-ft high. Typically on sloped asphaltic concrete foundations, some are elevated by design. Sheds typically have a sump covered by metal grating. Some containers placed in containment pallets.	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>
Storage Dome (TA-54-215)	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	A 60-ft wide by 266-ft long by 26-ft high arch framed supported stressed-membrane	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>

		structure. Dome's pad is equipped with a 6-inch high, 8-inch wide concrete ring for containment. Ring is connected to a double-wall holding tank for excess liquids.		
Canopy (TA-54-216)	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	A 33-ft wide by 120-ft long rigid aluminum frame structure supporting a tensioned membrane of polyester fabric coated with ultraviolet-stabilized plasticized polyvinyl chloride. The canopy frame is anchored to a sloped asphaltic concrete pad.	<i>NOD issue. Insert the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Insert the maximum volume of waste that can be stored in each CSU.</i>
Concrete Containment Structure (TA-54-32)	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	Concrete pad 15.5-ft wide by 116.5-ft long. Pad is sealed with an acid-resistant epoxy and bermed by a 1-ft wide, 6- to 8-inch high concrete curb. Curb is divided into areas to allow different classes of waste. Curb is overlain by a steel grate, upon which containers are placed. Pad is covered by a 117.75-ft long by 25.75-ft wide canopy.	<i>NOD issue. Insert the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Insert the maximum volume of waste that can be stored in each CSU.</i>
Containment Structure (TA-54-35)	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	Concrete pad 31.5 square feet, sloped 2 percent towards a sump. Pad has a 6-inch high concrete curb to provided secondary containment. Pad	<i>NOD issue. Insert the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Insert the maximum volume of waste that can be stored in each CSU.</i>

		is covered by a canopy, 136-ft long by 48-ft wide.		
Sampling Pad (TA-54-36)	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	A 31.5-ft wide by 33-ft long sealed, acid-resistant concrete pad sloped to a sump. Secondary containment provided by a 1-ft wide curb of 6-inches to 1-ft high. Pad contains a Perma-Con® structure 28-ft by 28-ft by 12-ft high, with a modular panel airlock enclosure.	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>
Transportation pad (TA-54-58)	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	A 31.5-ft wide by 33-ft long pad a sealed, acid-resistant concrete, sloped to a sump. Secondary containment provided by a 1-ft wide curb varying from 6-inches to 1-ft high. Pad is covered by a 136-ft long and 48-ft wide canopy.	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>
Storage Shafts 36 and 37	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	Retrievable storage shafts. Shaft 36 is 30-inch diameter corrugated metal pipe (CMP), 27.2-ft deep. Shaft 37 is 48-inch CMP and 35.75-ft deep. Each has a 1-ft deep concrete plug and welded metal plate at the base and is covered with a steel cover. The CMP is raised above a concrete pad to prevent infiltration. The shafts are also covered by 1 to 2 4 square foot concrete blocks	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>

		supported by railroad ties		
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IV.1.1.3. Area TA-54 West: The Permittees may store solid mixed low-level and mixed TRU waste in the designated areas within the fence line of TA-54 West: indoor and outdoor storage pads. The Permittees shall only use the high bay, low bay and loading dock area of TA-54-38 for indoor container storage.

The Permittees shall store solid mixed low-level and mixed TRU waste in containers specified in the Renewal Application, Section 2.1.3.2. These containers are limited to 30-, 55-, 83-, 85-, and 110-gallon steel, polyethylene and fiber drums, SWBs, steel boxes, metal overpack boxes, TRUPACT-II containers, and TDOPs. Any other container, such as “various small containers” and “irregularly shaped containers” must be specifically identified and submitted for approved use as outlined in the Module II, Attachment A Container Storage Area Schedule of Compliance, A.2.3.

Carl – The specific CSUs listed in Table IV-4 are inferred based upon the engineering drawings and discussion in the application. This list may need to be modified, as not all of the units listed may be used for container storage and some units may not be listed. Also the design specifications are pretty vague. This is an NOD issue, where we have asked LANL to provide a list of each specific area that will be used for container storage, the specific types and numbers of containers and the volume of waste per CSU.

**TABLE IV-4
TA-54 West Low-Level Mixed and Mixed TRU Waste Container Storage Units
Waste Types and Design Capacities**

CSU and Specific Units	Specific Wastes and EPA Waste Code	Design Specifications	Container Types	Maximum Volume of Waste per Individual Unit
Indoor Storage Area (TA-54-38) Low Bay High Bay Loading Dock	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	TA-54-38 is constructed of 36-ft high pre-cast concrete panels topped by pre-stressed double-T concrete roof sections. The Low Bay is 40-ft wide by 40-ft long. Rollup door open to the loading dock and into the high bay. The High Bay is 40-ft wide by 80-ft long, and	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>

		shall be used for loading waste into TRUPACT-II containers. The High Bay floor is unpainted and sloped 1.5 degrees toward a central sump and trench (5-inches wide, 6-inches deep, and 50-ft long) for secondary containment. The trench is covered with a steel grate. The loading dock is 16-ft wide by 38-ft high and 10-inches long and covered with a metal awning. The floor is concrete and 4 inches above-grade.		
Outdoor Storage Pad	<i>NOD issue. Inset specific wastes to be stored at each unit and include EPA Waste Codes</i>	The pad is irregular-shaped asphaltic concrete, 4-inches thick. The boundary is delineated with yellow painted lines. The pad is sloped toward curbed edges. Containers are either elevated by design or placed on pallets.	<i>NOD issue. Inset the specific containers that will be stored in each of the CSUs.</i>	<i>NOD issue. Inset the maximum volume of waste that can be stored in each CSU.</i>

IV.1.1.4. Storage Container Emission Controls: All containers used to contain hazardous waste shall control air pollutant emissions from each container in accordance with 20.4.1.500 NMAC (incorporating 40 CFR 264 Subpart CC). Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR 264.1086) all hazardous waste containers shall meet the appropriate container control, based on container capacity, of either Container Level 1, Container Level 2, or Container Level 3 standards.

All containers holding mixed TRU wastes shall be vented with high-efficiency particulate air (HEPA) filters to allow venting of gases, but preventing release of airborne particles.

Carl – this is an NOD issue. (Specific Comments 39 and 41). Also there are concerns over record-keeping and reporting and other associated requirements that were

referenced outside of the Application – are these really addressed in the LANL General Permit?

IV.1.2 Storage Time Limit

Carl – this is a condition from TA-50. Is it applicable?

The Permittees shall not store any hazardous or mixed waste in the CSAs for more than one (1) year from the date such waste was first placed into storage.

IV.1.3 Minimum Aisle Space

Carl – this is an NOD issue. (Specific Comments 5 and 34)

The Permittees shall maintain sufficient aisle space between storage containers in the CSAs to allow the unobstructed movement of personnel, fire protection equipment, spills control equipment and decontamination equipment to any area within the CSAs. [20.4.1.500 NMAC (incorporating 40 CFR §264.35)]

IV.1.4 Preparedness and Prevention

Carl – this is an NOD issue (Specific Comment #33)

Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.35), the Permittees shall ensure that each unit has been or will be designed, constructed, maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous or non-hazardous waste constituents to the air, soil or surface water which could threaten human health or the environment.

IV.2 PERMITTED AND PROHIBITED WASTE IDENTIFICATION

IV.2.1 Permitted Waste

Carl – this is an NOD issue. (Specific Comment #6)

The Permittees may store and manage hazardous, mixed low-level and mixed TRU wastes, which may contain some liquids, at the Area G and Area L CSAs. The Permittees may store and manage mixed low-level and mixed TRU solid wastes at the TA-54 West CSA. All waste containers shall be labeled with appropriate U.S. EPA Hazardous Waste Codes.

The Permittees shall manage and store for subsequent transfer to a permitted treatment, storage, or disposal facility, only the hazardous wastes provided in conjunction with this Permit, Module II Attachment A, Compliance Schedule A.2.2. Tables IV-1 through IV-4 above show the maximum amounts of hazardous waste that the Permittees shall manage or store at each individual TA-54 CSA subject to the terms of this Permit.

IV.2.2 Prohibited Waste

The Permittees are prohibited from managing and storing in the CSAs any hazardous or mixed waste that is not identified in Permit Condition IV.2.1 above. The Permittees shall not store more than a combined total of 7,797,465 gallons of the EPA Hazardous Wastes Types in containers at the TA-54 CSAs at any one time. Table IV-1 above shows the maximum amounts of hazardous waste that the Permittees can manage and store at each individual CSA subject to the terms of this Permit.

IV.2.2.a Permittees are prohibited from storing waste containing free liquids at any of the TA-54 West CSUs, including the Low Bay, High Bay and Loading Dock areas of TA-54-38 and the outdoor storage pad. Any containers found to contain free liquids must be immediately placed within a secondary containment device until arrangements are made to remove the waste.

IV.2.2.b Permittees are prohibited from accepting or storing waste with the following F-listed waste codes: F020, F021, F022, F023, F026, F027.

IV.3 ACCEPTABLE STORAGE CONTAINERS

Carl – this is an NOD issue. (Specific Comment #4)

The Permittees shall only use containers that comply with the requirements of the U.S. Department of Transportation shipping container regulations (49 CFR §173 - *Shippers - General Requirements for Shipment and Packaging*, and 49 CFR §178 - *Specifications for Packaging*) for storage of hazardous and mixed waste at the subject TA-54 CSAs. The Permittees shall store hazardous waste in those container types identified in Tables IV-2 through IV-4.

IV.4 CONDITION OF CONTAINERS

Carl – this is an NOD issue. (Specific Comment #6)

Containers must be in good condition (e.g., no severe rusting, apparent structural defects). If a container holding hazardous or mixed waste is not in good condition (e.g., has severe rusting, apparent structural defects) or if it begins to leak, the Permittees shall transfer the hazardous or mixed waste from such a container to a container that is in good condition or otherwise manage the waste in accordance with the Conditions of this Permit. [20.4.1.500 NMAC (incorporating 40 CFR § 264.171)]

IV.5 COMPATIBILITY OF WASTE WITH CONTAINERS

Carl – this is an NOD issue. (Specific Comment #7)

The Permittees shall use containers made of, or lined with, materials that will not react with, and are otherwise compatible with, the hazardous and mixed waste to be stored, so that the ability of the container to contain the waste is not impaired, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.172). The Permittees shall ensure compliance with this requirement by conducting pre-acceptance characterization of waste, as specified in the General Permit, Appendix ___ (*Waste Analysis Plan*), considering the precautions specified in *Prevention of Accidental Ignition or Reaction of Ignitable, Reactive or Incompatible Wastes*.

IV.6 MANAGEMENT OF CONTAINERS

Carl – this is an NOD issue. (Specific Comment #8)

The Permittees shall manage all containers as specified in the TA-54 Permit Application, Section 2.1.7 and Attachment G, and in accordance with the regulatory references listed in Table G-1 of Attachment G.

The Permittees shall keep all containers closed during storage, except when it is necessary to add, remove or sample the waste. The Permittees shall not open, handle, or store containers in a manner that may rupture the container or cause it to leak. [20.4.1.500 NMAC (incorporating 40 CFR §264.173)] Waste containers that are opened for waste addition, volume reduction, and/or repackaging shall be opened within a work enclosure that provides waste confinement and prevents release of waste constituents.

Material handling equipment (e.g., flatbed truck, trailers, forklifts, dollies, etc.) shall be used to transport waste containers to and from the various container storage areas or other waste management units at TA-54.

Damaged containers shall be repaired or overpacked or the contents of the container repackaged in a new container prior to placement at any of the container storage areas at TA-54.

IV.6.1 Storage Configuration

Carl – this is an NOD issue. (General Comments 2 and 4 and Specific Comments 3, 5, 34, 43, 53, and 60)

The Permittees shall maintain storage configurations as submitted in accordance with Module II, Attachment A, Container Storage Area Schedule of Compliance, A.2.2.

The Permittees shall stack drums, FRP boxes, SWBs and other boxes to a maximum of three high unless size and weight restrictions prohibit stacking due to safety concerns. The Permittees shall establish a maximum size and weight for the FRP boxes, SWBs and other boxes and containers to be stacked three high.

IV.7 SECONDARY CONTAINMENT SYSTEMS

Carl – this is an NOD issue. (Specific Comments 9, 43, 53, and 60)

The Permittees shall construct and maintain secondary containment systems for all containers containing free or residual liquids in the TA-54 CSAs as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.175), and the procedures specified in the TA-54 Permit, Attachment G (*Container Management*).

Containers shall be stored in a manner preventing contact with any liquids that may be present within the secondary containment. Containers at the Area G and Area L CSAs, which may contain liquid and/or potentially liquid-bearing wastes, shall be contained within a secondary containment system (e.g., sump, berm, or secondary containment pallet). Containers that are not elevated by design will be elevated to prevent contact with freestanding liquids, in accordance with the TA-54 Permit Application, Attachment G.2. Containers shall not be stored directly on a ground surface or other surface without an impervious base and secondary containment.

Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.175(b)) and as specified in Section 2.1.8 and Attachment G.2 of the TA-54 Permit Application, the Permittees shall maintain the secondary containment systems for all containers managed in the Area G and Area L CSAs. All secondary containment systems shall be designed to contain, at a minimum, ten percent of the volume of potential liquid-bearing waste containers or the volume of the largest waste container, whichever is greater.

All containers holding hazardous or mixed low-level or mixed TRU waste shall be kept from contact with standing liquids within the secondary containment. The Permittees shall remove all accumulated liquid in a timely manner to prevent overflow of the collection systems.

The Permittees shall not store containers containing free liquids at the TA-54 West CSA.

IV.8 INSPECTION SCHEDULES AND PROCEDURES

Carl – this is an NOD (Compliance Schedule A.2.8)

The Permittees shall inspect the TA-54 CSAs for the condition of containers and secondary containment systems, safety equipment, and aisle space at least daily to detect leaking containers, deterioration of containers and the containment system caused by corrosion and other factors, in accordance with the *Inspection Plan* specified in the General Permit, Appendix __ (*Inspection Forms*). [20.4.1.500 NMAC (incorporating 40

CFR §264.174)] The Permittees shall maintain the original inspection records for a minimum of three years from the date of inspection.

IV.9 RECORD KEEPING

The Permittees shall place the results of all waste analyses and any other documentation showing compliance with General Permit in the Facility operating record and the TA-54 operating record, in accordance with General Permit Condition __ (*Record Keeping and Reporting*), as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.73(a)).

IV.10 CLOSURE

Carl – this is an NOD issue. (General Comment #5 and Specific Comments 1, 11, and 21-31). Post-closure has not been incorporated.

During closure of the TA-54 CSAs, the Permittees shall remove all hazardous and mixed waste and hazardous and mixed waste residues from the containment system in accordance with the closure procedures specified in this Permit (Module III) and in the TA-54 Permit Application Attachments F.1, F.2, and F.3 (*Closure Plans*), as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.178). All remaining containers, liners, bases and soils containing or contaminated with hazardous and mixed waste or hazardous or mixed waste residues shall be decontaminated or removed, as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.178).

Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.112(b)(2) and §264.113(a) and (b)), the Permittees shall ensure 1) all hazardous waste will be treated, removed off-site, or disposed of on-site within 90 days from receipt of the final volume of waste at each unit and 2) all closure activities will be completed within 180 days from receipt of the final volume of waste at each unit.

In the event that clean closure is not obtainable and pursuant to 20.4.1.5 NMAC (incorporating 40 CFR §264.117 through §264.120), the Permittees shall meet the requirements for submissions of a survey plat and a post-closure monitoring plan.

Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §§264.113(a) and (b)), if the planned closure for TA-54 is expected to exceed the 90 days for treatment, removal or disposal of wastes and/or the 180 days for completion of closure activities, a petition for a schedule of closure that justifies a longer period of closure time will be submitted by the Permittees. An extension may only be granted by the Secretary if one of the following is demonstrated: closure activities require longer than 90 or 180 days as described above, the unit has the capacity to receive additional wastes, there is a reasonable likelihood that another person or operator will recommence operation of the site within one year, or closure would be incompatible with continued operation. The Permittees shall also demonstrate that all steps have been and/or shall be taken to prevent threat to human health and the environment from the unclosed, but inactive, unit.

The Permittees shall ensure that pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.112(c)), written notification of a request for a permit modification to authorize a change in operating plans, facility design or the approved closure plan will be submitted to the Secretary for review and approval prior to implementation of any changes. The Permittees shall submit a request for a permit modification for use of any criteria to demonstrate compliance for closure that has not been permitted in the application.

IV.11 SPECIAL CONTAINER PROVISIONS FOR IGNITABLE OR REACTIVE WASTE

Carl – this is an NOD issue. (Specific Comments 10 and 40)

IV.11.1 Location of Ignitable and Reactive Waste

The Permittees shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the TA-54 fence line. [20.4.1.500 NMAC (incorporating 40 CFR §264.176)] The physical location of this 50-foot boundary shall be permanently marked and maintained during the operational period of these CSAs.

IV.11.2 Procedures to Prevent Ignition/Reaction

The Permittees shall take all appropriate precautions to prevent accidental ignition or reaction of ignitable or reactive waste and shall follow the procedures specified in their *Waste Analysis Plan* (General Permit, Attachment __) and the TA-54 Permit Application, Attachment G (*Container Management*), as required by the requirements specified by 20.4.1.500 NMAC, incorporating §264.17 and §264.176.

IV.12 SPECIAL CONTAINER PROVISIONS FOR INCOMPATIBLE WASTE

Carl – this is an NOD issue. (Specific Comments 10 and 40)

IV.12.1 Storage of Incompatible Wastes

The Permittees shall not place incompatible wastes in the same containers, as specified in the General Permit, Attachment __ (*Waste Analysis Plan*) and the TA-54 Permit Application Attachment G (*Container Management*) and as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.177(a)).

IV.12.2 Management of Unwashed Containers

The Permittees shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material. [20.4.1.500 NMAC (incorporating 40 CFR §264.177(b))]

IV.12.3 Separation of Hazardous Waste Containers

The Permittees shall separate containers of incompatible wastes as specified in their *Waste Analysis Plan* (General Permit Attachment __) and the TA-54 Permit Application Attachment G (*Container Management*), as required by 20.4.1.500 NMAC (incorporating 40 CFR §264.177(c)). Storage containers with incompatible waste shall be separated from other material or protected from other materials by means of a berm, dike, wall or another device as defined in this permit and associated attachments. The Permittees shall ensure that in areas managing incompatible wastes, the incompatible wastes will not cause secondary containment systems to leak, corrode or fail.

MODULE II – GENERAL FACILITY CONDITIONS
ATTACHMENT A – CONTAINER STORAGE AREA SCHEDULE OF COMPLIANCE

A.1 DEFINITIONS

For purposes of this Container Storage Area Schedule of Compliance, the following definitions shall apply:

“Release” means any spills, leaks, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of hazardous waste (including hazardous constituents), mixed low-level waste, or mixed TRU waste into the environment (including the abandonment or discarding of barrels, containers and other closed receptacles containing hazardous waste, hazardous constituents or radiological constituents).

“Solid waste management unit” means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any areas at or around a facility at which solid wastes have been routinely and systematically released and include the container storage areas.

“Hazardous waste” means a solid waste, or combination of solid wastes, which because of the quantity, concentration or physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, incapacity reversible illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed. Hazardous wastes include hazardous constituents, as defined below by the term “hazardous constituent”.

“Hazardous constituent” means any constituent identified in Appendix VIII of 40 CFR §261 and/or in Appendix IX of 40 CFR §264.

“Mixed low-level waste” means waste that contains radioactivity and is not classified as high-level waste, transuranic waste, spent nuclear fuel or 11(e)(2) by-product material as defined in DOE Order 5820.2A, “Radioactive Waste Management”.

“TRU waste” means waste that is contaminated with alpha emitting transuranic (TRU) radionuclides with half-lives greater than 20 years and concentrations greater than 100 nanocuries per gram at the time of assay and has atomic numbers greater than 92, as defined in DOE Order 5820.2A, “Radioactive Waste Management”.

“Mixed TRU waste” means waste that contains both a hazardous and a TRU waste component.

“Permittees” include Los Alamos National Laboratory and the University of California.

“Facility” applies to area TA-54 at the Los Alamos National Laboratory. Area L, Area G and TA-54 West are defined as subareas within TA-54.

“Secretary” means the Director of the New Mexico Environment Department, or his/her designee.

If subsequent to the issuance of this permit, regulations are promulgated which redefine any of the above terms, the Secretary may, at its discretion, apply the new definition to the permit.

A.2 COMPLIANCE SCHEDULES

The Permittees shall only be granted a permit after all compliance schedule issues have been approved by the Secretary. A summary of the compliance schedules is provided in Table A-1.

A.2.1 Storage Structures

The Permittees shall provide to the Secretary within 60 calendar days the specific number and location of each storage container structure within Area L, Area G and TA-54 West, which are to be permitted. This shall also include the specific number and location for storage sheds.

A.2.2 Storage Configuration

The Permittees shall provide to the Secretary within 90 calendar days storage configuration diagrams for each container storage area within Area L, Area G and TA-54 West. The diagrams shall be provided for each type of storage area (including but not limited to all structures, pads, indoor and outdoor drum areas, and shafts) identified in the permit renewal application and shall include the following information:

1. An engineering drawing for each specific storage location/structure showing basic design features (e.g., airlock personnel entry) and parameters, specific dimensions, specific materials of construction, sloping and direction of sloping and berms;
2. Materials for building/structure bases and foundations;
3. A layout of container placement, by container type;
4. Number of each type of container;
5. Location of aisles;
6. Location of containment systems;

7. Volume of waste and waste container type; and
8. Specific wastes, including EPA Hazardous Waste Codes, to be stored at each individual container storage unit.

If more than one identical type of storage structure (e.g, manufactured shed) will be used, the Permittees shall identify the specific number and location of structures that meet each type of description provided.

A.2.3 Storage Containers

3. The Permittees shall provide to the Secretary within 30 calendar days a list of any additional waste containers, not specifically identified in the renewal application Section 2, that may be used to store waste at Area L, Area G and/or TA-54 West. The type of waste to be stored in these containers, the number of containers anticipated and the location (specific storage container area) where the containers will be used shall also be provided.
4. The Permittees shall provide to the Secretary within 30 calendar days the methodology to determine the presence of free liquid in all container types and what criteria will be used to designate a container as being free of liquids.
5. The Permittees shall provide to the Secretary within 30 calendar days details on which containers (those elevated by design) do not require elevation to prevent contact with accumulated liquids and which containers will require placement on either a pallet or a steel grate.

A.2.4 Condition of Containers

1. The Permittees shall provide to the Secretary within 30 calendar days the methodology that will be used to examine and/or survey the exterior surface of all waste containers to verify that the outside surfaces are free of contamination.
2. The Permittees shall provide to the Secretary within 30 calendar days information on whether liners will be used for all/any containers. Provided information shall also include liner requirements and specifications describing the functional requirements of fitting inside the drum/container, liner material thickness and tolerances, and quality controls and required testing that will be in place to ensure liners meet the specifications (including waste and container compatibility) and quality control procedures to ensure compliance with the requirements.
3. Radiological waste containers are typically vented to prevent the buildup of gases. In addition, the vents are most often filtered, to retain particles but still allow for the escaping of gases. The Permittees shall provide to the Secretary within 30 calendar days whether containers have ventilation ports for prevention of

pressurization of waste containers, which containers will have ventilation ports, and if filtered ports for preventing the escape of radionuclides into the atmosphere will be used.

A.2.5 Management of Containers

1. The Permittees shall provide to the Secretary within 30 calendar days a discussion of the handling methods and any special handling equipment that may be used for each type of container to ensure waste containers will be handled in a manner that will cause not ruptures or leaks.
2. The Permittees shall provide to the Secretary within 30 calendar days a plan for opening waste containers within a work enclosure that provides confinement, preventing any release of waste constituents. Included in this plan shall be an outline of specific waste handling requirements for opening waste containers and the work enclosure area, including any special ventilation systems and waste containment systems, for each type of waste container and waste type.
3. The Permittees shall provide to the Secretary within 30 calendar days the maximum size and weight restrictions for FRP boxes, SWBs and other boxes containers to be stacked three high.
4. The Permittees shall provide to the Secretary within 60 calendar days the procedures for transporting waste across the LANL facility or TA-54.

A.2.6 Containment Systems

1. Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.175(b)(1)), the Permittees shall provide to the Secretary within 60 calendar days information on the underlying base of the containment systems, and how it shall be demonstrated that the base will be free of cracks or gaps and will be sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and removed.
2. Pursuant to 20.4.1.900 NMAC (including 40 CFR §270.15(a)(3)), the Permittees shall provide to the Secretary within 60 calendar days the capacity of the containment system relative to the number and volume of waste to be stored in each container storage area. Calculations demonstrating the requirements for secondary containment at each storage area shall be provided. The Permittees shall also provide calculations of the surface area and the quantities of liquid that would cover the area for each container storage area.
3. The Permittees shall provide to the Secretary within 60 calendar days how waste containers will be kept from contact with any potentially accumulated liquids.

4. The Permittees shall provide to the Secretary within 60 calendar days details regarding containers that do not require elevation to prevent contact with accumulated liquids and containers that will require placement on either a pallet or a steel grate.

A.2.7 Ignitable, Reactive and Incompatible Waste

1. The Permittees shall provide to the Secretary within 60 calendar days an engineering drawing or other data that demonstrates that containers of ignitable or reactive waste will be located at least 50 feet from the TA-54 boundary.
2. The Permittees shall provide to the Secretary within 30 calendar days the policies that are in-place to minimize the possibility of accidental ignition and the precautions that will be taken for prevention of ignition, spontaneous ignition and radiant heat.
3. The Permittees shall provide to the Secretary within 30 calendar days all processes that will be used to prevent reactions that may: generate extreme heat or pressure, fire explosions or violent reactions; produce uncontrolled flammable fumes, dust or gases in sufficient quantities to threaten human health or the environment; produce uncontrolled flammable fumes, dust or gases in sufficient quantities to pose a risk of fire or explosions; damage the structural integrity of the facility; and be a threat to human health or the environment.

A.2.8 Inspection Schedules and Procedures

The Permittees shall provide to the Secretary within 60 calendar days specific inspection plans and inspection logs/summaries to be used for each type of waste container at each of the storage areas. Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.15), the Permittees shall record inspections in an inspection log or summary and, at a minimum, recorded information must include the date and time of inspection, name of inspector, notation of observations made, and the date and nature of any repairs or other remedial actions.

A.2.9 Corrective Action for Solid Waste Management Units

1. The Permittees shall provide to the Secretary within 60 calendar days the dimensions, materials of construction, dates of operation, engineering drawings, and quantity and/or volumes of waste placed in each container storage area (CSA) in Area L, Area G and TA-54 West.
2. The Permittees shall provide to the Secretary within 60 calendar days:
 - i) A listing of all releases that may have occurred within any of the container storage units in Area L and Area G;
 - ii) The date of release, type of waste(s) released, quantity or volume of waste released, nature of release; and

- iii) Any groundwater monitoring or other analytical data available to describe the nature and extent of the release.
3. The Permittees shall provide to the Secretary within 60 calendar days the methodology and data used to determine that there have never been any releases from the container storage areas are TA-54 West.
4. Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR 264.101 and 264 Subpart S) for RCRA permitted status, the Permittees shall address the closure and corrective action of the container storage units in Area L, Area G and TA-54 West. The Permittees shall provide to the Secretary within 60 calendar days a corrective action plan and a schedule of compliance for the corrective actions. The corrective actions must include implementation beyond area boundaries where necessary to protect human health and the environment.
5. The Permittees shall provide to the Secretary within 60 calendar days a discussion for each storage container location, as well as for Area L, Area G and TA-54 West as a whole that describes the operational controls that will be used to manage run-on and run-off.

A.2.10 Area G Closure Plan

1. The Permittees shall provide to the Secretary within 90 Calendar days the maximum inventory of waste, including waste type, maximum capacity based on area, and the maximum number of containers by container type for each container storage area at Area G.
2. Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR 264.112(b)(4)), a detailed description for the closure of each container storage area must include the steps needed to remove or decontaminate all waste (hazardous, mixed low-level, and mixed TRU) residues and contaminated containment system components, equipment, structures and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils and criteria for determining the extent of decontamination required to satisfy the closure performance standard. The Permittees shall provide to the Secretary within 90 calendar days a sampling and analysis plan for sampling and testing soils surrounding the container storage areas and for removing contaminated soils during either partial closure or closure of the container storage areas.
3. The Permittees shall provide to the Secretary within 90 calendar days a Quality Assurance and Quality Control (QA/QC) plan outlining the procedures for all soil sampling, decontamination and decontamination verification. The QA/QC plan shall also include laboratory validation and data validation procedures.
4. The Permittees shall provide to the Secretary within 90 calendar days a revised schedule for closure activities for Area G. The schedule shall be revised to

- include the use of swipes, and discuss how many swipes will be taken, the amount of coverage of the item requiring swiped, and the method of analysis.
- xii) Verification for hazardous waste residues shall also be verified using swipe analysis and discussion of how many swipes will be taken, percent surface coverage and the method of analysis; and
- xiii) Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.112(b)(4) and §264.178), methods for sampling and testing surrounding and underlying soils (affected or unaffected) at each container storage area shall be provided. Verification of these soils to closure performance standards in order to demonstrate that all soils surrounding the container storage areas are free of contamination or exhibit acceptable levels of contamination. Include the number and locations of background soil samples and the analytical parameters and appropriate analytical methods.
7. The Permittees shall provide to the Secretary within 90 calendar days a revised decontamination and verification plan for the container storage structures within Area G. In addition to the information provided in the permit renewal application and in Compliance Schedule 10.f, this plan must address the following items:
- i) Monitoring of portable equipment, storage structure walls and floors for fixed contamination and how any structure determined to contain fixed contamination will be decontaminated and verified clean;
 - ii) Monitoring of storage structures and inspection for any cracks or conditions that would potentially lead to loss of decontamination liquids for contamination prior to sealing or other treatment and how these flaws in storage structures will be monitored to ensure no contamination has migrated into the flaw prior to remedial action (e.g., sealing of cracks);
 - iii) Sampling and analytical methods to be employed if leaching from a structure (floor and/or walls) is determined to be the source of contamination in the wash water;
 - iv) Monitoring of drain lines connected to sumps and other recessed areas; and
 - v) Method for determining how sufficient numbers of samples will be determined, including a discussion of how the number of verification samples for each container storage structure will be determined.
8. The Permittees shall provide to the Secretary within 90 calendar days a revised decontamination and verification plan for the asphalt-covered areas within Area G. In addition to the information provided in the permit renewal application and in Compliance Schedule 10.f, this plan must address the following items:
- i) Procedures that may potentially be used to decontaminate the asphalt-covered storage areas;
 - ii) Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.112 (b)(4)), if the asphalt is removed, sampling of the soil underlying the removed asphalt must be conducted. All contaminated underlying soil must also be removed and verification sampling conducted. The plan shall include a discussion of how

- underlying soil will be sampled, removal methods for any contaminated soils and verification procedures for the remaining soils;
- iii) Discussion of the sampling and analytical methods that will be used to determine if leaching of contaminants from the asphalt is the source of contamination in wash water;
 - iv) Pursuant to 20.4.1.500 NMAC (incorporating 40 CFR §264.112 (b)(4)), soils surrounding the asphalt-covered areas shall be sampled and tested for potential contamination. The plan shall discuss how soils surrounding the asphalt-covered storage locations will be sampled, how many samples will be taken, what sampling methods will be applied and how contaminated soils will be removed; and
 - v) Method for determining how sufficient numbers of samples will be determined, including a discussion of how the number of verification samples for each asphalt-covered area will be determined.
9. The Permittees shall provide to the Secretary within 90 calendar days a revised decontamination and verification plan for the shafts within Area G. In addition to the information provided in the permit renewal application and in Compliance Schedule 10.f, this plan must address the following items:
- i) Decontamination of the storage shafts, including the number and locations of samples and corresponding collection methods, the analytical methods to be used for analysis of samples, the decontamination methods to be used if sampling indicates the presence of hazardous constituents, and in the shafts, the number and location of verification samples to be taken to ensure adequate decontamination;
 - ii) Verification screening for radiological hot spots and localized areas of elevated organics upon completion of shaft decontamination; and
 - iii) Method for determining how sufficient numbers of samples will be determined, including a discussion of how the number of verification samples for each shaft will be determined.

A.2.11 Area L and TA-54 West Closure Plan

Carl – This may need to be modified, as LANL has submitted these closure plans, but they were not included in the application that we reviewed. We are assuming that they are deficient, and thus are asking for a revised closure plan.

The Permittees shall provide to the Secretary within 90 calendar days a revised closure plan for each of Area L and TA-54 West. The Area L and TA-54 West closure plans shall meet the requirements for closure as outlined in 20.4.1.900 NMAC (incorporating 40 CFR §270.14(b)(13) and §§270.14(b)(15) through (18)) and 20.4.1.500 NMAC (incorporating 40 CFR §264.110 through §264.120 and §264.178). The closure plans shall address items similar to those contained in the application for Area G and as requested in Compliance Schedule A-2. In general, the closure plans shall address how each container storage area will be closed, how final closure for each area will be

conducted and the maximum extent of operations that will be left unclosed during the active life of the facility. Other components of the closure plans shall include:

1. Closure performance standard;
2. Partial closure;
3. Maximum waste inventory;
4. Schedule for closure;
5. Time allowed for closure;
6. Extension for closure time;
7. Inventory removal;
8. Disposal or decontamination of equipment, structures and soils; and
9. Verification of decontamination.

A.2.12 Security

The Permittee shall provide to the Secretary within 30 days assurances that access to the TA-54 West shall be controlled by a gate located on the west side of the area, which the Permittees shall upgrade to an electronically operated gate before issuance of this Permit.

Condition	Category	Summary	Compliance Schedule (days) ^a
A.2.1	Storage Structures	Number and location of storage structures	60
A.2.2	Storage Configuration	Storage configuration for Area L, Area G and TA-54 West	90
A.2.3.1	Storage Containers	Comprehensive list of storage containers	30
A.2.3.2	Storage Containers	Methodology for determination of free liquids	30
A.2.3.3	Storage Containers	Container structure and elevation requirements	30
A.2.4.1	Condition of Containers	Visual examination	30
A.2.4.2	Condition of Containers	Container liners	30
A.2.4.3	Condition of Containers	Ventilation	30
A.2.5.1	Management of Containers	Container handling	30
A.2.5.2	Management of Containers	Work enclosures and opening of containers	30
A.2.5.3	Management of Containers	Weight restrictions	30
A.2.5.4	Management of Containers	Transportation of waste	60
A.2.6.1	Containment Systems	Containment system bases	60
A.2.6.2	Containment Systems	Capacity of containment systems	60

A.2.6.3	Containment Systems	Separation of waste containers from accumulated liquids	60
A.2.6.4	Containment Systems	Container elevation	60
A.2.7.1	Ignitable, reactive and Incompatible Waste	Location of waste	60
A.2.7.2	Ignitable, reactive and Incompatible Waste	Policies and precautions	30
A.2.7.3	Ignitable, reactive and Incompatible Waste	Processes for reaction prevention	30
A.2.8	Inspection Schedule and Procedure	Inspection plan and logs	60
A.2.9.1	Corrective Action	Container storage area design, operation and waste information	60
A.2.9.2	Corrective Action	Releases and nature and extent of releases	60
A.2.9.3	Corrective Action	Data verification of no release status for TA-54 West	60
A.2.9.4	Corrective Action	Corrective action plan for Area L, Area G and TA-54 West	60
A.2.9.5	Corrective Action	Run-on and run-off operational controls	60
A.2.10.1	Area G Closure Plan	Maximum capacity by waste type and container	90
A.2.10.2	Area G Closure Plan	Soil sampling and analysis plan	90
A.2.10.3	Area G Closure Plan	Quality Assurance/Quality Control plan	90
A.2.10.4	Area G Closure Plan	Schedule for closure activities	90
A.2.10.5	Area G Closure Plan	Corrective action for asphalt-covered areas	90
A.2.10.6	Area G Closure Plan	Decontamination and verification plan, general to all areas	90
A.2.10.7	Area G Closure Plan	Decontamination and verification plan, container storage structures	90
A.2.10.8	Area G Closure Plan	Decontamination and verification plan, asphalt-covered areas	90
A.2.10.9	Area G Closure Plan	Decontamination and verification plan, shafts	90
A.2.11	Area L and TA-54 West Closure Plan	Closure plans for Area L and TA-54 West	90
A.2.12	Security	Installation of electronically opened gate at TA-54 West	30
Notes:			
^a Compliance schedules are based on calendar days.			