TechLaw
Quality & Integrity

310 Maxwell Road, Suite 500
Alpharetta, GA 30004
(770) 752-7585
(770) 752-9686 (Fax)
www.techlawinc.com

March 13, 2008

DCN 06280.210.ID.002

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. 06280.210; State of New Mexico Environment Department, Santa Fe, New Mexico; General Permit Support Contract; Public Comment Support, Sandia National Laboratory; Matrix of Public Comments on the Draft Permit; Draft Deliverable

Dear Mr. Cobrain:

This draft deliverable addresses the above-referenced work assignment and provides an index and matrix table which contains all of the public comments received by the New Mexico Environmental Department's (NMED) on the Sandia National Laboratory (SNL) Draft Permit.

In most cases, the public comments were taken verbatim and entered into the matrix. This approach was used in order to ensure that the intended meaning of the comments was not inadvertently altered. However, in some cases, some alterations were required and these changes are outlined in the following bullets:

- Salutations and closings were deleted from comments;
- Duplicative headers within a comment were eliminated;
- Cross-references to other comments were corrected to match the final comment numbers in the matrix. This occurred with the comments submitted by the Department of Energy(DOE)/Sandia;
- There were numerous comments where DOE/Sandia provided a revised table as part of the comment. Due to the difficulty of placing a table within the matrix table, TechLaw only entered into the comment matrix those fields that were changed from the original table in the draft permit. Changes were highlighted in red font.
- Minor typographical errors were corrected.

Please note that in Comment Nos., 234, 235, 281, 323 and 540, DOE/Sandia indicated that they would provide updated figures to NMED under separate cover.

The document is formatted in MS Word. The deliverable was emailed to you and Mr. Steve Pullen today at dave.cobrain@nmenv.state.nm.us and steve.pullen@nmenv.state.nm.us. A formalized hard (paper) copy of this deliverable will be sent via U.S. Mail. If you have any questions, please call me at (770) 752-7585, extension 105.

Sincerely,

Jasmine Schliesmann-Merkle

Jasmine Schliesmann-Merkle
Vice President

Enclosure
cc: Central Files

Index Table for Public Comments Received on Sandia National Laboratory Draft Permit

Commenter	Date Comments Submitted	Matrix Comment Numbers	Matrix Index Numbers
CARD and the Peace Center	1/17/08	660 - 681	CPC 001 – CPC 022
Citizen Action New Mexico	1/17/08	682 - 775	CNM 001 – CNM 094
DOE/Sandia	1/17/08	1-659	DOE 001 – DOE 659
Geraldine Amato	1/18/08	776-777	GEA 001 - 004

DOE/Sandia Comment Crosswalk

DOE/Sandia Comment Numbers	Matrix Comment Numbers	Matrix Index Numbers
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PP1-1 thru PP1-23, PP1-101 thru PP1-108	11 - 41	DOE 011 – DOE 041
PP2-1 thru PP2-45, PP2-101 thru PP2-105	42 - 91	DOE 042 – DOE 091
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PP7-1 thru PP7-2, PP7-101	227 - 229	DOE 227 – DOE 229
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PA8-1 thru PA8-8	420 - 427	DOE 420 – DOE 427
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PA10-1 thru PA10-9	486 - 494	DOE 486 – DOE 494
PA11-1 thru PA11-16	495 - 510	DOE 495 – DOE 510
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PA13-1 thru PA13-4	541-544	DOE 541 – DOE 544
PA14-1 thru PA14-17	545- 561	DOE 545 – DOE 561
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PA16-1 thru PA16-38, PA16-101 thru PA16-114	608 - 659	DOE 608 – DOE 659

NMED's Response to Non-Technical Public Comments Submitted on Revised Draft Permit

Note: Commentors may appear in more than one comment subject depending on the number of issues addressed by the commentor.

Comment No.	Index No.	Page No.	Section No.	Commentator's Name	Summary of Comment	NMED Response	Modification Made to Permit Y/N
1.	DOE 001		General	DOE	Source, special nuclear, and byproduct material are not regulated under the New Mexico Hazardous Waste Act (NMHWA) or the regulations in 20 NMAC 4.1 that govern activities that are described in this draft Permit. Therefore, DOE/Sandia believe the draft Permit need only specify materials regulated under the draft Permit and, accordingly, radionuclides do not require discussion within the documentation. The presence of radionuclides is indicated in the DOE/Sandia Part A and Part B Permit Applications (referred to in these comments as the Application) where it is appropriate with respect to compliance with the requirements of the Federal Facilities Compliance Order, with the requirements of 40 CFR 264, Subpart CC, and with respect to protection of Unit workers and members of the public during waste management operations, including characterization, storage, and treatment. With the exception of the TTU and CAMU, the draft Permit is to reflect management of hazardous waste and mixed waste at each Permitted Unit, rather than limiting any Unit to only hazardous or mixed waste management. Furthermore, the draft Permit mentions either hazardous wastes or mixed wastes in numerous requirements that are applicable to both (e.g., the title of Table 9-1 in Permit Attachment 9). Please revise the draft Permit to indicate management of both hazardous waste and mixed waste at all Permitted Units except the TTU and CAMU. Please revise requirements and Permit Conditions throughout to indicate applicability to both hazardous and mixed wastes.		
2.	DOE 002		General	DOE	The Permit should be limited to hazardous waste management operations that require a permit, and allow management practices that are included within the regulations. Additionally, the Permit should not include conditions for operations that are subject to requirements of other regulations or permits. As generators of hazardous waste, DOE/Sandia are responsible for compliance with the requirements of 40 CFR 261, 262, and some parts of 40 CFR 265. Some of these include: • Determining whether an item/material is a solid waste • Determining whether the solid waste item/material is a hazardous waste		

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					• Managing the waste properly while it is on site • Arranging for storage, treatment, and/or disposal of the waste in compliance with all applicable regulations • Keeping records and reporting waste generation and management activities DOE/Sandia note that a permit is not required for any of these activities but mere compliance with the regulations. Therefore, items such as these do not necessarily require inclusion within the Permit except to the extent needed for operations that are conducted under the Permit. The regulations include numerous exclusions for items and materials that are managed by particular methods, and also include many options for storage, treatment, and/or disposal of the waste. Each of these exclusions and options includes specifications that render it protective of human health and the environment [e.g., shredded circuit boards being recycled are not hazardous waste provided they are managed as specified in 40 CFR 261.4(a)(14)]. DOE/Sandia also perform hazardous waste storage and treatment activities at SNL/NM that DO require a permit. The presence of a permit does not affect DOE/Sandia's duty to comply with the requirements for waste generators. Thus DOE/Sandia are able to select an available exclusion or management option that is applicable to wastes generated at SNL/NM, including wastes generated at the Permitted Units. In particular, 40 CFR 261.4(a)(1)(ii) specifies that any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment is not a solid waste. This is applicable to operations at SNL/NM, including operations at the Thermal Treatment Unit (TTU) and the Corrective Action Management Unit (CAMU).		
3.	DOE 003		General	DOE	Where the NMED has incorporated the Federal RCRA regulations as written, the language presented in this draft Permit must then be identical to the rule. New Mexico statutes, Section 74-4-4 NMSA, prohibit more stringent requirements than the Federal RCRA regulations as amended, unless the Environmental Improvement Board determines, after notice and public hearing, that such federal regulations are not sufficient to protect public health and the environment. Revising the language of the incorporated Federal regulation is also inconsistent with the omnibus authority under RCRA Section 3005(c)(3) to protect public health and the environment.		

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4.	DOE 004	1	Section 2.22	DOE	Section 2.22 of the draft Permit contains a requirement that Sandia maintain liability coverage and is contrary to Sections 2.21, 7.9, 15.10 and 16.10. Sandia is exempt from all financial responsibility requirements under Subpart H for post-closure care. (See Section 127 of Public Law 108-199: "Funds appropriated in this, or any other Act hereafter, may not be obligated to pay, on behalf of the United States or a contractor or subcontractor of the United States, to post a bond or fulfill any other financial responsibility requirement relating to closure or post-closure care and monitoring of Sandia National Laboratories and properties held or managed by Sandia National Laboratories prior to implementation of closure or post-closure monitoring. The State of New Mexico or any other entity may not enforce against the United States or a contractor or subcontractor of the United States, in this year or any other fiscal year, a requirement to post bond or any other financial responsibility requirement relating to closure or postclosure care and monitoring of Sandia National Laboratories in New Mexico and properties held or managed by Sandia National Laboratories in New Mexico."). The intention of Congress for this exemption was due to the fact that this would involve setting aside public monies for any such effort. Furthermore, it is clear that the regulation specifies demonstrating "financial responsibility." As this Permit is related to the closure of Permitted Units at SNL/NM and post-closure care of the CAMU, this is a financial responsibility in which Sandia remains exempt.		
5.	DOE 005		Permit Part 6	DOE	The draft Permit provides overlap and inconsistencies with the Compliance Order on Consent (COOC) in a number of areas, the most critical example being the applicability of Permit Part 6, Corrective Action. Part 6 should be revised to clearly delineate the division of authority between the draft Permit and the COOC as Section III.W.4 of the COOC explicitly prohibits the renewed Permit from including requirements that are duplicative of the COOC. The following areas are of particular concern to DOE/Sandia: 1. The draft Permit contains provisions related to completion of corrective action at the Mixed Waste Landfill (MWL), which is regulated under the COOC. As stated above, the COOC explicitly prohibits the renewed Permit from including requirements that are duplicative of the COOC; these requirements should be removed from the draft Permit. 2. Tables 6-3 and 6-4 of Part 6 identify solid waste management units that have been designated Corrective Action Complete without Controls and Corrective Action Complete with Controls, respectively. Many of the entries to the tables contain errors or are inconsistent with the administrative record for decisions made under both the COOC and under the HSWA Module. These tables should be revised to incorporate the most current accurate information.		

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					3. The draft Permit contains provisions related to cleanup levels for perchlorate. Perchlorate is regulated under the COOC; the cited authority is the NM Solid Waste Act. DOE/ Sandia voluntarily agreed to perchlorate screening, only as specified in the Consent Order. Because perchlorate is not a regulated hazardous waste or hazardous constituent under RCRA, RCRA corrective action authority does not extend to cleanup of perchlorate. DOE and Sandia expressly contest the regulation of perchlorate under this Permit. All requirements related to perchlorate should be deleted from the draft Permit. 4. The draft Permit includes the presumption that a residential risk standard is appropriate for all sites. The presumption that cleanup levels must achieve a residential risk standard is not more protective of human health and the environment and is inconsistent with the corrective action program established in the COOC. Section 6.13 of the draft Permit contains cleanup levels for specified contaminants and media (based on a residential scenario) and a process for requesting a variance from a particular residential-based cleanup level; this Section should be revised to remove the presumption. 5. The draft Permit Sections 6.8.1 through 6.8.5 contain requirements for facility-wide reports documenting information related to: the general facility, potential receptors, surface water and sediment contamination, air contamination and subsurface gas. These reports are unnecessary and are inconsistent with the site-specific corrective actions conducted under the COOC; they should be removed from the draft Permit.		
6.	DOE 006		General	DOE	DOE/Sandia do not understand or agree with NMED's arbitrary and unexplained reduction in the maximum storage capacity and/or treatment capacity for each Permitted Unit. The reduced capacities are not consistent with the current permitted capacities as specified in Permit NM5890110518-1 (for the HWMU), Permit NM5890110518-2 (for the TTU), and the current Application (for the RMWMU, AHCU, and MSB). Furthermore, DOE/Sandia note that all storage and/or treatment capacities and configurations in the existing Permits and the Application were determined in full compliance with the requirements of 40 CFR 264 Subparts I and X, with consideration of the following: • the physical size and characteristics of each waste management area, • requirements for secondary containment, and • the general characteristics of the wastes and nature of each		

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					treatment operation. In some cases, the new limits render the treatment processes unworkable (e.g., macroencapsulation at the RMWMU). The information provided in the Application is consistent with current operations; and DOE/Sandia note these operations have been performed for over 15 years without harm to human health or the environment. The maximum storage capacity and the maximum treatment capacity for each type of treatment (as applicable) at each Permitted Unit should be revised to reflect the capacities in the current Permits and in the Application.		
7.	DOE 007		General	DOE	The Application includes descriptions of typical features of the Permitted Units or typical operations as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. The descriptions are typical rather than specific or prescriptive because of the wide variety of hazardous and mixed wastes managed at the Permitted Units. The draft Permit includes numerous prescriptive requirements that limit DOE/Sandia's ability to adjust the operations. In all cases, the prescriptive requirements will reduce operational effectiveness and in many cases the requirements will limit DOE/Sandia's ability to protect human health and the environment. DOE/Sandia are particularly concerned about the prescriptive requirement for NMED approval of a detailed plan prior to each treatment operation. Each detailed treatment plan will necessitate a lengthy review before NMED approval. As this approval is required before treatment can begin, it is highly unlikely that the wastes will be treated within one year and, therefore, this Permit Condition may impact the ability of DOE/Sandia to comply with the requirements of 40 CFR 268.50. Additionally, the pre- approval requirement will limit DOE/Sandia's ability to adjust the operations in response to conditions that may be encountered when the plan is implemented. Because of the variety of wastes and the need for flexibility in the operations, DOE/Sandia request that NMED limit prescriptive requirements to compliance with the regulations. The individual aspects of waste management activities are documented in the Operating Record and are available for NMED review and inspection in accordance with 40 CFR 270.30(i) and Permit Part 1, Condition 1.16.		
8.	DOE 008		General	DOE	DOE/Sandia have carefully reviewed the draft Permit and prepared numerous general and specific comments addressing various topics (e.g., inaccuracies, out-of-date		

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					information, inconsistencies, and prescriptive requirements). In many cases the text that is addressed in the comment appears in more than one place in the draft Permit. In each of these cases the comment applies to all instances, whether or not they are individually identified.		
9.	DOE 009		General	DOE	The applicability of 40 CFR 264 Subpart CC (Subpart CC) entitled "Air Emission Standards for Tanks, Surface Impoundments, and Containers" to mixed wastes has been and is still deferred pending the resolution of inconsistencies between the Atomic Energy Act (AEA) and RCRA requirements. NMED's application of the Subpart CC standards throughout the draft Permit implies that the terminology "hazardous waste management unit" and "waste management unit," as used in the cited regulation, are the same. The former term, although similar, is defined in 40 CFR 260.10 as "a contiguous area of land on or in which hazardous waste is placed. . . A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed." The latter term has been used in a more general sense by the EPA to include discrete containers in Subpart CC. DOE/Sandia note that the phrase "the waste management unit" is used in conjunction with "a tank, surface impoundment, or container" or "each ... container" (emphasis added) throughout 40 CFR 264 Subpart CC. This indicates that individual containers (rather than entire container storage areas) are the units that are subject to the air emissions standards. DOE/Sandia also note that the term "waste management unit" does not appear to have been modified in 40 CFR 264.1080(b)(6) since the original regulation was promulgated on December 6, 1994. Sections IV.F and VII.A.1.d (Federal Register, Vol. 59, December 6, 1994, pages 62903 and 62914) of the preamble to the rule contain explanatory language that indicates the temporary deferral for radioactive mixed wastes was to be applied on the basis of individual containers. Section IV.F states that ". . the EPA has decided to temporarily defer application of Subpart CC standards to tanks, containers, and surface impoundments which are being used solely to manage radioactive mixed wastes . ." DOE/Sandia note the similarity of the explanation with the actual text of 40 CFR 264.1080(b)(6). The technical basis for the deferral is explained in Section VII.A.1.d using drums and venting as an example of non-compatibility with radioactive mixed waste handling procedures. The subsequent discussion clarifying the use of the term "solely" in the specific regulation (*Federal Register*, Vol. 61, February 9, 1996, page 4904) does not address or change the use of the term "waste		

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					management unit." In addition to the general discussion in the preamble of the December 6, 1994 final rule (*Federal Register*, Vol. 59, December 6, 1994, pages 62896 through 62953), EPA directly addresses the issue of exemptions in the Background Information Document "Hazardous Waste Treatment, Storage and Disposal Facilities (TSDF) - Background Information for Promulgated Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers", EPA-453/R-94-076b, November 1994. The first comment in Section 6.2.1 (page 6-13): "states that exemption from the subpart CC air emission control requirements should be determined on the basis of the hazardous waste placed in an individual tank or container rather than in all of the units that comprise a 'hazardous waste management unit' as proposed in the rule." In the response, EPA states that: "The purpose of the subpart CC standards is to control organic air emissions from TSDF tanks, surface impoundments, and containers that manage hazardous waste . . .The EPA recognizes that, according to the RCRA definition of a 'hazardous waste management unit,' it is possible to have a situation in which a hazardous waste management unit includes both exempt and nonexempt containers. For example, drums containing hazardous waste that was generated by different sources could be stored on the same pad at a TSDF. The drums and pad constitute a hazardous waste management unit. Some of the drums stored in this hazardous waste management unit could contain hazardous waste that has a volatile organic concentration at the point of waste origination less than 200 ppmw. In this case, the EPA does not intend that these drums be required to use air emission controls under the subpart CC standards simply because the drums are physically located in the same hazardous waste management unit with drums containing hazardous waste that has a volatile organic concentration at the point of waste origination greater than or equal to 100 ppmw. Therefore, the EPA clarified the regulatory language of the final subpart CC standards by deleting the term 'hazardous waste management unit' from the rule and, instead uses the terms 'tank', surface impoundment,' and 'container.'" Overall, the title of the regulation and the examples and discussions used throughout the developmental language for the regulation appear to limit the Subpart CC requirement to containers rather than container storage units. Although the Subpart CC requirements cannot be applied to mixed waste		

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					through conditions in the Permit until the technical basis for the mixed waste deferral in 40 CFR 264.1080(b)(6) are resolved, DOE/Sandia manage this waste in a substantially equivalent manner, except for those instances where the Subpart CC requirements are in opposition to AEA requirements.		
10.	DOE 010		Permit Part 2	DOE	NMED states in Permit Part 2, Condition 2.20.2, that the closure plan submitted by DOE/Sandia is inadequate. The closure plan included in the Application (Appendix F and Section 7 in each Unit-specific module) fully addresses all the requirements of 40 CFR 264 Subpart G, the additional requirements for container storage units in 40 CFR 264.178, the requirements for miscellaneous units in 40 CFR 264 Subpart X, and the requirements for closure of thermal treatment units in 40 CFR 265.381. DOE/Sandia note the closure plans in the Application use the same methodology that NMED approved for closure of the High Bay Waste Storage Facility at SNL/NM in 2005-2006. An important part of that closure methodology is consideration of the history of the Unit and waste management activities during development of the closure plan. DOE/Sandia considered Unit history in identifying the surfaces and areas most likely to be contaminated (floors, secondary containment areas, interior fume hood surfaces, and initial runs of exhaust ducts) and in selecting indicator parameters for verifying completion of closure. DOE/Sandia selected Unit-specific indicator parameters that are non-volatile constituents present in many of the wastes commonly treated and/or stored at each Unit. Wastes managed at each Unit often exhibit hazardous waste characteristics of ignitability, corrosivity, and/or reactivity or contain volatile organic compounds; these are of limited value as indicator parameters due to their volatility or other properties. In the case of container storage units where there is no history of a release or evidence of any release of hazardous waste constituents, DOE/Sandia do not consider it appropriate to assume that all surfaces are contaminated and hazardous waste constituents from all wastes managed at the Unit are constituents of concern for closure, as NMED has done in Permit Part 2, Section 2.20.2 and throughout Permit Attachment 15.		
11.	DOE 011	1	1.3	DOE	DOE/Sandia note 40 CFR 270.14 is cited in numerous Permit Attachments addressing specific requirements for operation of the Permitted Units. However, this provision addresses contents of permit applications and is not directly relevant to the requirements of 40 CFR 264 that the Permittees are required to meet in operating the Units. Please delete references to 40 CFR 270.14 throughout the draft Permit except in reference to permit applications.		

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12.	DOE 012	2	1.5	DOE	DOE/Sandia note that 40 CFR 270.32(b)(1) includes specifications applicable to NMED's preparation of the Permit; it does not establish the minimum requirements for design, construction, operation, and maintenance of hazardous waste management units. Further, DOE/Sandia did not note any instances of language in a Permit Attachment which states or implies discretion to not comply with the minimum requirements of this Permit or the parts of 40 CFR 264, 266, and 268 that are applicable to operations and Units that require a Permit. Please revise to read: *This Permit and requirements of 40 C.F.R. Parts 264, 266 and 268 that are applicable to operation of the Permitted Units establish the minimum requirements for the design, construction, operation, and maintenance of the 10 hazardous waste management units.*		
13.	DOE 013	2	1.6	DOE	Please replace this definition with the definition of AOC as it appears in the COOC for clarity and consistency to read as follows: *Area of Concern or "AOC" means any area that may have had a release of a hazardous waste or hazardous constituent, which is not a Solid Waste Management Unit.*		
14.	DOE 014	3	1.6	DOE	DOE/Sandia note the five TAs comprise approximately 2,842 acres; this is the area stated in the Application and in Permit Attachment 1. The remote test areas comprise approximately 5,630 acres within KAFB, and approximately 6,582 acres in the adjacent lands withdrawn from the US Forest Service. The definition of Facility in the draft Permit includes the TAs and the remote test areas; the total area is approximately 15,054 acres (23.5 square miles). Accordingly, please revise to read: *"Facility" means the Sandia National Laboratories including all contiguous land, and structures, other appurtenances, and improvements on the land. The Facility includes five Technical Areas (TAs) located within Kirtland Air Force Base (KAFB) and several remote test areas located on KAFB and adjacent lands withdrawn from the U.S. Forest Service: Foothills Test Area, Central Coyote Test Area, Southwest Test Area, and Canyons Test Area. Within KAFB and the adjacent lands withdrawn from the U.S. Forest Service, the Facility comprises approximately 15,054 acres (23.5 square miles).*		
15.	DOE 015	3	1.6	DOE	Please replace this definition with the definition of hazardous waste as it appears in the COOC for clarity and consistency to read as follows: *"Hazardous Waste" means any solid waste or combination of solid wastes which because of its quantity, concentration, or physical, chemical, or infectious characteristics meets the description set forth in NMSA 1978, § 74-4-3(K), and is listed*		

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					as a hazardous waste or exhibits a hazardous waste characteristic under 40 C.F.R. Part 261 (incorporated by 20.4.1.200 NMAC).		
16.	DOE 016	3	1.6	DOE	Please revise this definition to clarify that remediation waste it is not limited to hazardous waste but includes all solid wastes and contaminated media associated with corrective action: *"Remediation Waste" means all solid, hazardous, and mixed wastes, and all media (including groundwater, surface water, soil, and sediment) and debris, that are managed for implementing cleanup.*		
17.	DOE 017	5	1.7	DOE	Management of radioactive wastes is not regulated under this Permit, as discussed in Comment No. 1. Therefore, DOE/Sandia do not believe this Permit needs to specify whether radionuclides are present or absent in RCRA-regulated waste managed at any of the Permitted Units. Limiting to either hazardous or mixed waste does not adequately cover operations at most of the Permitted Units. Each of the five Manzano Storage Bunkers is a separate Unit, and Bunker 37058 should be 37055. *Please revise as follows:* *The Permittees operate or conduct post-closure care at the following 11 Permitted Units.* *1. HWMU – used for storage and packing of hazardous and mixed wastes generated during Facility operations and corrective action activities. The HWMU is located south of Technical Area I (TAI), and is described in Permit Attachment 3.* *3. RMWMU – used for treatment, storage, and packaging of hazardous and mixed wastes generated during Facility operations and corrective action activities. These are described in Permit Attachment 5.* *4. AHCU – used for treatment, packaging, and storage of hazardous and mixed wastes generated during Facility operations and corrective action activities, as described in Permit Attachment 6.* *5. MSB – Bunkers 37034, 37045, 37055, 37057 and 37118; each used for storage of hazardous and mixed wastes generated during Facility operations and corrective action activities (See Attachment 7).* *6. CAMU – long-term storage in a containment cell that contains approximately 31,800 cubic yards of remediation wastes that were generated as part of corrective action activities at the Facility's Chemical Waste Landfill (CWL), a hazardous waste landfill located adjacent to the CAMU. The*		

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					CAMU is described in Permit Attachment 16. *7. CWL – post-closure care of the landfill will be regulated under a separate permit.*		
18.	DOE 018	6	1.7.2	DOE	DOE/Sandia note the draft Permit is also based on information submitted in the Part A included with the Part B Permit Application. For example, Attachment 8 – Authorized Wastes is from the Part A form. Please revise as follows: *This Permit is based on the information submitted in the Part A and Part B Permit Applications dated February 2002 and subsequent information, referred to as the Application.*		
19.	DOE 019	7	1.8.5	DOE	Consistent with the land transfer language of Part 6, Section 6.2.1 and Section III.Y.1 of the COOC, please limit the applicability of this section to that regulated under this Permit as follows: The Permittees shall submit a Permit modification request, in compliance with all requirements of 40 C.F.R. § 270.42 and 20.4.1.900 NMAC, at least 180 calendar days prior to the proposed effective date of transfer of ownership of any Facility property that is subject to any requirement under this Permit. The Permit modification request may be submitted as a Class 3 Permit modification, or the Permittees may request a determination that the modification is a Class 1 or 2 pursuant to the requirements of 40 C.F.R. § 270.42(d). In addition to the requirements of 40 C.F.R. § 270.42 and 20.4.1.900 NMAC, a Permit modification request for transfer of Facility property that is subject to any requirement under this Permit shall:		
20.	DOE 020	9	1.8.9	DOE	40 C.F.R. §§ 270.41(a)(5) and 270.50(d) apply to land disposal facilities and are not applicable to any of the SNL Permitted Units. DOE/Sandia note the CAMU is a containment cell; it is a grandfathered unit (see 40 CFR § 264.551) that was approved before April 22, 2002 and meets the exemption of 264.550(b). The Department may modify/review/reissue or terminate this Permit as necessary pursuant to Section 74-4-4.2 of the HWA and 40 C.F.R. §§ 270.41 or 270.43, as applicable. Such modification(s) shall not extend the effective term of this Permit as specified in Permit Condition 1.8.2. Nothing in this Section (1.8.9) of Permit Part 1 shall preclude the Department from reviewing and, in accordance with applicable requirements, modifying the Permit at any time during its term.		
21.	DOE 021	10	1.15	DOE	DOE/Sandia note that 40 C.F.R. § 264.74(a) and 40 C.F.R. § 270.30(h) require that records be furnished upon request and at reasonable times but do not require that records be maintained in electronic form. DOE/Sandia may maintain records in paper and/or electronic formats as described in the Application. Please revise to read:		

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					Information and records requested by the Department pursuant to this condition shall be provided in paper form or in an electronic format.		
22.	DOE 022	11	1.17.2	DOE	Please delete this requirement as groundwater monitoring associated with individual SWMUs and AOCs is best addressed in the requirements for the specific units.		
23.	DOE 023	11 - 12	1.17.3	DOE	DOE/Sandia note that 40 C.F.R. § 270.30(j)(3) does not require the qualifications of individuals who perform sampling, the name and address of the laboratory that performed the analyses, or the qualifications of the individuals who performed the analyses. Please see Comment No. 3 for additional discussion regarding consistency between the regulations and the requirements in the draft Permit, and revise as follows: *Records of monitoring information shall include:* *1 (not included in comment)* *2. The names of the individuals who performed the sampling or measurements;* *3 (formerly 4, not included in comment)* *4. The names or initials of the individuals who performed the analyses;* *5–6 (formerly 6 and 7, not included in comment)* *[40 C.F.R. § 270.30(j)(3)].*		
24.	DOE 024	12	1.19	DOE	DOE/Sandia note that modifications requested by the Permittees must meet the criteria in 40 CFR 270.42. In addition, there is no Section 1.9.11; the correct reference is to Section 1.19.1. Please revise as follows: *If any Permitted Unit is modified as defined in 40 CFR 270.42, the Permittees shall not treat or store hazardous or mixed wastes in the modified portion of the Permitted Unit, unless the following conditions have been satisfied.* 2. The Department has: *b. Waived the inspection or, within fifteen (15) calendar days from the date of submittal of the letter required by paragraph 1 of Section 1.19.1, has not notified the Permittees of its intent to inspect.*		
25.	DOE 025	12 - 13	1.20.1	DOE	DOE/Sandia note item 2 includes the phrase "or hazardous constituent" and is thus inconsistent with 40 CFR 270.30(l)(6)(i) and (ii). In addition, items 3, 4, 6, and 8 are also not consistent with the regulations. DOE/Sandia further note the list of items in this section does not fully address the		

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					requirements of 40 CFR 270.30(l)(6)(i) and (ii). Please see Comment No. 3 for additional discussion regarding consistency between the regulations and the requirements in the draft Permit, and revise as follows: *The oral report shall include the following.* *2. Any information about a release or discharge of hazardous or mixed waste or of a fire or explosion at a Permitted Unit which could threaten the environment or human health outside the Facility;* *3. A description of the occurrence and its cause;* *4. Name, address, and telephone number of the owner or operator;* *6. The occurrence date, time, and type of incident;* *8. An assessment of actual or potential hazards to the environment and human health outside the Facility, where this is applicable;* *10. The name and quantity of material(s) involved.*		
26.	DOE 026	13	1.20.2	DOE	DOE/Sandia note item 2 is not consistent with the requirements of 40 CFR § 270.30 (l)(6)(iii) or 40 CFR 264.56(j). DOE/Sandia further note the list of items in this section does not fully address the requirements of 40 CFR 270.30(l)(6)(i) and (ii). Please see Comment No. 3 for additional discussion of consistency between regulations and requirements in the draft Permit and revise as follows: *The written report shall contain the following.* *2. Name, address, and telephone number of the owner or operator;* *10. Date, time, and type of incident.*		
27.	DOE 027	14	1.27	DOE	Permit Condition 1.17 addresses monitoring records but does not specify reporting frequency. Please revise as follows to make this Condition consistent with the submittal summary in Table 1-1: The Permittees shall submit Monitoring Reports at the frequencies specified in approved work plans. [40 C.F.R. § 270.30(l)(4)].		
28.	DOE 028	14 - 15	1.29	DOE	DOE/Sandia note the draft Permit Condition is vague because it does not include criteria or a definition for a "significant discrepancy." Please revise to include the appropriate regulatory citation as follows: *If a significant discrepancy, as defined in 40 CFR § 264.72(b),*		

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					is discovered in a manifest, the Permittees shall attempt to reconcile the discrepancy. If not resolved within 15 calendar days, the Permittees shall submit a letter report, including a copy of the manifest to the Department, as required in 40 C.F.R. § 264.72(b), which is incorporated herein by reference.		
29.	DOE 029	15	1.32.1	DOE	Courier/delivery services such as Federal Express are capable of meeting the requirements (timeliness and documentation of delivery/receipt), yet these services are currently excluded from the list of delivery options available to the Permittees. The choices should be updated to explicitly include any courier/delivery service that provides documentation of delivery equivalent to certified mail. In addition, the NMED locations for hand delivery should include: New Mexico Environment Department Hazardous Waste Bureau 5500 San Antonio NE Albuquerque NM 87109		
30.	DOE 030	16	Table 1-1	DOE	The table includes several references to incorrect draft Permit conditions and regulatory requirements. It also contains requirements that are inconsistent with other parts of the Permit (e.g., the submittal deadline for the waste minimization certification). Correct references that could be discerned have been included below. Please see Comment No. 28 regarding reports of significant discrepancies in manifests that cannot be resolved. Please see Comment No. 1 regarding application of air emissions standards in 40 CFR 264 Subpart CC to individual containers rather than to Permitted Units. Please revise as follows and clarify the requirement for monitoring reports: *Facility Submission Requirements: Non-compliance Oral Report (Permit Part 1, Condition 1.20.1)* *Facility Submission Requirements: Non-compliance Written Report (Permit Part 1, Condition 1.20.2)* *Facility Submission Requirements: Monitoring Reports (Permit Part 1 Condition 1.17)* *Facility Submission Requirements: Manifest Discrepancy report (Permit Part 1, Condition 1.29)* *Due Date: 15 days after discovering a significant discrepancy in a manifest that cannot be resolved within 15 calendar days* *Facility Submission Requirements: Unmanifested waste*		

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					Report (Permit Part 1, Condition 1.30) *Facility Submission Requirements: Biennial Report covering Facility activities (Permit Part 1, Condition 1.31)* *Facility Submission Requirements: Updated SAPs for Unit closure if needed (Permit Part 2, Condition 2.20)* *Due Date: 60 days prior to final hazardous waste receipt* *Facility Submission Requirements: Waste Minimization Certification (Permit Part 2 Condition 2.7)* *Due Date: Annually by January 31 for the previous year* *Facility Submission Requirements: Organic Air Emissions Non-compliance Report for Individual Occurrences (Permit Part 5, Condition 5.2.1)* *Due Date: Within 15 days of a hazardous waste ≥ 500 parts per million (ppmv) VOCs being put into a container that is subject to but not in compliance with the requirements of 40 CFR 264 Subpart CC.* *Facility Submission Requirements: Organic Air Emissions Non-compliance Annual Report (Part 5, § 5.2 1)* *Facility Submission Requirements: Annual Report – summary of outdoor testing activities (Permit Part 6, Condition 6.1.6)* *Due Date: Annually by March 31* *Facility Submission Requirements: Implementation and Maintenance of Controls Annual Report for Corrective Action Activities (Permit Part 6, Condition 6.5)* *Due Date: Annually by March 31* *Facility Submission Requirements: Quarterly Progress reports on all Corrective Action Activities (Permit Part 6, Condition 6.1.5)* *Facility Submission Requirements: Verbal notification of Newly-Discovered Releases Beyond Facility Boundary (Permit Part 6, Condition 6.1.4)* *Facility Submission Requirements: MWL Corrective Measures Implementation (CMI) Progress Reports (Permit Part 6, Condition 6.7)*		
31.	DOE 031	18	1.34	DOE	DOE/Sandia note the records retention requirements in this section are not consistent with the recordkeeping requirements in Permit Attachment 13 or in 40 CFR 264.73, especially with respect to inspection records. Only the records associated with post-closure care of the CAMU need to be retained until the completion of CAMU post-closure care.		

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					Section 1.34 discusses records to be maintained at the Facility (SNL/NM) and at each Permitted Unit, and the distinction is not clear in all cases. In particular, it is not necessary or appropriate to keep a copy of the Operating Record or a copy of "summary reports and details of all incidents that require implementation of the Contingency Plan" at each Permitted Unit, as these are not pertinent to operations and are readily accessible at the Facility. Also, DOE/Sandia note the MSB have very limited facilities for records, and the operations do not require that any documents except the contingency plan and inspection schedule/records be maintained at each Unit. Thus, most of the records for the MSB are maintained at the RMWMU, as described in the Application. Several of the specific citations are not accurate. 40 C.F.R. § 264.15(b) requires an inspection schedule, rather than a plan. 40 CFR 264.16(d) requires personnel training documents and records rather than a plan. 40 CFR 264.51 (rather than 53) requires a contingency plan. Items 8 and 9 in the list are included in the Contingency Plans specified in item 5; thus, they should be deleted. Please review the entire list and the need to maintain these documents in multiple locations. Please revise to read: *The Permittees shall maintain the following records at the Facility as described in Permit Attachment 13 or Permit Attachment 16 (for the CAMU only), the following documents.* *1. This Permit, including all Attachments, amendments, revisions, and modifications, at the Facility.* *2. The current Waste Analysis Plan at each Permitted Unit except the MSB as set forth in Attachment 9, as required by 40 C.F.R. § 264.13(b), which is incorporated herein by reference, and this Permit.* *3. The current inspection schedule at each Permitted Unit as set forth in Attachment 11, as required by 40 C.F.R. § 264.15(b)(2), which is incorporated herein by reference, and this Permit. The schedule need only incorporate the Unit-specific information for that Unit.* *4. Current personnel training documents and records at each Permitted Unit except the MSB as set forth in Attachment 14, as required by 40 C.F.R. § 264.16(d), which is incorporated herein by reference, and this Permit.* *5. The current Contingency Plan at each Permitted Unit as*		

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					set forth in Attachment 12, as required under 40 C.F.R. § 264.51, which is incorporated herein by reference, and this Permit. The Plan need only incorporate the Unit-specific information for that Unit. *6. Operating Record and other records as required under 40 C.F.R. §264, Subpart E and this Permit, at the Permitted Units and/or the Facility as set forth in Attachment 13.* *7. The current Closure Plan at each Permitted Unit except the MSB as set forth in Attachment 15, as required under 40 C.F.R. § 264.112(a), which is incorporated herein by reference, and this Permit. The Plan need only incorporate the Unit-specific information for that Unit.* *8. The current Post-Closure Care Plan for the CAMU, as set forth in Permit Attachment 16, and as required under 40 C.F.R. § 264.118, which is incorporated herein by reference, and this Permit. None of the documents in items 2, 3, or 7 need be maintained at the CAMU.*		
32.	DOE 032	19	1.35	DOE	DOE/Sandia note that 40 CFR 124.33(d) states that the "information repository shall be located and maintained at a site chosen by the facility." There is no requirement to maintain the information at a site chosen by NMED (such as an internet webpage). Moreover, DOE/Sandia request deletion of this requirement for an information repository, as it is unnecessary in light of the fact that the documents relevant to the Permit and COOC are already publicly available. Documents are available in the administrative record and/or at the following address: University of New Mexico, Zimmerman Library Government Information Department DOE FOIA Document Collection Albuquerque NM 87131-1466 The administrative record is available from NMED at: NMED – Hazardous Waste Bureau 205 Rodeo Park Drive East, Building 1 Santa Fe NM 87505		
33.	DOE 033	20	1.37	DOE	Please delete this section or revise it to mirror the existing COOC language as corrective action is near completion at SNL, and any remaining corrective measures are already subject to public involvement requirements under Section VII.D.4 of the COOC.		
34.	DOE 034	1	1.2	DOE	The language should be more explicit to clarify that units may be used for storage and/or treatment, as in Permit Condition 1.18.1. Please revise as follows: *This Permit authorizes the Permittees to accept, store, and/or treat hazardous and mixed waste generated off-site and on-*		

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					site at the Facility at nine treatment and storage units. In addition, this Permit requires the Permittees to conduct post-closure care at one unit.		
35.	DOE 035	3	1.6	DOE	Please revise as follows to correct to the appropriate date of issuance: *"Federal Facility Compliance Order" (FFCO) means the Order issued by the Department to the United States Department of Energy, and Sandia Corporation on October 4, 1995, pursuant to section 3012(b) of RCRA, 42 U.S.C. § 6939(c), as amended by the Federal Facility Compliance Act (the Act) of 1992, Public Law 102 386, 106 Stat. 1505 (1992).*		
36.	DOE 036	9	1.9	DOE	There is no Permit Condition 1.9.2; the correct reference is to Permit Condition 1.10. Please revise accordingly.		
37.	DOE 037	10	1.15	DOE	There is no Permit Condition 1.9.7. Please delete the reference:		
38.	DOE 038	11	1.16	DOE	There is no Permit Condition 1.9.8. Please delete the reference:		
39.	DOE 039	14	1.23	DOE	There is no Permit Condition 1.9.12.2. Please revise to the relevant Permit Condition.		
40.	DOE 040	14	1.25	DOE	DOE/Sandia note that 40 CFR §§ 270.11(a)(1) and (3) apply only to applications; 40 CFR § 270.11(b) applies to reports and information. Please revise to read: *The Permittees shall sign and certify all applications, reports, or information submitted to or requested by the Department or required by this Permit, in accordance with the certification requirements in 40 C.F.R. §§ 270.11(a)(1) and (3) and 40 CFR § 270.11(b).*		
41.	DOE 041	15	1.31	DOE	This requirement is not consistent with the submittal summary in Table 1-1, and it does not clearly communicate the biennial report requirements or schedule. Please revise to read: *A biennial report must be submitted by March 1 of each even numbered calendar year. The report must cover facility activities during the previous calendar year in accordance with the requirements of 40 C.F.R. § 264.75.*		
42.	DOE 042	22	2.0	DOE	Please see Comment No. 1. DOE and Sandia note that source, special nuclear, and byproduct materials are regulated by DOE under the Atomic Energy Act, not through the Permit and the NMHWA. Therefore, DOE/Sandia believe the draft Permit need only specify materials regulated under the draft Permit, and thus radionuclides do not require discussion within the documentation. With the exception of the TTU, the draft Permit is to reflect management of hazardous waste and mixed waste at each Permitted Unit, rather than limiting any Unit to only hazardous or mixed waste management. Accordingly, please revise to read: *The Permittees shall treat only hazardous waste at the Thermal Treatment Unit (TTU). Mixed waste shall not be treated at the TTU.*		

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43.	DOE 043	22	2.1	DOE	DOE/Sandia note that this Permit Section is not consistent with the requirements of 40 CFR 264.31, which specifies release of hazardous waste constituents rather than release of hazardous constituents. As discussed in Comment No. 3, the language presented in the draft Permit requirements must be identical to the cited regulations. Please revise accordingly.		
44.	DOE 044	22	2.2.1	DOE	As discussed in Comment No. 2, the scope of activities conducted under this Permit includes treatment, and management of wastes at facilities other than the Permitted Units is not relevant to this Permit. Please revise to read: *The Permittees shall store and/or treat only the hazardous and mixed wastes specified in Part 3 (Storage of Hazardous and Mixed Waste), Part 4 (Treatment of Hazardous and Mixed Wastes), and Attachment 8 (Authorized Wastes) of this Permit.*		
45.	DOE 045	22	2.2.3	DOE	The draft post-closure care Permit for the Chemical Waste Landfill (CWL) currently requires DOE/Sandia to manage CWL wastes in the less-than-90-day accumulation area at the CAMU. Please delete this requirement.		
46.	DOE 046	23	2.2.4	DOE	DOE/Sandia note that wastes that are subject to the requirements of the FFCO may be stored for more than one year from the date such waste was first placed into storage. Please revise to read: *The Permittees are prohibited, pursuant to 40 C.F.R. § 268.50 (incorporated herein by reference), from storing hazardous or mixed waste restricted from land disposal pursuant to 40 C.F.R. Part 268, Subpart C for more than one year from the date such waste was first placed into storage, unless such storage is in accordance with the requirements of the Federal Facilities Compliance Order (FFCO).*		
47.	DOE 047	23	2.2.4	DOE	The Permittees do not perform land disposal of hazardous or mixed wastes at any of the Permitted Units, and off-site management of wastes is outside the scope of this Permit, as discussed in Comment No. 2. DOE/Sandia note that certain requirements of 40 CFR 268 are applicable to the wastes treated at the RMWMU, TTU, and AHCU; these are addressed in Permit Parts and Attachments as appropriate. Please see preceding comment regarding storage of hazardous or mixed wastes restricted from land disposal pursuant to 40 CFR 268. Please delete this text.		
48.	DOE 048	23	2.3	DOE	As noted in the Waste Analysis Plan (WAP), (Permit Attachment 9, Section 9.0, page 243), waste characterization at SNL "is a collaborative effort between individuals involved with the generation of hazardous and mixed wastes and personnel that work at the Permitted Units." It is not necessary that the waste be completely characterized before it is managed at a Unit in a safe and compliant manner.		

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					Please revise to read: *The Permittees shall accept, store, treat, or otherwise manage at the Permitted Units at the Facility only those hazardous wastes and mixed wastes that have been characterized sufficiently to identify the requirements for management at the Unit in accordance with the requirements of 40 CFR § 264.13 and this Permit. Characterization in accordance with the requirements of the Waste Analysis Plan (WAP) in Permit Attachment 9 may be completed while the waste is managed at a Permitted Unit.*		
49.	DOE 049	23	2.3	DOE	Please see Comment No. 1 regarding regulation of the radiological component of wastes under this Permit. Please see Comment No. 2 regarding the scope of this Permit and regulation of activities other than treatment and storage requiring a Permit at the Permitted Units; no reference to other management is needed. Please delete item 5 and revise as follows: *At a minimum, the Permittees must obtain and document all of the necessary information that must be known to treat or store a hazardous or mixed waste at one of the Permitted Units in accordance with 40 C.F.R. Parts 264 and 268, including but not limited to:* 1–4 (not included in comment)		
50.	DOE 050	24	2.3	DOE	As discussed in preceding comments, DOE/Sandia note that it is not necessary to fully identify all the chemical constituents of a waste in order to manage it in accordance with the regulatory requirements and Permit conditions. It is also not necessary to use a unique waste identifier in the Operating Record. Please delete item 2 and revise as follows: *The Permittees shall document the following for each hazardous waste and mixed waste managed under this Permit.* *1 (not included in comment)* *2 (formerly 3, not included in comment)* *3. A description of the waste generation process that includes material inputs or other information as needed to determine hazardous waste codes and physical form of the waste.*		
51.	DOE 051	25	2.3.1	DOE	The Operating Record requirements of 40 CFR § 264.73 do not include this requirement. Please see Comment No. 3 for additional discussion of regulatory requirements and consistency with the draft Permit. Please delete this condition.		
52.	DOE 052	25	2.3.2	DOE	DOE/Sandia note hazardous wastes are characterized according to the criteria in 40 CFR 261, not according to 40 CFR 268. The status of the waste with respect to the		

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					treatment standards in 40 CFR 268 is not required for the waste storage activities governed by this Permit. As described in the WAP (Permit Attachment 9), DOE/Sandia have developed a strategy for characterizing wastes generated at SNL. As part of the strategy, analyses are targeted towards constituents known or suspected to be present in the wastes, as summarized in Permit Table 9-1. Wastes that are to be treated in one of the Permitted Units are tested as needed to determine whether they meet the applicable treatment standards in cases where meeting the standards is one of the treatment objectives. The testing includes analysis for underlying hazardous constituents (UHCs) in 40 CFR 268.48 as applicable. Further, DOE/Sandia note that the definition of UHCs in 40 CFR 268.2(i) limits them to constituents "which can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standards." Accordingly, please delete this requirement.		
53.	DOE 053	25	2.3.2	DOE	DOE/Sandia generate a wide variety of wastes from Facility operations, and it is not feasible to ensure that future wastes will not have characteristics that interfere with analyses. In the case of wastes with such characteristics, DOE/Sandia will use other information as needed to characterize the waste. Please delete this requirement.		
54.	DOE 054	25	2.3.3	DOE	DOE/Sandia note that 40 C.F.R. § 264.74(a) and 40 C.F.R. § 270.30(h) require that records be furnished upon request and at reasonable times but do not require that records be maintained in written form. DOE/Sandia may maintain records in paper and/or electronic formats as described in the Application. There is no Permit Condition 2.17.2. Permit Condition 1.34 requires the Permittees to maintain operating record information until the completion of closure. Further, DOE/Sandia may choose to use another method to facilitate access as needed. Please revise to read: *AK documentation associated with waste analysis and waste determinations under 40 CFR 264.73(b)(3) must be maintained in the Facility Operating Record. The Permittees shall assign a traceable identification number to this documentation or use another method to facilitate access to this information by the Permittees and the Department until the completion of closure for the Permitted Unit.*		
55.	DOE 055	26	2.3.4	DOE	Regarding annual re-characterization, DOE/Sandia note that it is only appropriate to re-characterize those hazardous and mixed wastes that are generated periodically and will continue to be generated in the future. Further, it is not necessary to re-characterize all such wastes annually because some of them will be addressed as specified in		

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					items 2 and 3 (known or suspected changes in the process or waste, notification from TSDFs that waste does not match the characterization). The 24-hour notification is not consistent with the 15-day period established for resolution of significant manifest discrepancies in 40 CFR §§ 264.72, 262, and 263. Please revise this requirement as follows: *The Permittees shall:* *1. Annually re-evaluate waste streams for ten percent by volume or mass of the total routinely generated hazardous and mixed wastes streams at the Facility that have been received at a Permitted Unit but not evaluated for any reason within the past twelve months.* *3. Re-characterize a hazardous or mixed waste whenever the Permittees are notified by an off-site facility that has received a hazardous waste from the Facility that the characterization of the waste received at the off-site facility does not match a preapproved waste analysis certification or accompanying waste manifest or shipping paper.*		
56.	DOE 056	26	2.3.5	DOE	Table 2-1, "Documentation Table," does not specify waste characterization information. Waste characterization requirements are specified in Permit Attachment 9. DOE/Sandia note that the documentation requirements applicable to the Permitted Units are specified in Permit Attachment 13. Please delete Table 2-1, as discussed in Comment No. 64. DOE/Sandia may choose to use an alternative to a traceable identification number, as discussed in Comment No. 54. Section 2.17 addresses the manifest system. Section 1.34 in Permit Part 1 addresses document maintenance and Permit Attachment 13 addresses recordkeeping requirements. Please revise to read: *For records that contain waste characterization information but are required to be archived elsewhere at the Facility, such as laboratory record books, the Permittees shall assign a traceable identification number to this documentation or use another method to facilitate access to this information by the Permittees and the Department, for as long as required under Permit Part 1, Section 1.34, and the applicable sections of Permit Attachment 13, Recordkeeping.*		
57.	DOE 057	26	2.3.5	DOE	DOE/Sandia note that "a report summarizing the supporting documentation and waste characterization conclusions" is not required under the regulations, nor is it needed, as the conclusions are evident in the waste determination. All required documentation is maintained in the Operating Record, as described in Permit Attachment 13. Please revise to read: *The Permittees shall include in AK documentation all*		

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					information assembled and used in the characterization process.		
58.	DOE 058	26	2.3.6	DOE	The WAP (Permit Attachment 9) describes the process for characterizing wastes received from off-site sources. It does not include a list of such sources. Please delete this sentence.		
59.	DOE 059	27	2.3.6	DOE	This language is not consistent with the regulatory manifest discrepancy provisions set forth at 40 CFR 264.72 or with the requirements of the WAP (Permit Attachment 9, Section 9.8.2). Please revise to read: *If any significant discrepancies between the shipment and associated documentation are found that cannot be resolved within 15 days after receiving the waste, the Permittees shall send a notification to the Department in accordance with 40 C.F.R. § 264.72.*		
60.	DOE 060	27	2.3.7	DOE	DOE/Sandia note Permit Condition 2.3.4 addresses waste characterization review, rather than waste characterization. Additionally, compliance with treatment standards is not always a goal (e.g., preliminary treatment steps taken to render a waste suitable for further treatment at an off-site TSDF). DOE/Sandia evaluate the treated waste to determine whether the treatment was effective; thus, characterization would be limited to information needed for that determination. Please see Comment Nos. 453 and 473 for additional discussion of characterization of treated wastes. Accordingly, please revise to read: *For hazardous or mixed wastes that are treated to meet one or more applicable treatment standards at a Permitted Unit, the Permittees shall characterize the treatment-derived wastes in compliance with the notification and record-keeping requirements specified in 40 C.F.R. § 268.7(b)(3)(ii), Treatment Facility Paperwork Requirements Table, Requirement 1.* *Specifically, when compliance with treatment standards is a treatment goal, the Permittees shall characterize treatment-derived wastes, including wastes that are formerly characteristic and thus are no longer hazardous or mixed waste, to determine whether the waste meets the applicable LDR treatment standards specified at 40 C.F.R. §§ 268.40, 268.45, 268.48, and 268.49, in compliance with 40 C.F.R. § 268.7(b). Pursuant to 40 C.F.R. § 268.7(b)(3)(ii), the Permittees shall characterize treatment-derived waste to determine the presence of any of the constituents of concern for hazardous waste codes F001 through F005 and F039, and the presence of underlying hazardous constituents in characteristic wastes as defined at 40 C.F.R. § 268.2(i).*		
61.	DOE 061	27	2.4	DOE	The application of 40 CFR 264 Subpart CC requirements to containers of mixed wastes is discussed in Comment No. 1. Each container is evaluated individually with respect to the		

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					container construction specifications and operation requirements in 40 CFR 264.1086(b). Please revise to read: *The Permittees shall not be required to determine the average VOC concentration of wastes if the container or tank manages mixed waste as exempted at 40 C.F.R. § 264.1080(b)(6), or the Permittees control air emissions from the container in accordance with the container construction specifications and operation requirements at 40 C.F.R. § 264.1086(b).*		
62.	DOE 062	28	2.5.1	DOE	DOE/Sandia note that quantities of covered mixed wastes (wastes that are subject to the FFCO) that are less than 1 cubic meter or 10% of the volume of a treatability group are immediately included in the STP, as specified in Sections VIII and X.B.4 of the FFCO. Larger quantities of covered wastes are not included in the STP until it is revised as specified in Sections VIII and X. Since the revision process takes at least 60 days, it is not appropriate to specify that all covered wastes be included in the STP. As discussed in Comment No. 7, DOE/Sandia also note that NMED review and approval of detailed treatment plans for each waste to be treated at the RMWMU and AHCU (see Permit Part 4, Section 4.3) will lead to significant delays in treating the wastes; thus wastes may not be treated within one year, affecting the Permittees' ability to comply with the requirements of 40 CFR 268.50. Please revise to read: *3 That a mixed waste is subject to the Federal Facility Compliance Order (FFCO) and such storage is otherwise in compliance with all requirements of the STP and FFCO.*		
63.	DOE 063	29	2.5.3	DOE	40 CFR § 268.7(a)(7) requires a one-time notice. The Permit Condition should clearly state that requirement. Further, the requirement does not generally apply to the DOE/Sandia operations that are covered in this Permit; it only applies to wastes that are treated at the RMWMU, the AHCU, or the TTU. Information regarding exclusions and exemptions are documented in the Operating Record in accordance with 40 CFR 268.7(a)(7). Please revise to read: *For hazardous or mixed wastes treated at one of the Permitted Units, pursuant to 40 C.F.R. § 268.7(a)(7), the Permittees shall document in the Facility Operating Record (with a one-time notice) any land disposal prohibited wastes that the Permittees determine to be excluded from the definition of hazardous or solid waste, or determine to be exempted from Subtitle C regulation under 40 C.F.R. §§ 261.2 through 261.6 subsequent to the point of generation. This includes deactivated formerly characteristic hazardous waste managed in wastewater treatment systems subject to*		

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					the Clean Water Act (CWA) as specified at 40 C.F.R. 261.4(a)(2) or that are CWA-equivalent (40 C.F.R. § 268.7(a)(7)).		
64.	DOE 064	29	2.6 and Table 2-1	DOE	As discussed in Comment No. 56, documentation to be kept in the Facility Operating Record (including the documentation for waste characterization described in Permit Attachment 9) is clearly and completely specified in Permit Attachment 13. Numerous documentation references are also included in other sections of Permit Part 2. This Permit Condition is not consistent with the rest of this draft Permit, and it is not consistent with the requirements in 40 CFR 264.73. Furthermore, Table 2-1 contains numerous inaccurate references, and is unnecessary. Please delete this section.		
65.	DOE 065	30	2.8	DOE	DOE/Sandia note that PCBs are not included in 40 CFR 266.23(b). Please revise to read: *Pursuant to 40 C.F.R. § 266.23(b), the Permittees shall not use waste or used oil or any other material, which is contaminated with dioxin, or any other hazardous or mixed waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment. In addition, the Permittees shall not use waste or used oil or any other material contaminated with PCBs in this manner.*		
66.	DOE 066	30	2.9	DOE	The regulatory citations are not specific to the issue. Please revise to read: *Pursuant to 40 C.F.R. § 264.14(c), to prevent the unknowing entry and to minimize the possibility of unauthorized entry of persons or livestock onto the waste management units, the Permittees shall comply with the Security Plan set forth in Permit Attachment 10.*		
67.	DOE 067	30	2.10	DOE	40 C.F.R. § 264.15(c) addresses malfunctions and deterioration of only equipment and structures; 40 C.F.R. § 264.15(a) addresses "malfunctions and deterioration, operator errors, and discharges." Please revise to read: *The Permittees shall implement the Inspection Plan contained in Permit Attachment 11, and shall remedy any container and equipment malfunctions and deteriorations, operator errors, and discharges as required by 40 C.F.R. § 264.15(a).*		
68.	DOE 068	31	2.15.1	DOE	The wording of this Permit Condition is confusing, as Table 12-3 lists facility-wide equipment that is not maintained at individual Units, and other tables in the Permit Attachment list equipment to be maintained at individual Units. Please revise to read: *At a minimum, the Permittees shall have available for use the equipment set forth in Table 2-3 of Permit Attachment 12 (Contingency Plan), and as required by 40 C.F.R. § 264.32.*		

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					The Permittees shall also have available at each Permitted Unit the Unit-specific equipment detailed in Tables 12-5, 12-7, 12-9, 12-11, and 12-13.		
69.	DOE 069	31	2.15.2	DOE	The inspection frequencies identified in Permit Attachment 11 vary (e.g., daily, weekly, and monthly). DOE/Sandia note that weekly inspections are not necessary for much of the equipment; such items are inspected monthly at most of the Units in accordance with the requirements of 40 CFR 264.15, as described in the Application. DOE/Sandia have performed such inspections on a monthly basis for many years, and have found this frequency to be appropriate considering the slow rate of deterioration of the equipment and the low probability of an environmental or human health incident if the deterioration or malfunction goes undetected between inspections, as specified in 40 CFR 264.15(b)(4). Please revise to read: *This equipment shall undergo regularly scheduled inspections to ensure proper functionality in accordance with the frequencies specified in the Inspection Plan (Permit Attachment 11).*		
70.	DOE 070	31	2.15.5	DOE	The City of Albuquerque and Bernalillo County Fire Departments do not provide emergency response services to SNL/NM. Fire protection is provided by the 377th Air Base Wing and the US Forest Service, as described in the Application, and in Section 12.5.4 of Permit Attachment 12. DOE/Sandia note that the name and number of hospitals are subject to change. Please revise to read: *The Permittees shall maintain Coordination Agreements as needed with the 377th Air Base Wing, Kirtland Air Force Base, the New Mexico Department of Public Safety, the U.S. Forest Service, and one or more Albuquerque hospitals such as the Albuquerque Regional Medical Center, Lovelace Medical Center, the University of New Mexico Medical Center, and Presbyterian Health Care Services.*		
71.	DOE 071	32	2.15.5	DOE	DOE/Sandia note that 40 CFR § 264.73 (Operating Record) does not require that copies of coordination agreements be included in the Facility operating record. Please delete this sentence.		
72.	DOE 072	32	2.16.1	DOE	DOE/Sandia note the second paragraph under section 2.16.1 is not necessary for two reasons: • The information already provided in the Contingency Plan fully satisfies the requirements in 20.4.1.500 NMAC incorporating 40 CFR 264.52(d). • The requested information does not support the objectives of rapidly contacting the ECs and providing timely emergency response. Telephones and pagers are the primary means of contacting ECs, and addresses are solely listed for the purpose of correspondence, in which case a post office box is		

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					adequate. According to 40 CFR 264.52(d), "The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator..., and this list must be kept up to date." The plan submitted listed the names of the ECs and alternate ECs, provided an address for correspondence and included work and home telephone numbers as well as a pager number and/or a cell phone number. The sentence construction in this regulation clearly establishes that the "(office and home)" phrase applies to phone numbers only, not to providing home addresses. Also, in the May 19, 1980 Federal Register (45 FR 33186), EPA made the following statement when commenting on the availability of an emergency coordinator, "However, the Agency believes an emergency coordinator should at least be available (on call) to respond immediately to emergencies at the facility, initially by giving phone instructions to local authorities and facility personnel, but also by being able to be on-the-scene within a short time." Therefore, DOE and Sandia have complied with the regulations by providing an address which allows for correspondence (i.e., post office box for the relevant office address) and a complete listing of all telephone numbers to achieve the level of being available (on call). Please delete this requirement.		
73.	DOE 073	32	2.16.1	DOE	Please revise as follows to clarify that the requirement for implementing the contingency plan applies only to emergencies affecting Permitted Units: *The Permittees shall immediately implement the Contingency Plan contained in Permit Attachment 12, whenever there is a fire, explosion, or release of hazardous or mixed waste or hazardous waste constituents at a Permitted Unit that could threaten human health or the environment.*		
74.	DOE 074	32	2.16.2	DOE	It is not necessary to keep all amendments at each Permitted Unit; only the most current Plan is necessary. It is also not necessary to provide the full plan to entities that do not directly provide emergency services; these entities are adequately informed according to the Coordination Agreements. The distribution list for the plan and amendments consists of NMED, the SNL emergency response organization, and the Kirtland Air Force Base Fire Department, as shown in Section 12.4 of Permit Attachment 12. Please revise to read: *The Permittees shall maintain copies of the current Contingency Plan at each Permitted Unit and shall maintain a copy of the Contingency Plan and all amendments to the Plan*		

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					in the Facility Operating Record. [40 C.F.R. § 264.53(a)]. The Permittees shall provide a current copy of the Contingency Plan to the Department and all entities that provide emergency services at SNL/NM, as provided for in Permit Condition 2.15.5 and Permit Attachment 12. [40 C.F.R. § 264.53(b)].		
75.	DOE 075	32	2.18	DOE	Please delete this requirement. For purposes of implementing the Permit, use of position/title is more efficient than individual names. Use of position/title is consistent with the NMED contact information provided in Section 1.32.1 of the draft Permit. In accordance with 40 CFR 270.11, the names of responsible corporate officers and their delegated representatives will be provided to NMED by letter transmittal. The DOE contact person is: Site Office Manager U.S. Department of Energy P.O. Box 5400, M/S 0184 Albuquerque, NM 87185-0184 (505) 845-6036 The Sandia contact person is: Vice President Waste Management Operations Sandia National Laboratories P.O. Box 5800 Albuquerque, NM 87185-5800		
76.	DOE 076	33	2.19	DOE	The Biennial Report includes information on EPA ID numbers of offsite facilities; descriptions and quantities of hazardous waste received during the reporting year; and methods of treatment, storage, or disposal for each hazardous waste. Items 9-18 are not included in the requirements in 40 CFR 264.75 for biennial reports, and should not be included in the Permit as they are not consistent with the regulations, as discussed in Comment No. 3. DOE/Sandia are required by Condition 2.7 of Permit Part 2 and by 40 CFR 264.73(b)(9) to certify annually that a waste minimization program is in place. Please delete items 9-18 and revise as follows: *2.19 BIENNIAL REPORT* *The Permittees shall include the following items in biennial reports as required under 40 C.F.R. § 264.75 and of Condition 1.31 of Permit Part 1.* 1–8 (not included in comment)		

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77.	DOE 077	35 - 36	2.20.2	DOE	As discussed in Comment No. 10, DOE/Sandia note that the Closure Plan included in the Application and Permit Attachment 15 is adequate, as it fully identifies the steps necessary at each Unit to perform closure and meet the closure performance standards. In addition, the plan fully addresses all the requirements of 40 CFR 264 Subpart G, the additional requirements for container storage units in 40 CFR 264.178, the requirements for miscellaneous units in 40 CFR 264 Subpart X, and the requirements for closure of thermal treatment units in 40 CFR 265.381. Finally, the closure plan included in the Application and Permit Attachment 15 includes a SAP that addresses the requirements for SAPs in draft Permit Condition 2.20.3. Please delete the first item. Regarding the contaminants of potential concern (COPCs) in item 2, DOE/Sandia note that it is not reasonable to ignore Unit history and operations when developing a closure plan. DOE/Sandia selected constituents of concern based on Unit history, waste management operations, and constituent properties. The constituents are included in the Closure Plan in the Application and in Permit Attachment 15. The constituents chosen are those that are: • present in wastes that were/are stored in the Units, • indicative of releases of hazardous wastes or constituents • likely to be present at closure if they were released. DOE/Sandia included a schedule in the Closure Plan in the Application. DOE/Sandia also note that any schedule that accounts for future permit modifications is only an estimate. Please include the schedule from the Application in the Permit and delete item 3. Please revise to read: *Prior to closure of each Permitted Unit, the Permittees shall establish in the Closure Plan for that Unit a comprehensive list of contaminants of potential concern by identifying:* *1. All hazardous and mixed wastes managed within the Permitted Unit; and* *2. constituents present in wastes that would be indicative of releases of hazardous wastes* *3. constituents likely to be present at closure if they were released.* *This list shall be utilized to select the analytical methods and detection limits capable of detecting the contaminants of potential concern associated with the Unit.*		

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78.	DOE 078	36	2.20.3	DOE	It is not necessary to submit an "updated sampling and analysis plan" unless there are changes that necessitate an update. DOE/Sandia note that changes in procedures for decontamination of facility equipment or structures are considered Class 1 permit modifications requiring prior Department approval in 40 CFR 270.42 Appendix I (Item D.d). The review time specified in 20.4.2.207 NMAC for this type of modification is 120 days, not 60 days. DOE/Sandia further note that it is not possible to predict the date of "final receipt of hazardous waste at any of the Permitted Units" due to the variations in quantity and types of hazardous wastes generated by the research and development operations at SNL/NM. Please delete this item.		
79.	DOE 079	36	2.20.3.1	DOE	DOE/Sandia note that sampling environmental media is not an adequate or appropriate tool for determining whether there has been a release of hazardous wastes or hazardous waste constituents to environmental media. Sampling is appropriate to investigate the extent of a release only when there is prior information (such as visual evidence or operating history) indicating that a release occurred or may have occurred. DOE/Sandia also note the SAPs included in the Closure Plan do provide for adequate verification sampling. Please revise as follows: *Each SAP shall provide for:* *1. Verification sampling to ensure that equipment, structures, and buildings are decontaminated;* *2. Investigative sampling if a release of hazardous wastes or hazardous constituents to environmental media is identified in Unit operating history or records, or is suspected based on visual evidence in order to determine the nature and extent of the release; and*		
80.	DOE 080	37	2.20.3.1	DOE	*DOE/Sandia note that the most appropriate cleaning solution will be selected during closure based on the specific conditions. The closure plan in the Application includes a general specification for cleaners, and will be revised before closure to include recommendations for specific cleaners that are commercially available. Any cleaner chosen will meet the specifications. The closure report will include a discussion of the cleaning activities and the analytical results; the cleaning solution will be considered as appropriate during evaluation of the results.* *Please revise as follows:* *Each SAP shall, at a minimum, include the following.* *1–5 (not included in comment)*		

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					6. Cleaning Solutions. The Permittees shall make certain that all cleaning solutions to be used during closure meet the specifications in the Closure Plan.		
81.	DOE 081	37	2.20.4.1	DOE	DOE/Sandia note the sampling frequency specified in this section is not consistent with the Closure Plan in the Application or in Permit Attachment 15. Neither is it consistent with the operating history of the Permitted Units. For example, DOE/Sandia note wastes are transferred through tubing at the Thermal Treatment Unit; this tubing will be managed with the other equipment during closure, as described in the Closure Plan in the Application and Permit Attachment 15. The piping present in the other waste management units is part of the structures, and should be sampled in the same manner as the surrounding area; thus, item 5 should be deleted. Item 6 does not address verification sampling and should be deleted. Item 8 is not consistent with the Closure Plan and does not address contamination attributable to Unit operations. Permit Condition 2.20.7 describes Time Allowed for Closure, not decontamination and removal. Accordingly, please revise as follows: *After decontamination and removal as discussed in Permit Attachment 15, Sections 15.3.2, 15.4, and 15.5, the Permittees shall conduct the following verification sampling activities and frequencies, and include them in each SAP, to ensure equipment and structures are properly decontaminated and determine whether there has been a release of hazardous or mixed waste or hazardous constituents to environmental media.* *1. The Permittees shall collect samples as described in Permit Attachment 15. The samples shall address surfaces in the Permitted Units that were affected by hazardous and mixed waste management activities. The type of sample collected (e.g., washwater, swipe, chip, core, soil) shall depend on the material being sampled and the constituents being analyzed. The Permittees shall provide the rationale for proposing the types of samples they will be collecting.* *2 (not included in comment)* *3. If samples collected from any equipment or surfaces indicate the presence of contamination above threshold levels in the Closure Plan, the contaminated area must be washed and re-sampled. The Permittees shall continue this process until decontamination is achieved.* *4. If verification samples on floors detect hazardous or mixed waste or hazardous waste constituents, the Permittees shall follow the procedures identified in Permit Attachment 15, Section 15.3.2.*		

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					5 (formerly 7, not included in comment) *6. The Permittees' verification samples in areas constructed of asphalt or asphaltic concrete shall consist of collecting soil samples from the subgrade and soils underneath the asphalt or asphaltic concrete at intervals approved by the Department. If verification soil samples detect contamination attributable to release of hazardous wastes or hazardous waste constituents, the Permittees shall remove the affected asphalt or asphaltic concrete and follow the procedures identified in Permit Attachment 15.*		
82.	DOE 082	38	2.20.4.2	DOE	DOE/Sandia note that 40 CFR 264 Subpart G requires that the closure activities control, minimize, or eliminate contamination to the extent necessary to protect human health and the environment. This effort is achieved by defining the nature and extent of the contamination and then decontaminating to accepted cleanup levels. Please revise to read: *The Permittees must determine the nature and extent of any releases detected during closure activities if contamination is discovered.*		
83.	DOE 083	38	2.20.5	DOE	The text of numbered items 1 and 3 as written is unclear. DOE/Sandia also note 40 CFR 264 does not include a requirement for interim reports on the progress of closure; this should be deleted. Please revise as follows: *At the completion of closure of any Permitted Unit, the Permittees shall submit a closure report to the Department no later than 90 days after completion of Unit closure, for Department approval. The closure report shall summarize all activities conducted during closure including, but not limited to:* *1. Equipment and structure removal,* *3. Decontamination of the Units including remaining structures*		
84.	DOE 084	38 - 39	2.20.7	DOE	DOE/Sandia note that closure will not be completed in 90 days, as the closure schedule in Table 15-3 specifies 180 days. In addition, any closure activities will be delayed until NMED approves any revisions needed for the SAP. Please revise to read: *The Permittees shall remove all hazardous and mixed waste from the Permitted Unit to a permitted treatment, storage or disposal facility, and shall complete closure activities, as required by 40 C.F.R. § 264.113, following the Closure Schedule in Permit Attachment 15, Table 15-3.*		
85.	DOE 085	39	2.20.9	DOE	This section is not consistent with the requirements of 40 CFR § 264.115. Please revise to read:		

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					Within 60 days from the date of completion of closure of a Permitted Unit, the Permittees shall submit by registered mail to the Department a final closure report and written closure certification signed by the owner or operator and an independent professional engineer registered in the State of New Mexico, stating that the waste management unit was closed as required by the Closure Plan in Permit Attachment 15.[40 C.F.R. § 264.115]		
86.	DOE 086	39 - 40	2.22 and 2.23	DOE	Sandia Corporation is not subject to the liability requirements outlined in Sections 2.22 and 2.23, as discussed in Comment No. 4. Please delete these sections.		
87.	DOE 087	25	2.3.1	DOE	Permit Condition 2.17 addresses the Manifest System; the Facility Operating Record is required in Permit Condition 1.34 (Numbered item 6). Please revise accordingly.		
88.	DOE 088	26	2.3.6	DOE	Permit Section 2.3.4 addresses waste characterization review requirements; Section 2.3 lists general waste characterization requirements. Please revise accordingly.		
89.	DOE 089	27	2.3.7	DOE	As noted in Comment No. 88, Permit Part 2, Section 2.3.4 addresses waste characterization review requirements; Permit Part 2, Section 2.3 lists general waste characterization requirements. In addition, Permit Attachment 9, Section 9.4.5.3 addresses the characterization of treated wastes and treatment residues. Please revise to read: *The Permittees shall characterize treatment-derived wastes by determining whether the waste is a hazardous or mixed waste in compliance with the requirements of Permit Part 2, Section 2.3, and Permit Attachment 9, Section 9.4.5.3, of this Part (2) and in compliance with the notification and record-keeping requirements specified in 40 C.F.R. § 268.7(b)(3)(ii), Treatment Facility Paperwork Requirements Table, Requirement 1.*		
90.	DOE 090	31	2.15.3	DOE	Permit Condition 2.15.3 can reference the systems that are described in the Permit Attachments. Please revise to read: *The Permittees shall maintain access to the communications or alarm systems listed and described in Permit Attachments 11 and 12 as required by 40 C.F.R. § 264.34.*		
91.	DOE 091	31	2.15.4	DOE	Permit Attachment 12 does not include any reference to aisle space. Please revise to read: *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 operation of the Permitted Units, including the CAMU, in an emergency as required by 40 C.F.R. § 264.35, and as set forth in Permit Attachment 2, Section 2.2.2.2 (Aisle Space and Storage Configuration).*		
92.	DOE 092	41	3.0	DOE	Management of radionuclides is not regulated under this Permit, as discussed in Comment No. 1. Therefore,		

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					DOE/Sandia do not believe this Permit needs to specify whether radionuclides are present or absent in the wastes that are managed at the HWMU, RMWMU, AHCU, or MSB subject to this Permit. Accordingly, please revise to read: *This Permit Part (3) contains the regulatory requirements that the Permittees shall follow when managing and storing hazardous wastes at the Hazardous Waste Management Unit (HWMU), and when managing and storing mixed waste at the Radioactive and Mixed Waste Management Unit (RMWMU), the Auxiliary Hot Cell Unit (AHCU), and the Manzano Storage Bunkers (MSB).*		
93.	DOE 093	41	3.1	DOE	Waste management requirements and conditions are specified in all the Permit Attachments. DOE/Sandia note the time limit in Section 3.1 is not fully consistent with Section 2.5.1 in Permit Part 2 which allows storage beyond one year under certain conditions listed therein. Permit Attachment 9, Section 9.9.3 also lists conditions under which wastes may be stored for more than one year. Please revise as follows: *The Permittees shall manage and store hazardous and mixed waste as specified in Permit Attachments 1 through 14, subject to the following conditions.* *2. Storage Time Limit – The Permittees shall not store any hazardous or mixed waste in the storage Units for more than one year, unless the storage meets the conditions in Section 2.5.1 of Permit Part 2 or in Section 9.9.3 of Permit Attachment 9.*		
94.	DOE 094	42	3.4	DOE	Acceptable containers are compatible with the waste, in good condition, and kept closed. Containers at the Permitted Units meet these criteria and are managed in compliance with 40 CFR 264 Subparts I and CC as applicable. DOE/Sandia note that this Condition is not consistent with the requirements of 40 CFR 263.10 (b), which specifies "These regulations do not apply to on-site transportation of hazardous waste by generators or by owners or operators of permitted hazardous waste management facilities" in reference to the DOT hazardous materials transportation regulations in 49 CFR 171 through 179 that are incorporated by reference into 40 CFR 263. Please see Comment No. 3 for additional discussion regarding consistency between the regulations and requirements in the draft Permit. Furthermore, in many cases, containers that comply with DOT requirements for shipping are not appropriate for storage or treatment at the SNL Permitted Units. Accordingly, please delete this requirement.		
95.	DOE 095	43	Table 3-1	DOE	Please see Comment No. 6 for discussion of quantities in existing permits and in the draft Permit. DOE/Sandia note the maximum volume is given in gallons; this is a unit of volume		

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					and does not imply that the wastes are all liquids, as indicated in the footnote to revised Table 3-1 in this comment. As noted in Comment No. 7, the Application includes numerous descriptions of typical operations that illustrate ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. Container configuration, stacking, and the use of transportainers are three examples; in each case, the draft Permit includes prescriptive requirements that are not appropriate in all cases. Also, it is not clear whether "containers shall not be stacked" has the same meaning as "stacking not available." Please revise Table 3-1 as follows: *TABLE 3-1 Maximum Storage Capacities at SNL's Storage Units* *Hazardous Waste Management Unit (HWMU)* *Permitted Storage Unit: Building 958* *Maximum Amount of Waste (gallons): 59,950* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Building 958B (Modular Storage Building)* *Maximum Amount of Waste (gallons): 5,000* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating capacity.* *Permitted Storage Unit: Building 958C (Modular Storage Building)* *Maximum Amount of Waste (gallons): 5,000* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating capacity.* *Permitted Storage Unit: Building 959* *Maximum Amount of Waste (gallons): 7,590* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Radioactive and Mixed Waste Management Unit (RMWMU)* *Permitted Storage Unit: Building 6920* *Maximum Amount of Waste (gallons): 13,420* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Building 6921*		

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					Maximum Amount of Waste (gallons): 7,810 *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Building 6925* *Maximum Amount of Waste (gallons): 83,160* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Building 6926* *Maximum Amount of Waste (gallons): 83,160* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Modular Storage Building TP150* *Maximum Amount of Waste (gallons): 1,100* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating capacity.* *Permitted Storage Unit: Modular Storage Building TP153* *Maximum Amount of Waste (gallons): 1,100* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating capacity.* *Permitted Storage Unit: Asphalt Area North, East, and West of Building 6920* *Maximum Amount of Waste (gallons): 19,800* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Auxiliary Hot Cell Unit (AHCU)* *Permitted Storage Unit: Building 6597 Container Storage Area* *Maximum Amount of Waste (gallons): 3,520* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Building 6597 Storage Silos* *Maximum Amount of Waste (gallons): 1,456* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Building 6597 Hot Cell* *Maximum Amount of Waste (gallons): 900* *Type of Container Stacking: Stacks shall be stable.*		

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					Containers and stacks shall not exceed grating or floor capacity. *Permitted Storage Unit: Building 6597 Fume Hood* *Maximum Amount of Waste (gallons): 110 (included in Work Area)* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Building 6597 Work Area* *Maximum Amount of Waste (gallons): 2,200* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Manzano Storage Bunkers (MSB)* *Permitted Storage Unit: Bunker 37034* *Maximum Amount of Waste (gallons): 25,080* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Bunker 37045* *Maximum Amount of Waste (gallons): 18,480* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Bunker 37055* *Maximum Amount of Waste (gallons): 18,480* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Bunker 37057* *Maximum Amount of Waste (gallons): 18,480* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Permitted Storage Unit: Bunker 37118* *Maximum Amount of Waste (gallons): 35,200* *Type of Container Stacking: Stacks shall be stable. Containers and stacks shall not exceed grating or floor capacity.* *Note: The maximum volume is given in gallons; this does not imply that the wastes are liquids.*		

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96.	DOE 096	44	3.8	DOE	The inspection frequencies identified in Permit Attachment 11 vary (e.g., daily, weekly, and monthly). DOE/Sandia note that weekly inspections are not necessary for much of the equipment; such items are inspected monthly at most of the Units in accordance with the requirements of 40 CFR 264.15, as described in the Application. DOE/Sandia have performed such inspections on a monthly basis for many years, and have found this frequency to be appropriate considering the slow rate of deterioration of the equipment and the low probability of an environmental or human health incident if the deterioration or malfunction goes undetected between inspections, as specified in 40 CFR 264.15(b)(4). In addition, the condition is inexact in relation to the cited regulatory requirement. Please revise to read: *The Permittees shall perform regularly-scheduled inspections at areas where containers are stored in the storage Units in accordance with the frequencies specified in the Inspection Plan (Permit Attachment 11), as required by 40 C.F.R. § 264.174.*		
97.	DOE 097	44	3.10.1	DOE	DOE/Sandia note the HWMU and MSB are not located within a SNLTA. Accordingly, please revise to: *Containers holding ignitable or reactive wastes shall be located at least 50 feet from the TA boundary with the following exceptions: at the MSB where they shall be stored at least 50 feet from the fence restricting access by non-Facility personnel at all times, and at the HWMF where they shall be stored at least 50 feet from the Facility property line. Containers holding ignitable or reactive wastes shall be protected from sources of ignition or reaction. [40 C.F.R. § 264.176].*		
98.	DOE 098	44	3.10.3	DOE	40 CFR 260.11(a) states "When used in parts 260 through 270 of this chapter, the following publications are incorporated by reference:" DOE/Sandia note the "Flammable and Combustible Liquids Code" is not used in the regulations addressing general requirements for Ignitable reactive, or incompatible wastes in 40 CFR 264.17 or in the requirements for management of containers under 40 CFR 264 Subpart I. As discussed in Comment No. 3, the language of the Permit must be identical to the language of the regulations. Accordingly, please delete this sentence.		
99.	DOE 099	41	3.0	DOE	The storage Units are described in Permit Attachments 3, 5, 6, and 7. Please revise accordingly.		
100.	DOE 100	44	3.7	DOE	As written, Permit Condition 3.7 is inexact in relation to the cited regulatory requirement. Please revise to read: *Pursuant to 40 C.F.R. § 264.175(d), the Permittees shall have a containment system defined by 40 C.F.R. 264.175(b) for containers holding wastes having hazardous waste numbers F020, F021, F022, F023, F026, and F027 that do not contain free liquids.*		

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101.	DOE 101	44	3.10.2	DOE	Container management requirements are included in Permit Attachment 2 rather than Permit Part 2. Please revise accordingly.		
102.	DOE 102	45	3.11.1	DOE	Permit Attachment 2 describes the management of incompatible wastes. Permit Attachment 4 discusses treatment at the TTU; storage is not conducted at that Unit. Please revise to reference the correct Attachments.		
103.	DOE 103	45	3.11.2	DOE	Please see preceding comments. Section 3.11.2 references requirements in Permit Attachments 2, 3, 5, 6, and 7. Please revise to incorporate the appropriate Attachments.		
104.	DOE 104	46	4.1.1	DOE	As described in the Application, not all waste treatment at the RMWMU and AHCU occurs in containers. Physical treatment and chemical deactivation may or may not take place in containers, depending on the nature of the waste and treatment requirements. Further, DOE and Sandia note that the source, special nuclear, and byproduct materials that make up the radioactive component of mixed wastes are regulated by DOE under the Atomic Energy Act, as discussed in Comment No. 1. Please revise to read: *The Permittees shall treat waste at the RMWMU and the AHCU for subsequent transfer to a storage or disposal facility, and shall treat only wastes listed in Permit Attachment 8 (Authorized Wastes).*		
105.	DOE 105	47	Table 4-1	DOE	Please revise all quantities in the table to be consistent with current permitted capacities as specified in Permit NM5890110518-2 (for the TTU) and Part A of the Application (for the RMWMU and AHCU). All capacities have been calculated according to the process and physical requirements, as discussed in Comment No. 5. Reducing capacities will render the treatment operations unworkable and will not provide additional protection of human health or the environment. The table also includes several incorrect references (e.g., "Hazardous Debris Wastes with Toxic Metals (excluding mercury)" should be "Hazardous Debris" in the list of types of waste to be treated at the RMWMU and AHCU. This change will make Table 4-1 in the Permit consistent with the regulatory requirements for macroencapsulation in 40 CFR 268.45 Table 1, and with the waste treatment described in the Waste Analysis Plan (Permit Attachment 9.3.2 item 2) DOE/Sandia note that there are no contaminant restrictions for macroencapsulation in 40 CFR 268.45 Table 1; the restrictions listed in this table are applicable to stabilization rather than macroencapsulation. DOE/Sandia note stabilization is performed at the RMWMU and AHCU to immobilize toxicity characteristic metals but many stabilization agents also eliminate free liquids. Both stabilization and solidification may be goals of the treatment process; thus both should be included. Also, corrosive wastes		

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					are not treated by thermal deactivation at the RMWMU. As discussed in Comment No. 95, volumes are all given in gallons for consistency; this is a unit of volume and does not imply that all wastes are liquids, as indicated in the footnote to revised Table 4-1 in this comment. Please revise Table 4-1 to read: THERMAL TREATMENT UNIT (TTU) MAXIMUM AMOUNT PER TREATMENT EVENT: 190 pounds or 20.8 gallons present at any one time ANNUAL TREATMENT CAPACITY: 5,000 kilograms or 1,200 gallons RADIOACTIVE AND MIXED WASTE MANAGEMENT UNIT (RMWMU) -- Buildings 6920 and 6921 UNIT: Macroencapsulation (also in Building 6925) WASTE TYPES: Hazardous Debris MAXIMUM AMOUNT PER TREATMENT EVENT: 840 Gallons/ day UNIT: Stabilization/Solidification WASTE TYPES: Solid and Liquid Wastes (excluding elemental and high mercury subcategories) UNIT: Thermal deactivation WASTE TYPES: Ignitable and Reactive Wastes MAXIMUM AMOUNT PER TREATMENT EVENT: 10 Pounds/hour UNIT: Amalgamation WASTE TYPES: Mercury MAXIMUM AMOUNT PER TREATMENT EVENT: 2 Pounds/hour UNIT: Physical Treatment AUXILIARY HOT CELL UNIT (AHCU) -- Building 6597 UNIT: Macroencapsulation WASTE TYPES: Hazardous Debris UNIT: Stabilization/Solidification WASTE TYPES: Solid and Liquid Wastes (excluding elemental and high mercury subcategories) UNIT: Physical Treatment Note: The annual quantity may be given in gallons; this is a		

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					volume and does not imply that the treated wastes are liquids.		
106.	DOE 106	47	4.2.2	DOE	DOE/Sandia note that a burn event may last for several hours, and includes all the waste requiring treatment; this volume typically exceeds 20.8 gallons. However, only 20.8 gallons (or an equivalent volume of solids) of waste are present in the Unit at any one time. Further, the discussion of treatment of shipping and storage containers is not consistent with the existing permit or with the information provided in the Application. Please revise to read: *The Permittees shall not place more than 20.8 gallons or 190 pounds of reactive hazardous wastes (solid and liquid combined) in the burn pan at any one time. The maximum net explosive weight of explosives treated during any burn event shall not exceed 2.4 pounds (1.092 kg).*		
107.	DOE 107	48	4.2.3	DOE	TTU personnel notify Sandia emergency response personnel before and after TTU treatment operations; the emergency response personnel notify security personnel. Please revise to read: *After TTU treatment operations are completed for the day, TTU personnel shall notify Sandia emergency response personnel that the burn event is complete. Security personnel can then resume normal patrols around the TTU.*		
108.	DOE 108	48	4.2.3	DOE	DOE/Sandia note the burn pan is equipped with a lid that is kept closed except during treatment to minimize contamination. The pad that surrounds the burn cage (containing the burn pan) is open and drains to the catch tank; water does not accumulate on the pad. The catch tank is sized to accommodate a single precipitation event, but multiple events may occur before waste determination is completed. Therefore, the water in the tank is pumped into containers and accumulated; this prevents overflow of the tank. Please revise to read: *To prevent precipitation accumulation in the burn pan and to minimize contamination of precipitation, the burn pan lid shall be closed except during treatment events, during loading or unloading of the burn pan. Precipitation incident on the steel liner pad shall be collected in the adjacent catch tank. The Permittees shall make a determination of the water in accordance with 40 C.F.R. § 262.11, and shall manage the water appropriately.*		
109.	DOE 109	48	4.2.3.5	DOE	Permit Part 4.2 specifies requirements for the operation of the TTU. References to Permit Parts specifying requirements for the permitted storage Units are therefore unnecessary. Please revise accordingly.		
110.	DOE 110	47	4.2.3.6	DOE	DOE/Sandia note that it is sometimes necessary to adjust the operations in response to the weather, as recognized in existing Permit NM5890110518-2. Such adjustments allow TTU personnel to complete treatment in a timely manner, and		

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					provide protection for human health and the environment. Please revise to read: *The Permittees shall conduct OB activities only between the hours of 7 AM and 7 PM. Operations may continue beyond 7 PM only in case of an emergency or if necessary to complete treatment that is underway.*		
111.	DOE 111	48	4.2.3.7	DOE	For personnel safety, TTU operation is monitored from within building 6715 as described in the Application. Please revise to read: *During TTU treatment operations, the Permittees shall ensure two persons are present at the TTU or monitoring TTU operations from within Building 6715.*		
112.	DOE 112	49	4.2.3.10	DOE	The TTU boundary and Building 6715 complex boundary define the safety exclusion area for the TTU operations. An additional exclusion area beyond these is unnecessary. Please revise to read: *The Permittees shall not carry out TTU operations when there are unauthorized personnel within the TTU boundary or between the TTU and Building 6715.*		
113.	DOE 113	49	4.2.3.11	DOE	The upper limit in allowable wind speed is not consistent with Permit NM5890110518-2, and it is not clear that this restriction applies only to treatment operations at the TTU. During the past four years, DOE/Sandia have demonstrated that the TTU can be operated at wind speeds up to 20 miles per hour in compliance with the current permit conditions, and in a manner that is protective of human health and the environment. The windscreens on the south and north sides of the TTU and the burner housing on the east side of the cage, coupled with the depth and relatively small capacity of the burn pan and the close proximity of the burners, provide adequate combustion at ambient wind speeds up to twenty mph. The windscreens and burner housing extend more than 20 inches above the top of the burn pan and burners. The windscreens are attached at the top and have openings at the bottom to provide protection from direct winds while allowing airflow for combustion. The positive pressure and flow rate of the burners provide a sturdy flame, and the burners are located near the burn pan to maximize treatment effectiveness. Following treatment, the burn pan lid is lowered to provide containment and the ash is removed from the pan in accordance with the permit. Please revise to read: *The Permittees shall not operate the TTU (burn) when wind speed at the TTU exceeds 20 miles per hour (32 km/hour).*		
114.	DOE 114	49	4.2.3.11	DOE	These conditions [thunderstorms and snowstorms] are not consistent with Permit NM5890110518-2, and the operations have not changed to warrant these conditions. Also, it is not clear that the restrictions would apply only to treatment		

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					operations at the TTU. The draft Permit does not include any explanation of why these restrictions on Unit operations are necessary. DOE/Sandia note the restrictions are unclear and may prevent timely waste treatment, reducing both the safety of Unit personnel and protection of the environment (e.g., the restriction on operations during any day when a thunderstorm is imminent appears to be applicable to most days during the summer). Please revise to read: *The Permittees shall not operate the TTU (burn) at any time when threatening weather is within 10 miles (16 km) of the TTU. Threatening weather is defined as: winds in excess of 35 miles per hour (56 km/hour); tornadoes; electrical storms with or without precipitation of any type; snowstorms with a visibility of less than 2000 feet; rain with accumulations greater than 0.3 inches per hour; or any hail, sleet, and/or ice storms.*		
115.	DOE 115	49	4.2.3.11	DOE	Please see preceding comments regarding applicability of operating restrictions to treatment operations at the TTU. DOE/Sandia note that small short-lived brush fires are sometimes caused during tests at the SNL/NM outdoor test facilities in TA-3 (facilities that are in the vicinity of the TTU). These fires are rapidly controlled and do not present a hazard to TTU operations or operating personnel. Please revise to read: *The Permittees shall not operate the TTU (burn) when there is an uncontrolled range fire within one mile of the TTU.*		
116.	DOE 116	49	4.2.3.11	DOE	Dust or sandstorms caused by blowing wind are addressed by the general restrictions on wind speed, making this sandstorm restriction redundant. DOE/Sandia note sandstorms that are "dust devils" are sporadic and unpredictable. Due to their rapid formation and cessation, the Unit operator cannot effectively cease treatment operations for dust devils. Please delete this requirement.		
117.	DOE 117	49	4.2.3.13	DOE	As described in the Application, treatment operations occur periodically at the TTU and typically involve intermittent burns during one to three days. Because of the multi-day nature of the waste generating activities and associated waste treatment, it is not feasible or necessary to wait 24 hours before entering the Unit to place waste in the burn pan or perform other operations. Based on operating experience, DOE/Sandia have determined four hours is the minimum safe approach time. Please revise as follows: *Following treatment operations, the TTU Team Leader or alternate shall be responsible for determining whether or not it is safe to enter the Unit. Except in an emergency, the Unit shall be closed for a minimum of 4 hours after the fire has died out before anyone is permitted into the area.*		

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118.	DOE 118	49	4.2.4	DOE	As noted in Comment No. 117, DOE/Sandia have determined four hours is the minimum safe approach time. Personnel may enter the TTU after four hours to conduct a variety of activities (e.g., operations, maintenance or inspections). Determining whether it is safe to enter the Unit is addressed in Section 4.2.3.1, and is redundant here. DOE/Sandia note Permit Attachment 4, Section 4.7.2 requires that treatment residues shall be sampled at least annually. Due to the small annual quantity of treatment residues generated and consistency in the wastes treated at the Unit, annual sampling is adequate to characterize the residues. The residue is known to be a characteristic waste due to the presence of silver. Much of the second paragraph is redundant with the first paragraph. Please revise to read: *After a burn has been completed, the Permittees shall secure the TTU for 4 hours to ensure the safety of personnel entering the area. After the TTU has been deemed safe, and as soon as practicable after the completion of the last burn in a set of treatment operations, TTU personnel shall remove and containerize all treatment residues, inspect the TTU for serviceability, document any damage which should be repaired in order to keep the Unit operational, and check for kick-out of waste residue.*		
119.	DOE 119	50	4.2.4	DOE	The current layout of the TTU and the surrounding perimeter road results in 70 feet of cleared vegetation from the TTU. This area and the earthen berms surrounding the TTU effectively shield and protect surrounding areas from TTU activities and provide an adequate fire protection buffer. Expanding the cleared area to 200 feet would increase blowing sand and dust. To protect the environment, the need of fire protection must be balanced with fugitive dust control. For consistency with the requirements in Permit Attachment 4 (Section 4.5.6.1), please revise to read: *The Permittees shall keep the grounds and berms within 70 feet of the TTU clear of dry or dead weeds, brush, and other combustible substances to prevent fires.*		
120.	DOE 120	50	4.2.6	DOE	Condition 4.2.6, Sampling and Analysis Plan, is not consistent with Permit NM5890110518-2, with the requirements in Permit Attachments 4 and 9, or with the Unit operations described in the Application. DOE/Sandia note that soil in the earthen berms is not contaminated through routine TTU operations, and treatment residues from the TTU can be characterized without sampling and analysis. Please revise to read: ***4.2.6 Treatment Residues***		

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					The Permittees shall characterize treatment residues generated during TTU operations in accordance with Permit Attachment 9 (Waste Analysis Plan). If soil in the earthen berms is contaminated during TTU operations, the Permittees shall treat the soil as needed in accordance with Permit Attachment 4 (The Thermal Treatment Unit), and shall characterize the residue in accordance with Permit Attachment 9.		
121.	DOE 121	50	4.3	DOE	DOE/Sandia note that treatment processes at the RMWMU and AHCU are described in the Application and in Attachments 5 and 6 of the draft Permit. Treatment operations at the RMWMU have historically required 15 to 30 separate treatment plans each year due to the variety of wastes generated at SNL/NM. Immediate modifications are sometimes required in response to conditions encountered during treatment operations. DOE/Sandia note NMED has historically required 60 to 120 days to acknowledge receipt of documents submitted in accordance with the FFCO; this time has been considerably longer for documents that require review and approval. The mutual goal of NMED and the Permittees should be timely treatment of the waste and protection of human health and the environment. Please see Comment No. 7 for additional discussion regarding this requirement. Please revise as follows: *All treatment at the RMWMU and AHCU shall be performed in accordance with this Permit. Prior to any treatment at the RMWMU and the AHCU, the Permittees must prepare a detailed treatment plan. The treatment plan shall describe, at a minimum, the wastes to be treated, the volume of the wastes, the methods of treatment, and how treatment efficacy will be verified. These plans will be retained in the Operating Record in accordance with Permit Attachment 13.*		
122.	DOE 122	50	4.3.1	DOE	Condition 4.3.1 is not consistent with the conditions in the draft Permit for other types of treatment; the other types of treatment are optional but not required. In some cases, it is more effective to send the waste to an off-site facility for deactivation or neutralization. Please revise to read: *The Permittees may chemically deactivate or neutralize waste that exhibits the characteristics of ignitability, corrosivity, and/or reactivity at the RMWMU and the AHCU, as described in Permit Attachments 5 and 6.*		
123.	DOE 123	50	4.3.2	DOE	Elemental and high mercury subcategories are not excluded for hazardous debris treated in accordance with the alternative treatment standards for hazardous debris in §268.45. As noted in Comment No. 105, these exclusions apply to stabilization, rather than to macroencapsuation. In addition, §268.45(b)(2) is an incorrect reference to Table 1 in		

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					§268.45. Please revise to read: *The Permittees may, at the RMWMU and the AHCU, microencapsulate debris containing mixed waste or hazardous waste in accordance with 40 C.F.R. § 268.45 Table 1, Section C, in order to reduce or eliminate the leaching potential of that waste by immobilizing the larger debris-type wastes, as described in Permit Attachments 5 and 6.*		
124.	DOE 124	50	4.3.3	DOE	Both stabilization and solidification may be goals of the treatment process, thus it is appropriate to mention both in Condition 4.3.3. Please revise to read: ***4.3.3 Stabilization and Solidification*** *The Permittees may stabilize and/or solidify liquid wastes in containers, and may stabilize waste soils and particulate-type wastes in containers containing toxicity characteristic metals (excluding elemental and high mercury subcategories) in order to reduce or eliminate the leaching potential by immobilizing the metals, and eliminating the liquids, as described in Permit Attachments 5 and 6. Stabilization and solidification shall only be done at the RMWMU and the AHCU.*		
125.	DOE 125	50	4.3.4	DOE	Condition 4.3.4 is not fully consistent with Unit operations described in the Application. Please revise to read: *The Permittees may thermally deactivate explosives and explosive component wastes to remove the hazardous characteristic of reactivity. Thermal deactivation shall only be done at the RMWMU. The thermally deactivated waste may require subsequent treatment to address additional characteristic waste constituents that may also be present in explosive components.*		
126.	DOE 126	51	4.3.6	DOE	DOE/Sandia do not conduct X02 mechanical processing operations at the RMWMU or AHCU. Segregation and shredding are not included in the description of physical treatment in the Application. Please revise as follows: ***4.3.6 Physical Treatment*** *The Permittees may conduct physical treatment of hazardous or mixed wastes at the RMWMU and AHCU to achieve volume reduction of the wastes by reducing piece sizes, crushing, and dissolution of the wastes, as described in Permit Attachment 5.*		
127.	DOE 127	51	4.3.7	DOE	DOE/Sandia note the requirements of 40 CFR 264 Subpart BB are applicable to hazardous waste treatment operations at the TTU. The requirements of 40 CFR 264 Subpart CC are generally applicable to hazardous or mixed waste treatment operations at the RMWMU and AHCU. Please revise to read:		

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					The Permittees shall comply with the applicable air emissions requirements of 40 C.F.R. Part 264, Subparts BB and CC when conducting hazardous or mixed waste treatment at the Units described in Table 4-1 of this Permit Part. Air emission requirements are addressed in Permit Part 5.		
128.	DOE 128	46	4.0	DOE	Permit Part 4 only includes information on maximum amount and type(s) of wastes; there is no information about "a description of the types of containers used, the capacities of primary and secondary containment systems, or the specific features associated with each waste treatment activity". Descriptions of the treatment processes are included in Permit Attachments 4, 5, 6, and 9. Please revise accordingly.		
129.	DOE 129	46	4.1.1	DOE	There is no Section 4.4.2 of Permit Part 4; the correct reference is Section 4.2. Please revise accordingly.		
130.	DOE 130	52	5.1	DOE	DOE/Sandia note the Subpart CC requirements apply to individual containers, as discussed in Comment No. 9. Thus the exemption for containers managing mixed wastes in 40 CFR 264.1080(b)(6) applies to individual containers; this is not clear in the draft Permit language. Additionally, DOE/Sandia note that characterization is required only to the extent necessary for determining whether wastes are subject to the emission requirements in 40 CFR 264 Subparts AA, BB, and CC. Please revise to read: *The Permittees shall characterize hazardous and mixed wastes as needed to ensure adherence to applicable air emission requirements in compliance with 40 C.F.R. Part 264, Subparts AA, BB, and CC. The Permittees store and treat hazardous wastes in containers subject to Subpart CC (i.e., waste contains an average volatile organic concentration of 500 parts per million by weight (ppmw)). In accordance 40 C.F.R. § 264.1080(b)(6) mixed waste stored in containers used solely for management of mixed wastes are not subject to Subpart CC air emission control and waste characterization requirements. If the Permittees claim exemption from air emission controls due to a container managing mixed waste, the Permittees shall clearly label the container as containing a radioactive component.*		
131.	DOE 131	53	5.2.1	DOE	As discussed in Comment No. 9, the 40 CFR 264 Subpart CC requirements apply to individual containers rather than to entire Permitted Units. Therefore, DOE/Sandia can store containers that are subject to the Subpart CC requirements in the same Permitted Unit as containers that are exempt from the requirements. DOE/Sandia note that 40 CFR § 264.1090(a) does not require the name and telephone number of the responsible official to be included in the written report but does require that the report be signed and dated by an authorized representative of the owner or operator. Further, DOE/Sandia note that an annual report is not		

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					required; thus the last two sentences should be deleted. Please revise to read: *In accordance with 40 C.F.R. § 264.1090(a), for each container in a Permitted Unit that is exempted under 40 C.F.R. § 264.1082(c) from using air emission controls, a written report shall be submitted to the Department within 15 days from any occurrence when hazardous waste is placed in the container in noncompliance with the requirements specified in 40 C.F.R. § 264.1082(c)(1) or (c)(2), as applicable (for example, placing in such a container a hazardous waste having an average volatile organic concentration equal to or greater than 500 ppmw at the point of waste origination). The written report, signed and dated by an authorized representative of the owner or operator, shall contain the EPA identification number, Facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent recurrence of the noncompliance.*		
132.	DOE 132	53	5.3	DOE	Please see discussion in Comment No. 131 regarding individual containers. Please revise to read: *Pursuant to 40 C.F.R. § 264.1082(b) and (c), the Permittees shall control air emissions for each container or tank subject to the standards as specified in 40 C.F.R. §§ 264.1084 through 264.1087 as applicable to the Permitted Unit. Containers that meet the criteria in 40 CFR 264.1080(b) or 1082(c) are exempt from these emission control requirements.*		
133.	DOE 133	54	5.4.1	DOE	Please see discussion in Comment No. 9 regarding individual containers. The inspection requirement in this section should be consistent with the requirements in Sections 5.4.2 and 5.4.3. Please revise to read: *The Permittees shall visually inspect all Type A containers for defects at the time the Permittees first manage and/or store hazardous waste in it or the first time that the container with hazardous waste is accepted for storage at any of the Permitted Units.*		
134.	DOE 134	54	5.4.2	DOE	Please see Comment No. 133. The inspection requirement in this section should be consistent with the requirements in Sections 5.4.1 and 5.4.3. Please revise to read: *The Permittees shall visually inspect all Type B containers and cover devices for defects at the time each container is first used for managing and/or storing hazardous waste or the first time the container with hazardous waste is accepted at any of the Permitted Units. If a container remains at any of the permitted storage Units for one (1) calendar year or more, it shall be visually inspected for defects at least once every 12*		

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					months, pursuant to 40 C.F.R. § 264.1086(c)(4)(ii) and the Inspection Plan in Permit Attachment 11.		
135.	DOE 135	54	5.4.3	DOE	Please see the preceding comments. The inspection requirement in Section 6.4.3 should be consistent with the requirements in Sections 5.4.1 and 5.4.2. Please revise to read: *The Permittees shall visually inspect all Type C containers and cover devices for defects at the time each container is first used for managing and/or storing hazardous waste or the first time the container with hazardous waste is accepted at any of the Permitted Units.*		
136.	DOE 136	54	5.6	DOE	Please see Comment No. 9 regarding applicability of 40 CFR 264 Subpart CC requirements to individual containers rather than to entire Permitted Units. A permit modification is not required for management of wastes or individual containers that are included in the existing permit, whether those containers are subject to Subpart CC or not. Modifications to the Permitted Units are addressed in Permit Part 1. Please delete Section 5.6.		
137.	DOE 137	56	6.0	DOE	DOE/Sandia note circumstances 1 and 4 in Permit Condition 6.0 identify potential new releases that would be subject to corrective action under the Permit; Section III.W.1 of the Compliance Order on Consent (COOC or Consent Order) also identifies these releases as subject to the Permit. However, the rest of Part 6 is not clear regarding the division of authority between the COOC and the draft Permit, as discussed in Comment No. 5. For example, the references to Table 6-2 at times indicate that all of the SWMUs/AOCs listed are regulated under the COOC, and at other times indicate that the list would include new SWMUs/AOCs identified under the Permit, as discussed in Comment No. 139. DOE and Sandia request that Part 6 be revised to more clearly distinguish applicability by creating an additional table to list new releases that meet circumstances 1 or 4. Please take the following steps to achieve this: 1. Renumber the current Table 6-1 in the draft Permit as Table 6-5 since the initial reference to this table appears toward the end (p. 95) in Part 6. None of the other tables in Part 6 would be affected by this change. 2. Add another table to Part 6 to list those units subject to corrective action under the draft Permit (and not under the COOC). This new table would become Table 6-1 and should be titled "Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) Requiring Corrective Action under the Permit."		

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					3. Change the title of Table 6-2 to indicate it includes only units that are subject to corrective action under the COOC (but not under the Permit): "Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) Requiring Corrective Action under the Consent Order." DOE/Sandia note the new Table 6-1 would have no entries, but this could change in the future if new releases meeting Circumstances 1 and 4 occur or are discovered. DOE/Sandia further note a number of changes to Tables 6-3 and 6-4 are needed to correct errors, reflect the most current information, and ensure consistency with the COOC and the administrative record; these are addressed in Comment No. 214 and 215.		
138.	DOE 138	56	6.0 and 6.7	DOE	The MWL corrective action process is regulated under the COOC. Section III.W.4 of the COOC states: "The requirements of this Consent Order shall not terminate upon renewal of the Permit issued to the Respondents. The renewed Permit, and any future modifications, renewals, or reissuance of the Permit, will not include any corrective action requirements, nor any other requirement that is duplicative of this Consent Order. The Permit or any renewed Permit can include the four excepted items and the list of SWMUs requiring corrective action described in Section III.W.1." DOE/Sandia note that the COOC prohibits duplicative requirements in the Permit and specifically allows only the following four items listed in Section III.W.1: "(1) new releases of hazardous waste or hazardous constituents from operating units at the Facility; (2) the closure and post-closure requirements of 20.4.1.500 NMAC (incorporating 40 C.F.R. Part 264 Subpart G) as they apply to operating units at the Facility; (3) implementation of the controls, including longterm monitoring, for any SWMU on the Permit's Corrective Action Complete With Controls list, which is described in Section III.W.3.b; and (4) any releases of hazardous waste or hazardous constituents that occur after the date on which this Consent Order terminates pursuant to Section III.E.2." Accordingly, as the MWL corrective action requirements are not included in this list, please delete item 5, under Part 6.0 .		

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139.	DOE 139	56	6.0	DOE	DOE/Sandia note Part 6 of the draft Permit is not clear regarding the division of authority between the COOC and the draft Permit, as discussed in Comment No. 5 and the preceding comments. This issue may be addressed by adding a new Table 6-1 as discussed in Comment No. 137. After the new table is added, please revise to read: *The Permittees shall meet the specified compliance schedules for all actions and deliverables required by this Permit. Table 6-1 identifies the SWMUs and AOCs for which corrective action is required pursuant to this Permit. Table 6-2 identifies the SWMUs and AOCs for which corrective action is required pursuant to the Consent Order. The corrective action provisions of this Part apply only to the SWMUs and AOCs identified in Table 6-1, except as explicitly noted by reference to Table 6-2.*		
140.	DOE 140	57	6.1.5	DOE	Please revise Section 6.1.5 as follows to be consistent with the current quarterly reporting period and submittal dates: *The Permittees shall submit to the Department by March 30, June 30, September 30, and December 30 of each calendar year a quarterly report summarizing all corrective action activities conducted pursuant to this Permit and the Consent Order. Each report shall summarize the corrective action activities for the quarter (3 month time period). Each report shall be submitted within two months following the end of the quarter (e.g., the March 30 report shall cover the quarter ending January 31) as detailed in Section 6.14.1 of this Permit Part.*		
141.	DOE 141	57	6.1.6.1	DOE	Please see Comment No. 137 for suggested revisions to delineate division of authority between the COOC and the draft Permit. Please change the title of the section to better reflect the content, and revise to read: ***6.1.6.1 Tracking SWMUs and AOCs*** *Table 6-1 identifies the SWMUs and AOCs for which corrective action is required pursuant to this Permit. Table 6-2 identifies the SWMUs and AOCs for which corrective action is required pursuant to the Consent Order.*		
142.	DOE 142	58	6.1.6.2	DOE	DOE/Sandia note the first annual report of outdoor test activities was submitted December 14, 2005; thus there is no need for a first annual report. Also, the title of this section does not reflect the content of the report. Please revise to read: ***6.1.6.2 Reporting of Outdoor Test Activities*** *Permittees shall submit to the Department an annual report containing a summary of outdoor testing activities that could lead to the creation of new SWMUs/AOCs. The report shall list the name, location, and a general description of the type*		

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					or types of testing (e.g. firing site, explosives testing, drop testing, burn testing) conducted at each outdoor test facility. The reports shall be submitted annually by March 31 of the following year.		
143.	DOE 143	58	6.1.7	DOE	Please see Comment No. 137 for suggested revisions to delineate division of authority between the COOC and the draft Permit. Please revise to read: *If the Department determines that further investigation of a newly discovered SWMU, AOC, or release is required, the Permittees shall submit a Class 1 Permit modification request, in accordance with 40 C.F.R. § 270.42(a), to add the newly discovered SWMU or AOC to Table 6-1 or Table 6-2, as appropriate, within thirty calendar (30) days of the Department's determination.*		
144.	DOE 144	58	6.1.8	DOE	Please see Comment No. 137 for suggested revisions to delineate division of authority between the Consent Order and the draft Permit. In order to implement these revisions, please add references to new Table 6-1. DOE/Sandia note a number of changes to Tables 6-3 and 6-4 are needed to correct errors to the lists of SWMUs, to ensure consistency with the administrative record, and to reflect the most current risk information. These corrections are discussed in Comment Nos. 214 and 215, and are provided as markups to both tables (in separate files included with these comments). Additionally, AOCs are not addressed in either Table 6-3 or Table 6-4, since the COOC defines the process by which SWMUs are placed on either Table 6-3 or 6-4 of the Permit, and does not include AOCs in that process. COOC Section VII.D.6 Certificate of Completion for SWMUs and AOCs states: "If the Department determines that the requirements of this Consent Order have been satisfied for the SWMU or AOC, it will issue to the Respondents a written Certificate of Completion, which shall state that Corrective Action is Complete With Controls or Corrective Action is Complete Without Controls. If an AOC is designated as Corrective Action Complete With Controls, it shall be considered a SWMU and added to the Permit. See Section III.W." The COOC does not explicitly address the disposition of an AOC that is designated as Corrective Action Complete Without Controls, but implies that it will not be considered a SWMU and will not be added to the Permit (i.e. it should not be included on Table 6-3 of Permit Part 6). This interpretation is supported by the referenced Section III.W. Specifically, the relevant Subsection III.W.3.b Class 3 Permit Modification For Corrective Action Complete identifies only SWMUs that will		

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					be addressed in Class 3 permit modification requests for Corrective Action Complete and then added to Table 6-3 or 6-4 of the Permit. In addressing additions to the tables, Section III.W.3.b does not address AOCs at all. Thus, if an AOC is Corrective Action Complete with Controls, it will be re-categorized as a SWMU and added to Table 6-4. If an AOC is Corrective Action Complete Without Controls, it would not be included on either table and would not be subject to the Permit. Accordingly, the term "Area of Concern" should be removed from the titles of Tables 6-3 and 6-4. Please revise to read: *If the Department determines that no further corrective action is required for a SWMU or AOC listed in Table 6-1 or Table 6-2 (Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) Requiring Corrective Action), the Permittees shall submit a request to the Department for a Class 3 Permit modification in accordance with 40 C.F.R. § 270.42(c) to remove the unit from Table 6-2 and list the unit on either Table 6-3 (Operating Units, RD&D Permitted Units, Closing Units, and Solid Waste Management Units (SWMUs) for which Corrective Action is Complete Without Controls) or Table 6-4 (Solid Waste Management Units (SWMUs) Corrective Action Complete With Controls).* *A determination that Corrective Action is Complete and approval of a Permit modification to remove a unit from Table 6-1 or Table 6-2 shall not preclude the Department from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicate a release or likelihood of a release from a SWMU or AOC at the Facility that is likely to pose a threat to human health or the environment.*		
145.	DOE 145	59	6.2.1.2	DOE	DOE/Sandia note the land transfer process specified in this Section is not consistent with Section III.Y.1.b of the Consent Order. In order to ensure a timely process for land transfer that is consistent with the Consent Order, please revise to read: *If the Department determines that the corrective measures implemented by the Permittees with regard to the Property are not protective of human health and the environment in light of the Transferee's intended use of the Property, the Department will explain, in writing within 60 days after the meeting described in Section 6.2.1.1, why such measures are not protective and will identify the specific additional corrective action requirements that Permittees must complete with regard to the Property.*		

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146.	DOE 146	59	6.2.1.2	DOE	Please see Comment No. 145, and add the following paragraph to the end of Section 6.2.1.2: The Department must notify Respondents no later than 60 days following the meeting required by Section 6.2.1.1 as to whether additional corrective action measures are necessary with regard to the property given the transferee's intended use of the property. If the Department does not notify Respondents within this time frame, the Department will be deemed to have concluded that no additional corrective measures are necessary given the transferee's intended use of the property.		
147.	DOE 147	61	6.2.2.2	DOE	Please see Comment No. 146, and add the following paragraph to the end of Section 6.2.2.2: The Department must notify Respondents no later than 60 days following the notice of transfer required by Section 6.2.2.1 as to whether additional corrective action measures are necessary with regard to the property given the transferee's intended use of the property. If the Department does not notify Respondents within this time frame, the Department will be deemed to have concluded that no additional corrective measures are necessary given the transferee's intended use of the property.		
148.	DOE 148	61	6.3	DOE	Due to the advanced stage and site-specific nature of corrective of action at SNL/NM, please delete the requirement to maintain a facility-wide health and safety plan. Please replace all of Section 6.3 in the draft Permit with the following requirement: *The Permittees shall prepare Health and Safety Plans for all field activities. The Health and Safety Plans shall be prepared in accordance with all applicable provisions of this Permit and all local, State and federal regulations and be developed as stand-alone documents.*		
149.	DOE 149	62	6.5	DOE	Following the first sentence in Section 6.5, please insert: *The Permittees may at any time initiate a permit modification to revise or delete a control.*		
150.	DOE 150	62	6.5	DOE	DOE/Sandia note Section 6.5 is not consistent with the inspection requirements in 40 CFR 270.30(i). Please see Comment No. 3 for further discussion of consistency between regulatory requirements and Permit Conditions, and revise to read: *The controls shall be fully implemented within 90 days of the effective date of this Permit. SWMUs for which controls are required shall be inspected by the Permittees at least annually and may be inspected at reasonable times by the Department.*		

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151.	DOE 151	63-64	6.6	DOE	DOE/Sandia note the controls proposed for SWMUs 54, 94, 65, 28-1, and 28-4 in Section 6.6 of this Permit Part are related to potential physical and/or radiological hazards, and are not related to remaining residual RCRA contamination. As discussed in Comment No. 3, New Mexico statutes, Section 7-4-4 NMSA, prohibit more stringent requirements than the federal RCRA regulations as amended. Additionally, source, special nuclear, and byproduct material are not subject to this Permit, as discussed in Comment No. 1. Long-term controls at SWMUs must be directly related to protection of human health and the environment from hazardous waste or residual RCRA contamination; this is consistent with both the COOC and EPA guidance. In guidance for Corrective Action Complete determinations (*Federal Register*, Vol. 67, February 27, 2002, pages 9174 and 9175), EPA distinguished between a cleanup that results in unrestricted use of a facility and one that allows contamination to remain on site: "In other cases, the Agency selects a remedy that allows contamination to remain on site, but imposes ongoing obligations concerning, for example, operation and maintenance of physical waste controls (e.g., a cap), and compliance with institutional controls (e.g., an industrial land use restriction). Thus in this situation, the goal of "protection of human health and the environment" often is achieved by imposing a remedy that allows some contamination to remain in place, but requires controls (engineering and/or institutional) at the facility <u>to limit exposure and subsequent release of contamination that remains following cleanup</u>." (emphasis added) EPA's definition of institutional controls in the guidance (*Federal Register*, Vol. 67, February 27, 2002, pages 9174 and 9175) contains the same qualifying concept: "non-engineered instruments such as administrative and/or legal controls that <u>minimize the potential for human exposure to contamination</u> by limiting land or resource use." (emphasis added) DOE/Sandia note the COOC does not contain a definition for controls or institutional controls, but is consistent with the EPA guidance that controls are measures that are taken to limit exposure to residual contamination. Subsection III.W.3.b of the COOC states: "These two lists [the draft Tables 6-3 and 6-4] are for informational purposes only and are not enforceable; provided, however, that where controls are identified for a SWMU, only those controls (e.g., institutional controls, engineered barriers, long-term monitoring and operation and maintenance) are enforceable under the		

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					Permit." Regarding radionuclides, DOE/Sandia note Section I of the COOC is consistent with the exclusive legal authority of DOE and states: "The requirements of this Order do not apply to radionuclides, including, but not limited to, source, special nuclear, or byproduct material as defined in the Atomic Energy Act of 1954, as amended, or the radioactive portion of mixed waste." Additionally, NMED addressed the issue in a letter dated January 8, 2007 to DOE and Sandia regarding ER Site 28-2, stating that radiological risk will not be considered in Corrective Action Complete determinations. Accordingly, please delete the following SWMUs from this section, and add them to Table 6-3 "Corrective Action Complete without Controls:" • SWMU 54, Pickax Site (Thunder Range) • SWMU 94, Lurance Canyon Burn Site (including all subunits 94-A through 94-H) • SWMU 65, Lurance Canyon Explosive Test Site (including subunits 65-A through 65-E) • SWMU 28-1, Mine Shaft • SWMU 28-4, Mine Shaft		
152.	DOE 152	64	6.7	DOE	DOE/Sandia note the Mixed Waste Landfill (MWL) is regulated under the Consent Order as discussed in Comment No. 138. Please delete this entire Section and all other provisions of the draft Permit related to corrective action at the Mixed Waste Landfill.		
153.	DOE 153	66	6.8	DOE	DOE/Sandia note Section 6.8 contains requirements for facility-wide reports documenting information related to: the general facility, potential receptors, surface water and sediment contamination, air contamination and subsurface gas. This information has already been developed for individual sites to determine whether corrective action is needed and, if so, an appropriate remedy. Given the almost-complete state of corrective action at SNL/NM, this facility-wide information is not useful. Please delete all of Section 6.8.		
154.	DOE 154	68	6.9.1	DOE	Please see Comment Nos. 137 and 139 for suggested revisions to delineate division of authority between the Consent Order and the draft Permit. In order to revise Part 6 as discussed in these comments, please revise to read:		

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					The Permittees shall conduct a site investigation for each SWMU and AOC listed on Table 6-1 of this Permit.		
155.	DOE 155	71	6.10.6	DOE	DOE/Sandia note a public hearing is only required under certain circumstances as stated in the regulations. Please revise to read: *As provided in 20.4.1.901A(5)(a)-(c) NMAC, the Department will provide an opportunity for a public hearing on the proposed remedy, at which all interested persons will be given a reasonable chance to submit data, views or arguments orally or in writing and to examine witnesses testifying at the hearing.*		
156.	DOE 156	71	6.10.7	DOE	The cross-reference in Section 6.10.7 (1st paragraph) appears to be incorrect. Please revise to read: *The CMI Work Plan shall be submitted to the Department for review in accordance with Part 1, Section 1.32, of this Permit.*		
157.	DOE 157	72	6.11.2	DOE	The cross-reference in Section 6.11.2 (2nd paragraph) appears to be incorrect. Please revise to read: *In accordance with Part 1, Section 1.32.2, if the Department disapproves the ACM Work Plan, the Department will notify the Permittees in writing of the work plan deficiencies and will specify a due date for submittal of a revised ACM Work Plan.*		
158.	DOE 158	74	6.13	DOE	Section 6.13 of the draft Permit contains cleanup levels for specified contaminants and media, all based on the presumption that a residential risk standard is appropriate for all sites. Given that SNL/NM is an industrial facility located on an Air Force base, and given that many SWMUs already require long-term controls, a presumption of cleanup to residential levels is inappropriate. The determination of a sitespecific cleanup level should be based on protection of human health and the environment at that site, not a predetermined default to residential levels. Accordingly, DOE/Sandia expressly contest any presumption of cleanup to a residential level and the process established for requesting a variance from a particular cleanup level (based on a residential scenario). Please revise this Section of the draft Permit to remove the presumption that cleanup to a residential level is required.		
159.	DOE 159	74	6.13	DOE	DOE/Sandia note this Section of the draft Permit could be interpreted to impose additional investigation requirements on a Facility-wide basis; such investigations would not be consistent with the COOC. To clarify that this Section is explicitly limited to identifying standards for cleanups only at SWMUs and AOCs covered under this Permit, and to maintain consistency with the revisions discussed in Comment No. 137, please revise to read:		

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					The Permittees shall adhere to the requirements of this Section (6.13) for implementing and completing cleanup of groundwater, surface water, and soil at all SWMUs and AOCs listed on Table 6-1.		
160.	DOE 160	74	6.13.1	DOE	Please clarify Section 6.13.1 by adding the following at the end: *The WQCC standards apply to the dissolved portion of contaminants with the exception of mercury, organic compounds, and non-aqueous phase liquids. Mercury, organic compounds, and non-aqueous phase liquids shall be evaluated based on total, unfiltered concentrations; EPA MCL standards shall apply to the total unfiltered concentrations.*		
161.	DOE 161	74	6.13.2	DOE	As discussed in Comment No. 5, perchlorate is regulated under the COOC, and is not a regulated hazardous constituent under RCRA. Accordingly, please delete this Section and renumber the remaining subsections in Section 6.13.		
162.	DOE 162	76	6.14	DOE	Please revise Section 6.14 to clarify: All Work Plans and Reports shall be prepared considering any technical and regulatory input received from the Department.		
163.	DOE 163	78	6.14.4	DOE	DOE/Sandia note that vadose zone monitoring is not addressed in any of the periodic reports; it is appropriately included with groundwater monitoring. Please revise to read: *The Permittees shall prepare a Periodic Monitoring Report using the format set forth below. The reports shall present the results of periodic or routine groundwater, vadose zone, and remediation system monitoring at the Facility.*		
164.	DOE 164	80	6.14.6	DOE	Items 6-11 in Section 6.14.6 appear to be more appropriate for a CMS Report than for a CMS Work Plan. Please delete Items 6-11 and revise as follows: *The Permittees shall prepare a CMS Work Plan using the format set forth below. Required sections for a CMS Work Plan are:* *1–5 (not included in comment)* *6. Establishment of Corrective Action Objectives* *7. Format for Presentation of the CMS* *8. Proposed Remedy.* *9. Schedule* *10–12 (formerly 12-14, not included in comment)*		

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165.	DOE 165	82	6.14.9	DOE	The report described in Section 6.14.9 of the draft Permit is documenting progress on the implementation of the Corrective Measure. Please revise to read: ***6.14.9 Corrective Measures Implementation Progress Report*** *The Permittees shall make progress reports on the execution of the CMI Work Plan to the Department, as described in Section 6.10.9 of this Permit Part.*		
166.	DOE 166	84	6.16	DOE	The requirement of an approval by the Department is inappropriate for SNL/NM internal documents; however, submittal to the Department for written concurrence that these internal procedures are in accordance with regulatory requirements is appropriate. Also, DOE/Sandia note that internal procedures are updated as needed; this should be addressed. Please revise to read: ***6.16 STANDARD OPERATING PROCEDURES*** *The Permittees may reference relevant Facility Standard Operating Procedures, provided that copies of these procedures are also submitted to the Department for concurrence that the procedures are in accordance with regulatory requirements. Where no regulatory impact is at issue, the Permittees may implement updated versions of the internal procedures without prior written concurrence from the Department. Revisions to these internal procedures do not constitute a permit modification.*		
167.	DOE 167	84	6.17	DOE	Please add an introduction sentence to Section 6.17 that recognizes that site-specific alternative requirements or procedures may be defined in a Work Plan or Sampling and Analysis Plan approved by the Department: ***6.17 REQUIREMENTS FOR FIELD ACTIVITIES*** *The requirements for field activities as specified in Section 6.17 shall apply unless the Department has approved a Plan that specifies alternative requirements or procedures.*		
168.	DOE 168	85	6.17.1	DOE	DOE/Sandia note the records of field activities are internal documents, and the contents vary according to the nature of the work recorded therein. The records provide information that is included in reports to NMED, including the reports described in Section 6.14 of the draft Permit. Section 6.14 lists the contents and format of each report; thus it is not necessary to specify the contents of the individual records of field activities. Please revise as follows: *The daily record of field activities may include the following items:* *1–14 (not included in comment)*		

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169.	DOE 169	85	6.17.2	DOE	DOE/Sandia note there are several acceptable methods for decontaminating drilling and exploration equipment, and any decontamination method would be included in a work plan that would be subject to NMED approval. The same is true of decontamination methods for sampling and measurement equipment. Likewise, the detergent would be specified in the work plan, and it is not necessary to include examples in the Permit. The cross-reference for management of IDW is incorrect. Please revise as follows: *Drilling equipment or other exploration equipment that may come in contact with a borehole shall be decontaminated by steam cleaning, by hot-water pressure washing, or by another method specified in the approved work plan prior to drilling each boring.* *Sampling or measurement equipment, including but not limited to, stainless steel sampling tools, split-barrel or core samplers, well development or purging equipment, groundwater quality measurement instruments, and water level measurement instruments, shall be decontaminated in accordance with the following procedures or other methods specified in the approved work plan before each sampling event.* *3. Wash with non phosphate detergent or other detergent as specified in the approved work plan, followed by a tap water rinse.* *All decontamination solutions shall be collected and stored temporarily as Investigation Derived Waste (IDW) as described in Section 6.17.6 of this Permit Part.*		
170.	DOE 170	85	6.17.3	DOE	DOE/Sandia note the requirement for daily calibration (in the second sentence) is not consistent with calibration according to the manufacturer's recommended schedule in the first sentence. Additionally, the calibration should be specified in the work plan. Please revise to read: *Field equipment requiring calibration shall be calibrated to known standards, in accordance with the manufacturer's recommended schedules and procedures, as specified in the approved work plan, and the instruments shall be recalibrated, if necessary.*		
171.	DOE 171	87	6.17.5	DOE	Acceptable test methods will be those specified in the work plan approved by NMED. Also, the testing described in this Section would be conducted as part of an established investigation or other activity; thus the results would be reported as part of the report for that activity. Please revise to read:		

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					Acceptable testing methods must be specified in the approved work plan. The tests shall be conducted in accordance with Department, EPA, USGS, ASTM or other methods generally accepted by industry that will allow information representative of site conditions to be obtained. Detailed logs of all relevant site conditions and measurements shall be made during the testing events. A summary of the test results, including unexpected or unusual test results and equipment failures or testing limitations shall be reported to the Department, generally through an established reporting mechanism such as an RFI Report.		
172.	DOE 172	87	6.17.6	DOE	DOE/Sandia are responsible for characterizing IDW in accordance with the WAP and the requirements of 40 CFR 261. DOE/Sandia are responsible for managing hazardous wastes in accordance with the requirements of 40 CFR 262, and are responsible for arranging further off-site management that is compliant with all applicable requirements of 40 CFR 260-270, as discussed in Comment No. 2. It is not necessary to reiterate those responsibilities here, nor is it necessary to include a description of the anticipated IDW management as a part of any work plan submitted for approval. Please revise to: *All IDW shall be characterized in accordance with 40 CFR 261 and shall be managed appropriately.*		
173.	DOE 173	88	6.17.8	DOE	Because there are not any borings specified in the Permit, please revise to: *Borings shall be completed at locations specified in work plans approved by the Department.*		
174.	DOE 174	88	6.17.8	DOE	Drilling methods, drilling fluids, and drilling fluid additives will be specified in work plans submitted to NMED for approval. Please revise as follows: *The drilling method selected must be specified in the work plan approved by the Department prior to the start of field activities. Based on the drilling conditions, the borings shall be completed using one of the following methods.* *1–8 (not included in comment)* *Hollow-stem auger or DPT drilling methods are preferred if vaporphase or VOC contamination is known or suspected to be present. Air rotary drilling is preferred for borings intersecting the saturated zone of any aquifer. The type of drilling fluids or additives used, if necessary, must be specified in the approved work plan.*		
175.	DOE 175	89	6.17.8	DOE	NMED may direct DOE/Sandia to advance borings to a certain depth; it is not necessary to include a general requirement in the draft Permit. Borings that are not directly specified by NMED will be specified in a work plan which		

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					requires approval by the Department. Please revise to read: *Exploratory borings shall be advanced to the depths specified in the approved work plan.*		
176.	DOE 176	89	6.17.8	DOE	DOE/Sandia note borings may need to be relocated due to buried utilities or other unforeseen obstacles. Please revise to read: *When possible, the boring locations shall be located to the nearest foot of their planned location. Locations shall be recorded on a scaled site map upon completion of each boring.*		
177.	DOE 177	90	6.17.10	DOE	DOE/Sandia note the sample interval would be included in the work plan approved by NMED. Alternative sample methods would also be included in the work plan. Please revise as follows: *1. At five (5)-foot intervals, ten (10)-foot intervals, continuously, or as specified in the approved work plan.* *2–8 (not included in comment)* *Additional samples may be obtained from any depth based on field observations. A split-barrel sampler lined with brass sleeves, a coring device, or other method specified in the approved work plan shall be used to obtain samples during the drilling of each boring.*		
178.	DOE 178	91	6.17.10	DOE	Please revise as follows to clarify that sample intervals and depths will be specified in work plans: *The proposed number of samples, sample intervals and depths, and analytical parameters shall be included as part of the site-specific work plan submitted to the Department for approval prior to the start of field investigation activities.*		
179.	DOE 179	91	6.17.10.1	DOE	DOE/Sandia note the sampling devices will be specified in the work plans that require approval by NMED. Please revise as follows: Surface and shallow subsurface soil and sediment samples shall be collected in accordance with the following procedures. *1. Samples that are collected for analyses other than for VOCs shall be obtained using a hand-held stainless steel coring device, Shelby tube, thin-wall sampler, or other device specified in the approved work plan. The samples shall be transferred to pre-cleaned laboratory prepared containers for submittal to the laboratory.* *2. Samples obtained for VOC analyses shall be collected using Shelby tubes, thin-wall samplers, or other device specified in the approved work plan. The ends of the*		

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					samplers shall be lined with Teflon tape or aluminum foil and sealed with plastic caps fastened to the sleeves with tape for shipment to the analytical laboratory.		
180.	DOE 180	91	6.17.10.2	DOE	Please add an introductory sentence to clarify the scope of Section 6.17.10.2: ***6.17.10.2 Field Screening of Soil, Rock, and Sediment Samples*** *Required field screening methods and frequencies will be specified in a site-specific work plan and may include some or all of the following field screening techniques.*		
181.	DOE 181	91	6.17.10.2	DOE	Please clarify that instruments will be specified in the work plan which requires approval by the Department: *A photo-ionization detector (PID) equipped with a 10.6 or higher electron volt (eV) lamp, combustible gas indicator, or other instrument specified in the approved work plan shall be used for VOC field screening.*		
182.	DOE 182	92	6.17.10.2	DOE	DOE/Sandia note the methods and procedures will be specified in the work plan that requires approval by NMED. Also, the last two sentences are ambiguous with regard to what is necessary for inclusion. Please revise to read: *The methods and procedures for sample preparation and instrument calibration shall be specified in the approved work plan prior to the start of field activities.* *The Permittees shall record on the field logs all conditions capable of influencing the results of field screening. These influential conditions shall be included in any report where the field screening results are presented.*		
183.	DOE 183	92	6.17.10.3	DOE	This requirement [6.17.10.3] is not consistent with the field QC specified in Section 6.18.1.5. In addition, disposable sampling equipment precludes decontamination issues; therefore equipment blanks when using disposable equipment are unnecessary. Please revise to read: *The Permittees shall prepare and analyze equipment blanks from all sampling apparatus at a frequency of at least five (5) percent of the total number of samples submitted for analysis.*		
184.	DOE 184	93	6.17.10.4	DOE	Please clarify that classification methods will be specified in the work plan which requires approval by the Department: *Samples shall be visually inspected and the soil, sediment, or rock type classified in accordance with ASTM D2487 (Unified Soil Classification System) and ASTM D2488 (Standard Practice for Description and Identification of Soils), or AGI Methods for soil and rock classification or in other ways specified in the approved work plan.*		

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185.	DOE 185	93	6.17.11	DOE	DOE/Sandia note the field-measurement parameters will be determined on a site-specific basis, and measurement methods will be specified in the work plan that will be approved by NMED. Also, it is not necessary to include other analytes, because all analytes will be specified in the work plan. Please revise as follows: *The Permittees shall, as specified on a site-specific basis in the work plan, collect soil-vapor samples for field measurement of some or all of the following.* *1 (not included in comment)* *2. Organic vapors (using a photo-ionization detector with a 10.6 eV lamp, a combustible vapor indicator or other method specified in the approved work plan).* *3–5 (not included in comment)* *Permittees shall, as specified on a site-specific basis in the work plan, collect soil-vapor samples for laboratory analysis of the following:* *1–2 (not included in comment)*		
186.	DOE 186	94	6.17.11	DOE	As discussed in preceding comments, methods will be specified in the work plan that requires approval by NMED. Also, DOE/Sandia note that equipment calibration should occur at a frequency recommended by the manufacturer (not necessarily daily), and calibration is discussed in Section 6.17.3. Please revise to read: *Soil-vapor samples for laboratory analysis shall be collected using SUMMA canisters or other sample collection method specified in the approved work plan. The samples shall be analyzed for VOC concentrations by EPA Method TO-15, as it may be updated or equivalent VOC analytical method specified in the approved work plan.* *Field soil-vapor measurements, the date and time of each measurement, and the type and serial number of field instrument used shall be recorded on a soil-vapor monitoring data sheet. The instruments used for field measurements shall be calibrated in accordance with the manufacturer's specifications and as described in Section 6.17.3 of this Permit Part. The method used to obtain soil-vapor field measurements and samples must be specified in the approved work plan.*		
187.	DOE 187	94	6.18	DOE	Please revise the 3rd sentence in Section 6.18 to recognize that groundwater investigation activities may be defined on a site-specific basis:		

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					The Permittees shall implement the groundwater investigation requirements in accordance with the requirements set forth in this Section or in the approved work plans.		
188.	DOE 188	94	6.18.1	DOE	DOE/Sandia note the Albuquerque Basin is a complicated basin for performing water balances and the information gained from the watershed is sufficient. Also, surveying requirements are described in Section 6.17.7. Please revise as follows: *The Permittees shall implement groundwater investigations to determine the following.* *1–5 (not included in comment)* *6. Site-wide water balance information for evaluating fate and transport of hazardous constituents including:* *a. recharge and discharge locations, rates, and volumes* *b. evapotranspiration data* *c. stream-flow data* *7–13 (not included in comment)* *In selecting a site for a new well, the Permittees shall consider paleotopography, fracture density and orientation, source areas, hazardous constituent characteristics, geologic structures, groundwater flow direction, and the known occurrences of groundwater. All existing and newly installed wells and piezometers shall be surveyed in accordance with the requirements described in Section 6.17.7 of this Permit Part.*		
189.	DOE 189	95	6.18.1.1	DOE	For larger groundwater areas of concern, the well network may too large to measure water levels in 24 hours. Please revise to read: *Groundwater levels shall be measured in all wells specified in a Department approved work plan within a 24 hour timeframe. Any deviation from this timeframe will require the groundwater levels to be measured as soon as practicable following the 24 hour timeframe.*		
190.	DOE 190	95	6.18.1.2	DOE	Because newly-installed wells are often installed at a site with existing wells, it is more practical to conduct the initial sampling during the next scheduled sampling event for that site. Additionally, monitoring frequencies will be specified in work plans that require NMED approval. Please revise to read: *Initial groundwater samples shall be obtained from newly-installed monitoring wells between ten (10) and thirty (30) days after completion of well development, or during the next scheduled sampling event for that site. Subsequent*		

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					groundwater monitoring and sampling shall be conducted at frequencies specified in the approved work plan.		
191.	DOE 191	95	6.18.1.2	DOE	DOE/Sandia note this schedule [Section 6.18.1.2, 3rd sentence] does not include contingencies for equipment malfunctions, weather conditions, analytical requirements (holding times), holidays, number of wells for associated project, and well characteristics. Depending upon the project, it is not possible to complete sampling of all wells within a 21-day time frame (e.g., annual sampling of the 21 TAG wells is a task that cannot be completed within 21 calendar days. Please revise to read: *If possible, all monitoring wells specified in a Department approved work plan shall be sampled within twenty one (21) calendar days from the start of the groundwater sampling event. The Permittees shall sample all groundwater in all wells as specified in a Department approved work plan. Any requests for planned variances from the approved groundwater sampling plan or schedule shall be submitted to the Department in writing, ninety (90) days prior to the start of scheduled monitoring and sampling events. For any unplanned variances, due, for example, to unanticipated conditions in the field, sampling will be completed as soon as the specific conditions allow, following the 21 calendar day timeframe, and will be reported when the sampling results are reported.*		
192.	DOE 192	95	6.18.1.2	DOE	For clarity, please revise [Section 6.18.1.2, 2nd paragraph] to read: *For all wells or exploratory borings subject to this Permit, groundwater samples shall be collected from all saturated zones, where possible, including from exploratory borings that are not intended to be completed as monitoring wells prior to abandonment of the borings.*		
193.	DOE 193	95-96	6.18.1.3 and Table 6-1	DOE	Please see Comment No. 137 for the order and numbering of tables in Part 6 of the draft Permit. Table 6-1 should be renumbered to Table 6-5. Required analysis and measurement intervals are those specified in the work plan(s) approved by NMED. Additionally, it is not practical to require that NMED approve use of individual measuring instruments, as new products and different vendors are always becoming available for these field instruments. DOE/Sandia note the purging specifications in this Section are not consistent with Field operating Procedures (FOPs) 05-01, 02, 03, and 04; these FOPs were developed per NMED approval of the TAG Work Plan and are consistent with KAFB groundwater program. Please revise to read:		

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					In addition to other required analyses, water samples shall be analyzed in accordance with approved work plans for one or more of the general chemistry parameters shown in Table 6-5 below. ***6.18.1.3 Well Purging*** *All screened zones in each monitoring well shall be purged by removing groundwater prior to sampling in order to ensure that fresh formation water is sampled. Purge volumes shall be determined by monitoring, at a minimum, groundwater pH, specific conductance, dissolved oxygen concentrations, turbidity, redox potential, and temperature during purging and at measurement intervals specified in the approved work plan. The groundwater quality parameters shall be measured with a flow-through cell and measuring instruments standard to the environmental industry. The volume of groundwater purged, the readings obtained at each interval, and the instruments used shall be recorded on the field monitoring log. Water samples shall be obtained from a well only after purging a minimum of one saturated screen volume plus achieving stability of water quality parameters as 4 consecutive measurements of pH (w/in 0.1 units), temperature (w/in 1 degree C), SC (w/in 5%), and turbidity (10% or < 5 NTU). A well-bore volume is herein defined as the volume of water in the saturated filter pack plus the volume of all standing water within the well screen and casing. The Permittees may submit to the Department for approval, a written request for a variance from the described method of well purging for individual wells no later than 90 days prior to scheduled sampling activities.* ***Table 6-5. Groundwater General Chemistry Parameters***		
194.	DOE 194	96	6.18.1.4	DOE	DOE/Sandia note the methods will be specified in the work plan which requires approval by NMED. Also, the eight-hour timeframe is not reasonable for some wells and sampling conditions. Wells that purge dry are generally allowed to recover 80% then sampled; recovery times at these wells range from hours to days. In addition, practical considerations, such as time of day when purge/recovery is complete, preclude strict adherence to an 8-hour rule. Also, the references to Sections 6.17.3 and 6.17.1 are not correct. Please revise to read: *Groundwater samples shall be obtained using methods specified in the approved work plan, as soon as practicable following completion of well purging. Sample collection methods shall be documented in field monitoring logs. The*		

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					samples shall be transferred to appropriate, clean, laboratory-prepared containers provided by the analytical laboratory. Sample handling and chain-of-custody procedures are described in Section 6.17.4 of this Permit Part. Decontamination procedures shall be established and, implemented, for non-dedicated water sampling equipment as described in Section 6.17.2 of this Permit Part.		
195.	DOE 195	97	6.18.1.4	DOE	As discussed in Comment No. 2, DOE/Sandia are responsible for proper characterization and management of all wastes generated, and there are many options for off-site management of wastes in compliance with the regulations. Also, Section 6.17.5 discusses in-situ testing. Please revise to read: *All purged groundwater and decontamination water shall be collected in labeled 55-gallon drums or other compatible containers. The water, disposable equipment, personal protective equipment, and any IDW shall be managed as described in Section 6.17.6 of this Permit Part*		
196.	DOE 196	97	6.18.1.4	DOE	The Permit includes numerous cleanup levels in Section 6.13.1 of Part 6: WQCC standards, EPA MCLs, and Region IV Human Health Medium-Specific Screening Level for tap water. DOE/Sandia note the WQCC standards apply to dissolved metal portions, except for mercury. Also, analysis will be conducted according to NMED-approved work plans. Please revise to read: *Groundwater samples intended for metals analysis shall be submitted to the laboratory for analyses of total metals; the samples shall not be filtered in the field or laboratory, unless specified in the approved work plan, e.g., to allow comparison to WQCC standards. Samples to be analyzed for dissolved metals shall be filtered using disposable in-line filters with a 0.45 micron or other mesh size specified in the approved work plan.*		
197.	DOE 197	97	6.18.1.5	DOE	The proposed frequency is not appropriate for many SWMUs and AOCs. It is inconsistent with current practices and will not provide additional assurance of proper techniques. The intention is to include one field blank per analytical batch of environmental samples. Please revise to read: *In the case of VOC analyses, field blanks shall be prepared and analyzed at a frequency of at least 10 percent of the total number of environmental VOC samples, with at least one field blank per analytical batch of environmental samples.*		
198.	DOE 198	97	6.18.1.5	DOE	Disposable sampling equipment precludes decontamination issues, therefore equipment blanks are unnecessary. Also, the proposed frequency is not appropriate for many SWMUs and AOCs; as the sampling rate may be as low as one well per day. Please revise to read:		

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					Equipment blanks shall be prepared and analyzed at a rate of at least five (5) percent of the total number of environmental samples submitted for analysis, but no fewer than one equipment blank per sampling event.		
199.	DOE 199	97	6.18.1.5	DOE	Please delete the two sentences in the 5th paragraph of Section 6.18.1.5. Reagent blanks are unnecessary for accomplishing quality control on laboratory analyses, and their use is inconsistent with current practices. Laboratory QC requirements are addressed in contracts and analytical protocols.		
200.	DOE 200	98	6.18.2	DOE	The survey methods and general chemistry parameters will be specified in the NMED-approved work plan. Survey methods are described in Section 6.17.7 of this Permit Part, general chemistry parameters are listed in Section 6.18.1.3 of this Part, and field QC procedures are described in Section 6.18.1.5. Please revise as follows: *As required by the Department, the Permittees shall submit to the Department work plans for sampling of springs that meet the following requirements:* *2. The sampling point for each spring shall be located in accordance with the survey methods described in Section 6.17.7 of this Permit Part or by other survey methods specified in the approved work plan.* *4. Spring samples shall be submitted to an analytical laboratory for analyses of the general chemistry parameters listed in Section 6.18.1.3 of this Permit Part, and in accordance with approved work plans.* *5. The Permittees shall perform the same field QC procedures as are described in Section 6.18.1.5 of this Permit Part.*		
201.	DOE 201	98	6.18.3	DOE	Please revise to clarify that the methods and instruments will be specified in the work plan: *The methods and instruments used to measure field parameters shall be specified in the approved work plan.*		
202.	DOE 202	99	6.19	DOE	Please change the text due to the updated EPA change from CLP to the NELAC standard. *The Permittees shall submit all samples for laboratory analysis to laboratories holding accreditation to the National Environmental Laboratory Accreditation Conference (NELAC) standard or equivalent standard.*		
203.	DOE 203	99-104	6.19 to 6.20.2.5	DOE	DOE/Sandia reference these requirements [Section 6.19 and 6.20] (or current industry practices) in analytical contracts and protocol documentation. To clarify that site specific requirements will be defined in a work plan, please add the following sentence to the end of the first paragraph in Section 6.19:		

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					The requirements for laboratory analysis as specified in this Section shall apply unless the Department has approved a Plan that identifies alternative requirements or procedures.		
204.	DOE 204	102	6.20.1	DOE	A one working day notification to NMED of laboratory data quality exceptions is unnecessary, since these do not represent a threat to human health or the environment. Likewise, a 10 –day limit for submitting written documentation of a data quality discussion is not necessary. Please revise to read: *The Permittees shall contact the Department within five working days of receipt of the laboratory notification of data quality exceptions to discuss the implications to the sampling data, and to determine whether the data will still be considered acceptable or if sample re-analysis or resampling is necessary. The Permittees shall summarize the results of this discussion with Department personnel in a letter. The Permittees shall submit the letter to the Department by fax or electronic mail within ten working days of the conclusion of the data quality discussion and shall mail the original signed copy of the letter to the Department within 30 days of the conclusion of the data quality discussion.*		
205.	DOE 205	102-112	6.20.3	DOE	DOE/Sandia note the material in these Sections [6.20.3 – 6.20.3.14] does not fit within the content of Section 6.20, which addresses field and laboratory QC data for all media. Please reformat Section 6.20.3 into a new section 6.21, and reformat all listed subsections accordingly. In addition, to clarify that site-specific requirements will be defined in a work plan, please add the following sentence to the beginning of this section: ***6.21 GROUNDWATER MONITORING WELL CONSTRUCTION REQUIREMENTS*** *The requirements for monitoring well construction as specified in this Section shall apply unless the Department has approved a Plan that identifies alternative requirements or procedures.*		
206.	DOE 206	105	6.20.3.3	DOE	Please see Comment No. 205 regarding renumbering this section. DOE/Sandia note most of the wells completed at SNL/NM are drilled into alluvium. This section of the draft Permit addresses wells drilled at the alluvium-bedrock interface. Also, sampling of alluvial sediments and borings will depend on the requirements of a site-specific work plan approved by NMED. It is not appropriate to specify a minimum number of samples for every case.		

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					Regarding section numbers and cross-references, DOE/Sandia note the following: • There is no Section 6.17.9.2; Section 6.17.10.2 addresses field screening procedures. • Section 6.18 addresses groundwater sampling; Section 6.17 addresses requirements for field activities. • There is no Section 6.18.4. • Well construction and installation are addressed in Sections 6.20.3.6 – 6.20.3.9; these should be renumbered as Sections 6.21.6– 6.21.9 as discussed in Comment No. 205. Please revise as follows: ***6.21.3 Alluvium-Bedrock Interface Wells and Piezometers*** *Alluvium-bedrock interface wells and piezometers are wells that are screened partially or wholly in alluvial sediments at the interface with underlying bedrock. The Permittees shall submit to the Department for approval work plans for construction of alluvial wells and piezometers that meet the following requirements.* *2. If required by a site-specific work plan, samples of alluvial sediments and underlying bedrock, and soil and soil vapor shall be collected for hydraulic and soil property testing and for analysis to determine the presence of hazardous constituents at depths or intervals approved by the Department and in accordance with the methods described in Section 6.17 of this Permit Part.* *3. Alluvial wells and piezometers shall be constructed and developed in accordance with Sections 6.21.6 – 6.21.9 of this Permit Part. Wells and piezometers shall be abandoned in accordance with the procedures for abandonment in Section 6.21.12 of this Permit Part.* *4. Samples shall be obtained as described in the approved work plan. If appropriate, samples shall be obtained from each boring between the ground surface and one foot below the ground surface (0.0-1.0 foot interval), at subsequent five-foot intervals, at the alluviumbedrock contact, and at the maximum depth of each boring in accordance with the methods described in Section 6.17.10 of this Permit Part.* *5. Field screening and chemical analyses of collected samples shall be conducted in accordance with Section 6.17.10.2 of this Permit Part and in accordance with approved work plans.*		

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					8. Groundwater samples shall be delivered to an analytical laboratory for the analyses required in the approved work plans.		
207.	DOE 207	108	6.20.3.7	DOE	Please clarify that use of pre-fabricated well screens and filter packs will be specified in the work plan which requires approval by the Department: *The use of pre-fabricated well screens and filter packs shall be specified in the approved work plan.*		
208.	DOE 208	108	6.20.3.8	DOE	it is standard industry practice (especially for deep wells) to use a tagging device (a weighted tape measure) to verify the thickness of the seal rather than using a tamping device. Please revise to read: *A tagging device shall be used to ensure that the seal is emplaced at the proper depth.*		
209.	DOE 209	109	6.20.3.9	DOE	Please clarify that introduction of air, water or other fluids into a well for the purpose of well development will be specified in the work plan which requires approval by the Department: *If the introduction of air, water, or other fluids into a well for the purpose of well development is planned, these plans will be specified in the approved work plan.*		
210.	DOE 210	109	6.20.3.11	DOE	In some cases it may be unreasonable to submit a well completion summary within 30 days of completing an installation. Multiple wells are often installed over several months during a single field effort; it is more appropriate to submit well completion summaries for all the wells together. Also, well boring logs are addressed in Section 6.20.3.13 which should be renumbered as Section 6.21.13 as discussed in Comment No. 205. Please revise to read: For each monitoring well, the Permittees shall submit to the Department a well completion summary within 90 days of completing the field program which shall include a well construction log and diagram, a well boring log, and a well development log. The well construction log and diagram and the well boring log shall contain at a minimum the information required under Section 6.21.13 of this Permit Part.		
211.	DOE 211	110	6.20.3.12	DOE	The prescribed well abandonment requirements for small diameter casing wells are not always feasible with deep (~500 ft) well completions. Hollow-stem auger drilling methods may not be feasible at these depths. Alternatives to overdrilling will be specified in the work plan. Please revise to read: *If conditions allow, for wells with small diameter casing (i.e., 2-inch or less), abandonment shall be accomplished by over drilling the well with a large diameter hollow-stem auger.*		

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212.	DOE 212	112	6.20.3.14	DOE	Well boring logs are addressed in Section 6.20.3.13 which should be renumbered as Section 6.21.13 as discussed in Comment No. 205. The design and depth of installation will be specified in a work plan that is approved by NMED. Please revise to read: *Information on the design and construction of soil-vapor monitoring wells shall be recorded as for groundwater monitoring wells (Section 6.21.3.13 of this Permit Part) as applicable.* *Soil-vapor monitoring wells shall be designed and constructed in a manner that will yield high-quality samples. The design and depth of installation must be specified in the approved work plan.*		
213.	DOE 213	113	Table 6-2	DOE	Consistent with Comment No. 137, please revise as follows: ***TABLE 6-2*** ***Solid Waste Management Units (SWMUs)*** ***Requiring Corrective Action*** ***under the Consent Order***		
214.	DOE 214	116-128	Table 6-3	DOE	DOE/Sandia note that a number of changes to Table 6-3 are needed to correct errors to the lists of SWMUs, to ensure consistency with the administrative record, and to reflect the most current risk information. Because many of these sites were evaluated some time ago (through the No Further Action process), the basis for the determination (i.e. the land use assumptions) was not always readily apparent and additional review was needed to translate the earlier determination into a Corrective Action Complete with Controls or a Corrective Action Complete without Controls determination. There are two versions of Table 6-3 enclosed as separate files. One is a marked up version containing notes with the rationale for proposed changes. The second file is a final version of revised Table 6-3. Consistent with Comment No. 144, please revise the title of this table as follows: ***TABLE 6-3*** ***Operating Units, RD&D Permitted Units, Closing Units, and Solid Waste Management Units (SWMUs)*** ***for which Corrective Action is Complete Without Controls*** Please delete Table 6-3 from the draft Permit and replace it with the enclosed final version of Table 6-3.		

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215.	DOE 215	129-132	Table 6-4	DOE	DOE/Sandia note that a number of changes to Table 6-4 are needed to correct errors to the lists of SWMUs, to ensure consistency with the administrative record, and to reflect the most current risk information. As noted in the preceding comment, many of these sites were evaluated some time ago (through the No Further Action process), thus the basis for the determination (i.e. the land use assumptions) was not always readily apparent and additional review was needed to translate the earlier determination into a Corrective Action Complete with Controls or a Corrective Action Complete without Controls determination. There are two versions of Table 6-4 enclosed as separate files. One is a marked up version containing notes that summarize the relevant risk information and the rationale for proposed changes. The second file is a final version of revised Table 6-4. Consistent with Comment No. 144, please revise the title of this table as follows: ***TABLE 6-4*** ***Solid Waste Management Units (SWMUs) Corrective Action Complete With Controls*** Please delete Table 6-4 from the draft Permit and replace it with the enclosed final version of Table 6-4.		
216.	DOE 216	90	6.17.10	DOE	There are no Sections 6.17.9.2 or 6.17.9.4. Sections 6.17.10.2 addresses field screening and Section 6.17.10.4 addresses logging. Please revise accordingly.		
217.	DOE 217	97	6.18.1.5	DOE	Section 6.17.3 discusses calibration of field equipment; Section 6.17.4 addresses sample management. Please revise accordingly.		
218.	DOE 218	98	6.18.3	DOE	There is no Section 6.18.5; the correct reference is to Section 6.18.1.5. Please revise accordingly.		
219.	DOE 219	103	6.20.2	DOE	There is no Section 6.18.5.1; the correct reference is to Section 6.20.1. Please revise accordingly.		
220.	DOE 220	104	6.20.2.4	DOE	There is no Section 6.18.4; the correct reference is to Section 6.19. Please revise accordingly.		
221.	DOE 221	105	6.20.3.1	DOE	Section 6.17.7 addresses surveying; Section 6.17.8 addresses requirements for exploratory and well installation borings and exploratory excavations. Please revise accordingly.		
222.	DOE 222	105	6.20.3.2	DOE	Please see Comment No. 222. Section 6.17.7 addresses surveying; Section 6.17.8 addresses requirements for exploratory and well installation borings and exploratory excavations. Please revise accordingly.		
223.	DOE 223	105	6.20.3.2	DOE	There is no Section 6.18.6. Well construction and installation are addressed in Sections 6.20.3.6 – 6.20.3.9; these should be renumbered as Sections 6.21.6 – 6.21.9 as discussed in Comment No. 205. Please revise accordingly.		

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224.	DOE 224	106	6.20.3.4	DOE	Regarding section numbers and cross-references, DOE/Sandia note the following: • There is no Section 6.17.9.2; Section 6.17.10.2 addresses field screening procedures. • Section 6.18 addresses groundwater sampling; Section 6.17 addresses requirements for field activities. • There is no Section 6.18.4. • Permit Part 5 addresses organic air emissions. Please revise as follows: *The Permittees shall submit to the Department for approval work plans for construction of perched aquifer wells that meet the following requirements.* *1. Based on site-specific conditions, geophysical measurements and soil, sediment, rock, soil-vapor, and groundwater samples shall be collected from each boring prior to well construction in accordance with Section 6.17 of this Permit Part, as appropriate.* *4. Field screening and collection of soil, sediment, rock, soil-vapor, and groundwater samples shall be conducted in accordance with Sections 6.17.10.2, 6.17.11, and 6.18.1.4 of this Permit Part.* *6. Work plans shall be prepared in accordance with Section 6.9.2 of this Permit Part* *7. Groundwater samples shall be delivered to an analytical laboratory for the analyses required in the approved work plans.*		
225.	DOE 225	106	6.20.3.5	DOE	Regarding section numbers and cross-references, DOE/Sandia note the following: • There is no Section 6.17.9.2; Section 6.17.10.2 addresses field screening procedures. • There is no Section 6.18.4. • There is no Section 4.5 of Permit Part 4. Permit Part 4 addresses treatment at the TTU, RMWMU, and AHCU. Please revise as follows: *The Permittees shall submit to the Department for approval work plans for construction of regional aquifer wells that meet the following requirements.*		

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					1. The proposed locations, depths and details of drilling, sampling, and well construction shall be described in work plans prepared in accordance with Section 6.9.2 of this Permit Part or other document approved by the Department prior to well installation. *6. Field screening and sample collection of soil, sediment, rock, soil-vapor, and groundwater samples shall be conducted in accordance with Section 6.17.10.2 of this Permit Part.* *9. Groundwater samples shall be delivered to an analytical laboratory for the analyses required in the approved work plans.*		
226.	DOE 226	56-132	Part 6	DOE	The following acronyms appear in the text of this Permit Part but are not defined in the acronym list at the beginning of the draft Permit. Please include them in the Acronym List: AEC - Atomic Energy Commission AUA - Annual Unit Audit DEER - Directed Energy Experimental Range HE - high explosive HERMES - High-Energy Radiation Megavolt Electron Source LAARC - Light Air-transport Accident Resistant Container LCBS - Lurance Canyon Burn Site MO - mobile office MW - mixed waste NIOSH - National Institute of Occupational Safety / Health POTW - publicly-owned treatment works RCRIS - Resource Conservation and Recovery Information System RD&D - Research, Development, and Demonstration RDX - Cyclotrimethylene trinitramine TCA - trichloroethane TCE - trichloroethylene or trichloroethene TNT - Trinitrotoluene TO - toxic organic TPH - Total Petroleum Hydrocarbon UST - underground storage tank VCM - voluntary corrective measure		
227.	DOE 227	133	7.2.1	DOE	Consistent with Section 16.0 of Permit Attachment 16 and with 40 CFR 264.117(a)(1), post-closure care began after completion of closure, which was certified on October 15, 2003. Please revise to read: *The Permittees shall conduct post-closure care for the CAMU Containment Cell identified in Permit Condition 7.1 above, beginning after completion of closure of the Unit on October 15, 2003, and continuing for 30 years after that date, except*		

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					that the 30-year post-closure care period may be shortened or extended in accordance with 40 C.F.R. § 264.117(a)(2) as follows.		
228.	DOE 228	134	7.2.2	DOE	DOE/Sandia note the CAMU containment cell is not a landfill; therefore the requirements of 40 CFR 264.552(e)(6)(v) are applicable, rather than the requirements of 40 CFR 264.309 and 310. Select provisions of landfill post-closure care are appropriate for the CAMU, (e.g., maintaining the integrity of the final cover). Item 5 is not applicable or necessary for compliance with the requirements of 40 CFR 264.552(e)(6)(v), and it is not described in the recordkeeping requirements in Section 16.8 of Permit Attachment 16. Therefore, it should be deleted. Please revise as follows: *Because remediation waste will remain in the CAMU, the CAMU containment cell is subject to post-closure care. Therefore, the Permittees shall comply with the requirements of 40 CFR 264.552(e)(6)(v), as described in Permit Attachment 16, and as follows.* *1–4 (not included in comment)*		
229.	DOE 229	135	7.7	DOE	Inspections are described in Section 16.6 of Permit Attachment 16. Please revise the cross-reference as follows: *The Permittees shall inspect the components, structures, and equipment at the CAMU in accordance with the Inspection, Maintenance, Repair Activities and Frequencies described in Sections 16.6.5 and 16.6.6 of Permit Attachment 16 and the CAMU Post-Closure Inspection and Maintenance/Repair Schedule in Appendix 1, Permit Attachment 16.*		
230.	DOE 230	138	1.2.1	DOE	If the gates are locked, it is not necessary for the doors to also be locked. DOE/Sandia note the condition as stated is not consistent with Permit Attachment 10. Please revise to read: *The gates or doors to all Units shall be closed and locked during non-operating hours.*		
231.	DOE 231	138	1.2.1	DOE	DOE/Sandia note access procedures have changed slightly, and the draft Permit should reflect the most current information. DOE/Sandia will provide an updated figure under separate cover. Please revise to read: *Entrance is through five general-purpose gates and several special-purpose gates, staffed by armed military police or contractors, and requires appropriate identification issued by KAFB or by the Facility. Visitors must have a KAFB or Facility sponsor and appropriate identification to enter KAFB and the Facility. The gates to KAFB and the Facility are shown on Figure 1-3.*		
232.	DOE 232	137	1.1	DOE	DOE/Sandia note the five TAs occupy approximately 2,842 acres, as discussed in Comment No. 14. The Facility is defined in Permit Part 1, Section 1.6 as the TAs and remote		

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					test areas; the total area is approximately 15,054 acres (23.5 square miles). Please revise accordingly.		
233.	DOE 233	138	Table 1-1	DOE	DOE/Sandia have submitted revised information to NMED regarding the size of Bunker 37118; it should be incorporated. Please revise as follows: *Unit Name: Manzano Storage Bunkers (Units 37034, 37118, 37045, 37055, and 37057)* *Location and Size: In Manzano Area on KAFB: 0.4 acres occupied by bunkers (approximately 1,600 to 2,400 square feet in each bunker)*		
234.	DOE 234	After 143	Figure 1-4	DOE	Traffic patterns and waste transportation routes have changed slightly, and the draft Permit should reflect the most current information. DOE/Sandia will provide an updated figure under separate cover.		
235.	DOE 235	After 143	Figures 1-1 and 1-5	DOE	The figures do not reflect the most current information available. DOE/Sandia will provide updated figures under separate cover.		
236.	DOE 236	144	Permit Attachment 2, 2.0	DOE	Management of radioactive waste is not covered under the NMHWMA or this draft Permit, as discussed in Comment No. 1; thus it is not necessary to specify that radioactive wastes are stored at the MSB. Also, this list implies that both treatment and storage are conducted at every Permitted Unit but the MSB. Please revise to read: *The Permittees conduct treatment and/or storage of hazardous and/or mixed wastes at the Thermal Treatment Unit (TTU), Hazardous Waste Management Unit (HWMU), Radioactive and Mixed Waste Management Unit (RMWMU), Auxiliary Hot Cell Unit (AHCU), and MSB Units.*		
237.	DOE 237	144	Permit Attachment 2, 2.0	DOE	DOE/Sandia note the Unit-specific requirements in Permit Attachments 3-7 describe practices and requirements at the individual Permitted Units. In most cases they supplement the requirements in this Permit Attachment. In some cases, however, the Unit-specific requirements are not consistent with this Permit Attachment; these cases reflect conditions and requirements at the individual Units, and serve to promote effective waste management operations and protection of human health and the environment. In cases of inconsistencies, the Unit-specific requirements should take precedence. Please revise to read: *The information in this Permit Attachment, together with the Unit-specific information provided in Permit Attachments 3, 4, 5, 6, and 7, describe the required waste management practices for each of the Permitted Units. If there is a conflict between the provisions of this Permit Attachment and the provisions of the Permit Attachments 3 through 7, the provisions of the Attachment specific to the particular Permitted Unit shall supersede the provisions of this Permit attachment.*		

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238.	DOE 238	145	Permit Attachment 2, 2.1.1	DOE	This permit condition addresses liquids collected in secondary containment structures and areas. It does not apply to storm water retention ponds at the HWMU and RMWMU as these do not serve as secondary containment. Please clarify this by revising to read: *Accumulated liquids in secondary containment systems from precipitation or snowmelt, for which there is no evidence of a release, may be discharged to the ground or to the sanitary sewer if sampling and analysis data indicate that the accumulated liquids are not hazardous.*		
239.	DOE 239	146	Permit Attachment 2, 2.1.2.1	DOE	If the water-reactive wastes are in containers when they are present in areas equipped with automatic sprinklers, the containers serve to keep water from coming into contact with the wastes. In these cases, the requirements for extra isolation are redundant. Please revise the item shown to read: *5. Water-reactive wastes shall not be stored in waste management areas equipped with automatic water sprinkler systems, except when being staged for treatment or for off-site shipment. When water-reactive wastes are present in such waste management areas (e.g. for treatment or temporary staging), the Permittees shall take appropriate measures to ensure water does not come into contact with the waste.*		
240.	DOE 240	146	Permit Attachment 2, 2.1.2.1	DOE	Use of intrinsically safe electrical systems is not required by applicable local and other building codes in all instances where operations include open containers of ignitable or reactive wastes. In these cases, the requirements for such intrinsically safe systems are redundant. Please revise the item shown to read: *6. Buildings and areas where operations include open containers of ignitable or reactive wastes shall be equipped with electrical systems that meet applicable codes. The Permittees shall take precautions if necessary to prevent accidental ignition or reaction of ignitable and reactive hazardous or mixed wastes.*		
241.	DOE 241	147	Permit Attachment 2, 2.1.2.2	DOE	DOE/Sandia note the HWMU and MSB are not located within a SNL TA. Accordingly, please revise to: *Containers holding ignitable or reactive wastes shall be located at least 50 feet from the TA boundary with the following exceptions: at the MSB where they shall be stored at least 50 feet from the fence restricting access by non-Facility personnel at all times, and at the HWMU where they shall be stored at least 50 feet from the Facility property line. Containers holding ignitable or reactive wastes shall be protected from sources of ignition or reaction. [40 C.F.R. § 264.176].*		

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242.	DOE 242	147	Permit Attachment 2, 2.1.3.1	DOE	DOE/Sandia note the requirements for inspection and testing of the fire protection systems are fully specified through reference to the NFPA requirements. Please revise to read: *The Permittees shall ensure that communications and alarm systems and fire protection, spill control, and decontamination equipment are inspected or tested according to the inspection plans and schedules detailed in Permit Attachment 11. Maintenance, repair, and replacement of emergency equipment shall be performed as needed to ensure proper function and in a timely manner. The Permittees shall also test fire suppression equipment at intervals based on NFPA 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" (NFPA 2002, as updated and revised).*		
243.	DOE 243	148	Permit Attachment 2, 2.1.3.2	DOE	DOE/Sandia note 40 CFR 264.34 does not require that personnel have access to other personnel and multiple means of communication at all times. Rather, the requirement is for "immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee", "whenever hazardous waste is being poured, mixed, spread, or otherwise handled". Two-way radios, pagers, cellular telephones, and working in pairs are illustrations of means of communication that are typically available. DOE/Sandia note that requiring two personnel to be present at all times when managing waste or use of particular communications equipment will not enhance safety in some cases (e.g., small quantities of wastes, limited work space, or operations involving reactive wastes). The Application describes use of two persons only during waste handling operations at the MSB; this precaution is taken to provide additional protection of human health and the environment because the Units are not routinely occupied. Please revise to read: *If the communications and alarm systems described in each Unit-specific Attachment of this Permit are not immediately available, on-site personnel working alone shall carry two-way radios or cellular telephones so that they can contact emergency personnel. Alternatively, waste management personnel shall work in pairs and maintain visual or voice contact, and one member of the pair shall have access to two-way radios, cellular telephones, or the communications and alarm systems described in each Permit Attachment [40 C.F.R. § 264.34].*		
244.	DOE 244	148	Permit Attachment 2, 2.1.4.1	DOE	DOE/Sandia note the wastes accepted for transport to the Permitted Units may include large pieces of equipment and other self-contained items. Please revise as follows: *Only closed waste containers or large self-contained waste items shall be accepted for transportation by vehicles to the Permitted Units. Prior to transport, containers and items shall*		

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					be inspected to ensure that they are properly closed, labeled, and in suitable condition for transport.		
245.	DOE 245	148	Permit Attachment 2, 2.1.4.1	DOE	This is somewhat unclear because the HWMU, RMWMU, and TTU each include outdoor areas within the Permitted Unit boundary. DOE/Sandia note that it is appropriate to use the general procedures outlined in Permit Attachment 12 to respond to spills. However, use of the procedures does not constitute implementation of the Contingency Plan or designation of the spill as an emergency. DOE/Sandia further note it is not necessary that loading and unloading areas be level (e.g., the loading ramp on the west side of Building 6926 at the RMWMU) to minimize hazards in loading and unloading operations. Please revise to read: *If loading and unloading operations occur outdoors, they shall be conducted so as to minimize the distance that the waste must be moved. Spills that occur during loading or unloading operations shall be promptly cleaned up in accordance with spill response procedures contained in Permit Attachment 12; however such cleanup operations do not necessarily constitute implementation of the Contingency Plan or designation of the spill as an emergency as defined in Permit Attachment 12. The asphalt, concrete, or other pavement shall be maintained in good condition in all loading and unloading areas.*		
246.	DOE 246	149	Permit Attachment 2, 2.1.4	DOE	DOE/Sandia note 40 CFR 270.14(b)(8) addresses the contents of permit applications rather than the requirements of 40 CFR 264.31 that are applicable to preparedness and prevention. In addition, the draft Permit addresses releases of hazardous constituents rather than hazardous waste constituents as specified in 40 CFR 264.31. Please delete the reference to 40 CFR 270.14 and revise the language of the Permit to be identical to the regulation, as discussed in Comment No. 3.		
247.	DOE 247	149	Permit Attachment 2, 2.1.4.1	DOE	As discussed in Comment No. 7, the Application includes descriptions of typical waste handling equipment and operations as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. The waste handling equipment and detailed operations described are typical rather than prescriptive because they are continually adjusted as needed for the specific hazardous and mixed wastes being handled at any time in the Permitted Units. Including prescriptive handling requirements for fastening containers to lifts is redundant, and the requirement to use specific fastening methods may lead to operations that are less protective of worker safety (e.g., containers that are strapped together may		

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					block the forklift driver's view and be more cumbersome than using a special forklift attachment to transport two drums at a time). Similarly, DOE/Sandia note the prescriptive requirements for number of personnel are unnecessary and may be counterproductive, as discussed in Comment No. 7 and individual comments addressing Permit Attachments 3 through 7. Awareness of the weather and use of two people during waste handling activities may be appropriate at the MSB; these issues are best addressed through requirements in Permit Attachment 7. Please delete the reference to 40 CFR 270.14 as discussed in Comment No. 246 and revise to read: *Vehicles, forklifts, drum dollies, pallet jacks, and other tools used for the transport and management of wastes shall be used as appropriate during loading and unloading operations. Small containers may be loaded or unloaded manually from waste-transport vehicles. A forklift, hydraulic lift, or other mechanical device may be used as needed to load or unload larger containers. In all cases, containers of waste shall be handled in a manner to prevent shifting or falling. Waste-handling equipment shall be maintained and operated in accordance with manufacturers' guidance.* *Only personnel trained in accordance with the Training Plan in Permit Attachment 14 shall be allowed to handle waste at the Permitted Units.*		
248.	DOE 248	149	Permit Attachment 2, 2.1.4.4	DOE	For clarity and consistency with procedures in Permit Attachment 12, please revise to read: *In the event of a power loss, the Permittees shall perform the following steps if safe to do so: place the affected equipment in a safe state, close or cover open containers of hazardous or mixed wastes that are present, and stop operations until power is restored.*		
249.	DOE 249	149	Permit Attachment 2, 2.1.4.5	DOE	The PPE described in the Application illustrates ways in which DOE/Sandia meet the requirements of 40 CFR 264 to be protective of human health and the environment. These illustrations should be detailed in the Permit in a general fashion to meet the variety of potential conditions. Please revise to read: *Facility personnel at Permitted Units shall be required to use appropriate PPE to protect themselves from hazards. Such hazards may include handling heavy containers, explosives, radiation, operating waste-handling equipment, weather conditions, and contact with or other exposure to hazardous or mixed wastes and hazardous waste constituents.*		

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250.	DOE 250	150	Permit Attachment 2, 2.1.5	DOE	This condition does not accurately reflect DOE/Sandia operations. As described in the Application, equipment that is subject to the requirements of 40 CFR 264 Subpart BB is used (but not routinely used) at the Permitted Units, and DOE/Sandia note that any such equipment is exempt from the requirements in accordance with 40 CFR 264.1050(f) because it is used less than 300 hours per year. Please revise to read: *The Permittees are not authorized to manage hazardous wastes with organic concentrations equal to or greater than 10 percent by weight in process equipment identified in 40 CFR 264 Subpart BB for more than 300 hours per year. Therefore, Subpart BB regulations do not apply to the Permitted Units.*		
251.	DOE 251	150	Permit Attachment 2, Table 2-1	DOE	The specific requirements in table 2-1 are not consistent with other parts of the draft Permit or the information provided in the Application. The Application includes information to illustrate actions that could be taken to mitigate the effects of power outages. Including these actions as prescriptive requirements in the draft Permit is likely to lead to unsafe conditions, such as the requirement to use portable fire extinguishers whenever fire sprinklers are not operational (this requirement is also not fully consistent with the procedures in Permit Attachment 12, Section 12.8). Please revise as follows: Equipment/System: Lights Solution to Failure or Outage: Permittees shall maintain battery-operated emergency lights as needed in the buildings in each Permitted Unit. Equipment/System: Pumps and other equipment Solution to Failure or Outage: Permittees shall use portable manually- or pneumatically-operated equipment as needed. Equipment System: Container-handling equipment Solution to Failure or Outage: Permittees shall obtain replacement equipment, as needed. Equipment/System: Vehicles Solution to Failure or Outage: Personnel shall obtain replacements for vehicles, as needed. Equipment/System: Fire Sprinklers Solution to Failure or Outage: Only if safe to do so, Permittees shall use appropriate alternative fire suppression equipment.		
252.	DOE 252	152	Permit Attachment 2, 2.2.1	DOE	DOE/Sandia note the wastes managed at the Permitted Units include large pieces of equipment and other self-contained items. To clarify, please revise to read:		

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					Waste containers that may be stored at the Permitted Units include, but are not limited to, 30-, 55-, 83-, 85-, and 110-gallon steel, polyethylene, and fiber drums; fiberglass-reinforced plastic or plywood boxes; various steel boxes; metal over pack boxes; cardboard shipping containers; gas cylinders; roll-off bins; lab pack containers; various small containers (e.g., 1-, 2-, 5-, 10-, and 20-gallon drums or pails); bags; and some oversized, irregularly-shaped containers (e.g. equipment and other self-contained large items).		
253.	DOE 253	153	Permit Attachment 2, 2.2.1	DOE	DOE/Sandia note waste generation and accumulation activities at SNL that are subject to the requirements of 40 CFR 262.34(a) are outside the scope of this Permit. Please see Comment No. 2 for further discussion. In addition, 40 CFR 262.34(a) merely specifies that containers be "labeled or marked clearly with the words 'Hazardous Waste'". Please see Comment No. 3 for further discussion of consistency between the regulations and the requirements in the draft Permit. Please delete the 2nd paragraph in this section.		
254.	DOE 254	153	Permit Attachment 2, 2.2.2	DOE	This requirement is applicable only to operations covered by this Permit at the Permitted Units. Please revise to read: *Pursuant to 40 C.F.R. § 264.173, waste containers at each Permitted Unit shall be handled in a manner that will not cause them to rupture or leak. Containers at each Permitted Unit shall be kept closed except when waste is added to or removed from a container, when the contents of a container need to be repackaged, waste is being inspected or sampled, or waste is being treated.*		
255.	DOE 255	153	Permit Attachment 2, 2.2.2.1	DOE	The Application includes descriptions of remedial actions as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264.171. Including prescriptive requirements for transferring waste or overpacking containers is redundant and may lead to operations that are less protective of worker safety (e.g., exposure to chemical or radiological hazards). Please revise to read: *If appropriate, remedial actions shall include transferring the hazardous waste from the leaking or damaged container to a container that is in good condition or over packing the container into another container that is in good condition.*		
256.	DOE 256	146	Permit Attachment 2, 2.1.2.2	DOE	These references have been revised and updated since the Permittees submitted the Application; the Permit should reflect the updates. Please revise to read: *The Permittees shall use characterization information for each waste and published data regarding chemical properties of hazardous waste constituents in the wastes (e.g., material safety data sheets [MSDSs], "NIOSH Pocket Guide to Chemical Hazards" [DHHS, 1994] as revised and updated,*		

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					and Bretherick's Handbook of Reactive Chemical Hazards, Urben, 1995, as revised and updated) to identify potential consequences of treatment or other mixing activities.		
257.	DOE 257	155	Permit Attachment 3, 3.1	DOE	DOE/Sandia note there are actually four hazardous and mixed waste management areas, and the description is not entirely consistent with the information provided in the Application. Waste oils are addressed in Section 3.3.7; including them in this section is somewhat confusing. Additionally, as discussed in Comment No. 1, DOE/Sandia believe the Permit should not restrict mixed waste management at the HWMU. Accordingly, please revise to read: *The Hazardous Waste Management Unit (HWMU) occupies 1.35 acres on Facility property between Technical Area I (TA-I) and TA-II (Figure 1-2 of Attachment 1). It is a fenced compound with several buildings and hazardous waste management areas used for storage and packaging of hazardous and mixed wastes (Figure 3-1 of this Attachment).*		
258.	DOE 258	155	Permit Attachment 3, 3.1	DOE	These homes have been demolished. Please revise to read: *The nearest residential areas are located east of Wyoming Avenue, north of F Street (north of TA-I), approximately 0.8 miles away from the HWMU (Figure 1-8 of Attachment 1).*		
259.	DOE 259	157	Permit Attachment 3, 3.3.4	DOE	DOE/Sandia note the concrete floor, including the base and sides of each recessed area, is free of cracks and gaps, and is sufficiently impervious to contain leaks and spills until the collected material is detected and removed in compliance with 40 CFR 264.175(b)(1). The entire floor and the bottom seven inches of wall surface in each recessed area are covered with an epoxy-based chemical-resistant coating; however, this coating is not necessary for compliance with 40 CFR 264.175(b)(1-4) as the concrete is sufficiently impervious. Accordingly, please revise to read: *The building floor and the walls in the cells are painted. The entire floor of the building and the bottom seven inches of wall surface in each recessed area shall be maintained as needed to be free from cracks and gaps.*		
260.	DOE 260	158	Permit Attachment 3, 3.3.4	DOE	DOE/Sandia chose to use the lower capacity for consistency with existing Permit NM5890110518-1. Please revise to: *The recessed area in each holding cell is 5 feet by 4.5 feet and 7 inches deep, with an actual capacity of 98 gallons. The recessed floor area under the packaging area is 5 feet by 12 feet and 7 inches deep, with an actual capacity of 261 gallons. The capacity utilized for each holding cell is limited to 71 gallons, and the capacity for the packaging area is limited to 188 gallons.*		
261.	DOE 261	158	Permit Attachment 3, 3.3.4	DOE	DOE/Sandia note the storage capacities in the draft Permit are not consistent with current permitted capacities as specified in Permit NM5890110518-1 and in the Application.		

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					Please see Comment No. 6 for further discussion. Please revise to read: *Based upon the secondary containment capacity (equal to 10% of the stored volume or the volume of the largest container), each of the eight holding cells in the Hazardous Waste Packaging Building shall be limited to storing a maximum of thirteen 55-gallon drums, or an equivalent volume. The packaging area shall be limited to holding a maximum of 34 55-gallon drums, or an equivalent volume. 40 CFR 264.175(b)(3)*		
262.	DOE 262	158	Permit Attachment 3, 3.3.4	DOE	This condition is not consistent with the requirements of Permit NM5890110518-1 or with the Application. DOE/Sandia note that water-reactive wastes may be managed on a temporary basis in areas with automatic water sprinkler systems as long as the water does not come in contact with the wastes. Please revise to read: *Water reactive and spontaneously ignitable wastes shall not be managed in the Hazardous Waste Packaging Building, except on a temporary basis during receipt, repackaging, and staging activities.*		
263.	DOE 263	158	Permit Attachment 3, 3.3.5	DOE	DOE/Sandia note the concrete floor, including the base and sides of each recessed area, is free of cracks and gaps, and is sufficiently impervious to contain leaks and spills until the collected material is detected and removed in compliance with 40 CFR 264.175(b)(1). The entire floor is covered with an epoxy-based chemical-resistant coating; however, this coating is not necessary for compliance with 40 CFR 264.175(b)(1-4) as the concrete is sufficiently impervious. Accordingly, please revise to read: *The building floor (all cells and the walkway) are painted. The entire floor of the building and the sides of the recessed areas shall be maintained as needed to be free from cracks and gaps.*		
264.	DOE 264	158	Permit Attachment 3, 3.3.5	DOE	This condition is not consistent with the requirements of 40 CFR 264.175, with Permit NM5890110518-1 or with the Application. In particular, the restriction on storage of liquids in Cell 5 is inconsistent. Pallets are used when liquids are present in Cell 5; the pallets serve to elevate the containers as required by 40 CFR 264.176(b)(2). The Permittees may also occasionally store large self-contained items (e.g., waste equipment). Please see Comment No. 6 for additional discussion on capacity restrictions. Please revise to read: *Waste containers shall be placed on metal grating over the secondary containment areas, or on pallets on the reinforced concrete floor in Cell 5. If no containers of bulk liquids are stored in Cell 5, containers may be stored directly on the floor. Large self-contained items (e.g. waste equipment) may be stored on pallets or on the floor in Cell 5, as applicable.*		

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265.	DOE 265	159	Permit Attachment 3, Table 3-1	DOE	DOE/Sandia note the storage capacities in the draft Permit are not consistent with current permitted capacities as specified in Permit NM5890110518-1 and in the Application. Please see Comment No. 6 for further discussion, and revise Table 3-1 as follows: Cell No. 1 Maximum Storage Capacity Expressed as Number of 55-Gallon Drums: 98 Cell No. 2 Maximum Storage Capacity Expressed as Number of 55-Gallon Drums: 79 Cell No. 3 Maximum Storage Capacity Expressed as Number of 55-Gallon Drums: 79 Cell No. 4 Maximum Storage Capacity Expressed as Number of 55-Gallon Drums: 79 Cell No. 5 Maximum Storage Capacity Expressed as Number of 55-Gallon Drums: 518 Cell No. 6 Maximum Storage Capacity Expressed as Number of 55-Gallon Drums: 79 Cell No. 7 Maximum Storage Capacity Expressed as Number of 55-Gallon Drums: 79 Cell No. 8 Maximum Storage Capacity Expressed as Number of 55-Gallon Drums: 79 Please revise the footnote to provide additional information regarding Cell 5: Note A portion of the secondary containment capacity in Cell 5 is taken up by pallets, and the central aisle space is not included in the calculations. Maximum storage capacity was based on an effective capacity of 2849 gallons.		
266.	DOE 266	159	Permit Attachment 3, 3.3.5	DOE	As noted in Comment No. 262, water-reactive wastes may be managed on a temporary basis in areas with automatic water sprinkler systems as long as the water does not come in contact with the wastes. Please revise to read: Water reactive and spontaneously ignitable wastes shall not be managed in the Hazardous Waste Storage Building,		

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					except on a temporary basis during receipt and staging activities.		
267.	DOE 267	159	Permit Attachment 3, 3.3.6	DOE	The locking features provide additional protection for Unit personnel but are not required for management of hazardous or mixed wastes or hazardous waste constituents. Locked doors are not necessary for access control or security during non-operational hours, as discussed in Comment No. 487. DOE/Sandia note the inside surfaces (walls, bottom, ceiling, and floor) of each building are painted; these painted surfaces in the sump at the bottom of each modular building are free of cracks or gaps and are sufficiently impervious to contain leaks and spills until the collected material is detected and removed in accordance with 40 CFR 264.175(b)(1). The painted sump and floor fully satisfy the requirements of 40 CFR 264.175(b)(1-4). *Please revise to read:* *Each building has three doors that can be locked. Each building has a 6-inch deep integral spill containment reservoir under the entire building; the containment capacity is 500 gallons. The reservoirs are constructed of continuously welded 10-gauge steel or equivalent. The inside surfaces (bottom and sides) of each reservoir shall be painted to provide additional protection against degradation of the secondary containment. The sumps shall be maintained as needed to be free from cracks and gaps.* *Containers shall be stored on painted 1-inch-thick fire resistant plywood or equivalent over the reservoirs. The plywood shall be maintained as needed to support containers and elevate them above any accumulated liquid.*		
268.	DOE 268	159	Permit Attachment 3, 3.3.6	DOE	DOE/Sandia note the storage capacities for the modular buildings in the draft Permit are not consistent with current permitted capacities as specified in Permit NM5890110518-1 and in the Application. Please see Comment No. 6 for further discussion. It is not necessary to inspect the underside of the modular buildings on a regular basis because degradation of the reservoirs will be evident in the inspections that include the inside surfaces of each containment reservoir. Including the undersides of the buildings does not increase protection of human health or the environment; it increases the risk of injury to site personnel due to the difficulties of physical access. *Please revise to read:* *Each building rests on structural supports that elevate it and shall allow visual checks of the underside of the spill*		

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					containment reservoir if there is evidence of deterioration on the interior surfaces. The storage capacity shall be limited to 5,000 gallons (equivalent to 91 55-gallon drums) for each building.		
269.	DOE 269	159	Permit Attachment 3, 3.3.6	DOE	DOE/Sandia note the Application includes descriptions of typical waste management practices as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. Not all ignitable wastes are stored in the modular buildings. The specific wastes stored in the modular buildings at any time depends on the overall inventory of wastes present at the HWMU; the storage locations for individual items are adjusted as needed to meet Permit and regulatory requirements for ignitable, reactive, and incompatible wastes, prevent hazards, protect human health and the environment, and maintain effective operations. Including detailed specifications for storage of specific wastes may lead to conditions that are less protective of worker safety (e.g., the Permittees must maintain capabilities for storage of lithium batteries whether they are present or not, reducing capabilities for other water-reactive wastes that could also be present at the Permitted Unit). Please revise to read: *The modular storage buildings are located west of Building 958 (Figure 3-2 and Appendix 3-1 photograph) and are used for storage of wastes such as ignitable solids and water reactives.*		
270.	DOE 270	160	Permit Attachment 3, 3.3.7	DOE	DOE/Sandia find this description to be somewhat confusing due to mixed descriptions of multiple features and operations at the HWMU. Please revise to read: *A covered, open, bermed, concrete-lined area is located in the northeast corner of the HWMU. It is primarily used for the storage of nonhazardous waste (such as used oil) prior to shipment offsite for recycling. The area is also used to store packaging supplies. Storage of used oil is subject to compliance with 40 C.F.R. Part 279. A second covered, open, bermed, concrete-lined area is attached to the west side of Building 959. An empty drum crusher is located within that area. Only drums that meet the definition of empty under 40 C.F.R. § 261.7(b)(1) shall be crushed in the drum crusher.*		
271.	DOE 271	160	Permit Attachment 3, 3.4.1	DOE	DOE/Sandia note the Application includes descriptions of typical waste management practices as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. As noted in Comment No. 269, the storage locations for specific wastes are adjusted as needed; when water-reactive wastes are present; they are stored in the modular buildings. Not all ignitable wastes are stored in the modular buildings. It is not necessary to specify the length of the grounding rods for the modular buildings, because the rods are fully defined		

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					by their protective function. DOE/Sandia note that the restrictions on use of forklifts in Building 959 are limited to the duration of open container operations. The forklifts may be used safely for handling heavy containers at all other times. Please revise as follows: *Potential sources of ignition that may be present at the HWMU include welding activities, open flames, hot surfaces, frictional heat, radiant heat, sparks, and engines. Precautions and practices that shall be employed at the HWMU to prevent fires or explosive reactions of waste include:* *1. Water-reactive wastes shall be segregated from other wastes and stored in the modular storage buildings. The modular storage buildings shall have exterior signs indicating the presence of water-reactive wastes in the buildings.* *3. Water-reactive wastes may temporarily be managed in Building 959 after receipt and during repackaging activities. Individual containers shall be labeled and be kept apart from other wastes* *4. Forklifts shall not be used for waste movement in Building 959 during open container operations to minimize potential sources of ignition in the building.* *6. The modular storage buildings shall be grounded by a grounding rod and cable or equivalent method. They shall be equipped with a dry chemical fire suppression system to assure that water-reactive wastes shall not be exposed to water during fires or other incidents.*		
272.	DOE 272	162	Permit Attachment 3, 3.4.3	DOE	As noted in Comment No. 245, it is not necessary that loading and unloading areas be level. DOE/Sandia also note that forklifts or other equipment may be used to move heavy containers within the HWMU. Please revise to be consistent with Permit Attachment 2: *If loading and unloading operations occur outdoors, they shall be done in areas adjacent to hazardous waste management areas to minimize the distance that the waste must be moved. All loading and unloading areas shall be paved, and the asphalt or concrete or other pavement shall be maintained in good condition. Loading and unloading areas shall be free of overhead and other obstructions to visibility and operations. Loading and unloading activities typically take place on the south sides of Buildings 958 and 959 (Figure 3-4 of this Permit Attachment). Vehicles, forklifts, drum dollies, pallet jacks, and other tools used for the transport and management of wastes shall be used as*		

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					appropriate during loading and unloading operations. Small containers may be loaded or unloaded manually from waste-transport vehicles. A forklift, hydraulic lift, or other mechanical device may be used as needed to load or unload larger containers. In all cases, containers of waste shall be handled in a manner to prevent shifting or falling. Waste-handling equipment shall be maintained and operated in accordance with manufacturers' guidance.		
273.	DOE 273	162	Permit Attachment 3, 3.4.5	DOE	DOE/Sandia note the catchment pond does not provide secondary containment. Spills, fire-fighting water, and other releases of hazardous or mixed wastes or hazardous waste constituents to the pond are addressed in the Contingency Plan in Permit Attachment 12. The pond and discharges from it are subject to National Pollutant Discharge Elimination System (NPDES) requirements established under the Clean Water Act. Therefore, as discussed in Comment No. 2, it is not necessary to include requirements for routine operations of the catchment pond in this Permit. Please delete this section.		
274.	DOE 274	163	Permit Attachment 3, 3.4.7	DOE	DOE/Sandia note the Application includes descriptions of resources for emergency power as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. The resources are typical rather than prescriptive because they are updated and adjusted as needed to serve SNL facilities. Including a prescriptive requirement for a permanent power transformer is redundant. Please revise to read: *The Permittees shall provide emergency power as needed to protect human health and the environment in accordance with the requirements listed in Table 2-1 in Permit Attachment 2.*		
275.	DOE 275	163	Permit Attachment 3, 3.4.8	DOE	The PPE described in the Application illustrates ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. These illustrations should not be included in the Permit as requirements, because they are not applicable in all situations. Please revise to read: *Facility personnel at Permitted Unit shall be required to use appropriate personal protective equipment (PPE) to protect themselves from hazards.*		
276.	DOE 276	163	Permit Attachment 3, 3.5	DOE	DOE/Sandia note the storage capacities in the draft Permit are not consistent with current permitted capacities as specified in Permit NM5890110518-1 and in the Application. Please see Comment No. 6 for further discussion. The Application includes descriptions of typical operations as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. The operations (including configuration of stored containers) are typical rather than prescriptive		

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					because of the wide variety of hazardous and mixed wastes (and the variety of containers) managed at the HWMU. The requirements for configuration of containers are fully specified through reference to compliance with 40 CFR 264 Subparts B, C, and I. Including prescriptive requirements for stacking various containers is redundant, and may lead to operations that are less protective of worker safety. Please revise to read: *Requirements regarding the management of hazardous waste storage containers, information on container handling, the condition of containers, aisle space, compatibility of waste with containers, and storage configuration are contained in Permit Attachment 2.* *In Building 958, if containers are stacked, they shall be in a stable configuration that does not exceed the load-bearing capacity of the reinforced concrete or the grating.* *In Building 959, containers shall be stored in the holding cells. If containers are stacked, they will be in a stable configuration that does not exceed the load- bearing capacity of the reinforced concrete or the grating and conforms to the same limitations as for Building 958.* *In Buildings 958B and 958C, if containers are stacked, they will be in a stable configuration that does not exceed the load-bearing capacity of the floor and conforms to the same limitations as for Building 958.*		
277.	DOE 277	155	Permit Attachment 3, 3.0	DOE	The list of figures in Permit Attachment 3, Section 3.0 does not match the actual figures. Please revise to read: *Figures specific to the HWMU are provided at the end of this Permit Attachment and include the following.* *1. Figure 3-1: Hazardous Waste Management Unit Layout, Traffic Routes and Controls* *2. Figure 3-2: Hazardous Waste Packaging Building (Building 959), Floor Plan* *3. Figure 3-3: Hazardous Waste Storage Building (Building 958), Floor Plan* *4. Figure 3-4: Hazardous Waste Management Unit Access Control Features* *5. Figure 3-5: Hazardous Waste Management Unit Drainage Control Features* *6. Figure 3-6: Hazardous Waste Management Unit Location of Fire Hydrants*		

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278.	DOE 278	157	Permit Attachment 3, 3.3.3	DOE	Access controls are shown on Figure 3-4. Please revise accordingly.		
279.	DOE 279	156	Permit Attachment 3, 3.3	DOE	The last photograph (taken on September 2, 1999) was mistakenly included in the electronic files provided to NMED by DOE/Sandia. It has been superseded by the other more recent photographs. Please delete the photograph and revise to read: *Appendix 3-1 of this Permit Attachment contains four photographs of the HWMU.*		
280.	DOE 280	157	Permit Attachment 3, 3.3.4	DOE	DOE/Sandia find this description to be somewhat confusing due to mixed descriptions of multiple features of the building. Also, the concrete floor, including the base and sides of each recessed area, is sufficiently impervious to meet the requirements of 40 CFR 264.175(b)(1). Please see Comment No. 259 for additional discussion, and revise to read: *The Hazardous Waste Packaging Building is the easternmost hazardous waste management area and is an 1,800-square-foot (ft2) pre-cast concrete building with an eave height of 12 feet (ft) (Figures 3-1 and 3-2 of this Permit Attachment and Appendix 3-1 photograph). Eight waste-holding cells with half-height concrete masonry walls and a waste packaging area are located in the building. The packaging area contains a fume hood and flexible ventilation hoses attached to a local negative-pressure ventilation system that exhausts to the exterior of the building. The building floor and the walls in the cells are painted. The entire floor of the building and the bottom seven inches of wall surface in each recessed area shall be maintained as needed to be free from cracks and gaps. Figures 3-2 and 3-3 of this Permit Attachment are the floor plans of Buildings 959 and 958, respectively.* *All the cells and the packaging area have recessed floors that are constructed of reinforced concrete and are covered with metal grating. The load-bearing capacities of the metal grating and the reinforced concrete floor are 450 and 2,000 pounds per ft2, respectively. Waste containers are placed on the metal grating or on shelves over the grating. The individual shelves are covered with removable chemical-resistant grating, and they shall have edges to hold the containers in place. The shelves are not designed to provide secondary containment. The recessed areas provide secondary containment.*		
281.	DOE 281	After 163	Permit Attachment 3	DOE	The figures and photographs do not reflect the most current information available. DOE//Sandia will provide updated figures and photographs under separate cover.		
282.	DOE 282	165	Permit Attachment 4, 4.0	DOE	DOE/Sandia note this description of the waste treated at the TTU does not include all the constituents or applicable waste codes. It does not match existing Permit NM5890110518-2, other Sections of the draft Permit, the Application, or ongoing		

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					operations. Please see Comment No. 420 for additional discussion of the potentially corrosive characteristic of some of the SASN waste treated at the TTU. DOE/Sandia are responsible for characterizing the treatment residues and the collected precipitation in accordance with the WAP and the requirements of 40 CFR 261. DOE/Sandia are responsible for managing hazardous wastes in accordance with the requirements of 40 CFR 262, and are responsible for arranging further off-site management that is compliant with all applicable requirements of 40 CFR 260-270, as discussed in Comment No. 2. Additionally, management of treatment residues is addressed elsewhere in the Permit and the last sentence is not fully consistent with the requirements in this section. Please revise to read: *The TTU shall only be used for thermal treatment of reactive wastes generated by Facility operations in Building 6715; these wastes exhibit the hazardous waste characteristics of reactivity (D003), ignitability (D001), and toxicity (D011); potentially exhibit the corrosivity (D002) hazardous waste characteristic; and may contain spent solvents (F003 and F005).*		
283.	DOE 283	166	Permit Attachment 4, 4.1.1.1	DOE	The Application includes information about transportation of residues as examples of vehicles that might be entering or exiting the Building 6715 compound; these are examples only. Management of residues and collected precipitation is the responsibility of the Permittees, as discussed in Comment No. 2, and it is addressed in other parts of the Permit. Please delete the last two sentences in this section, as they are not related to the description of traffic in this section.		
284.	DOE 284	167	Permit Attachment 4, 4.3	DOE	The Application includes information about the environmental setting of the TTU in accordance with the requirements of 40 CFR 264 Subpart X, including information about ambient air quality. The ambient air monitoring activities at SNL are not subject to the requirements of this Permit. Please delete the last two sentences in the first paragraph of this section.		
285.	DOE 285	169	Permit Attachment 4, 4.4	DOE	The Application includes a description of the current burner configuration to illustrate TTU operations. DOE/Sandia note the burners may need minor adjustments to provide the most effective waste treatment. Please revise to read: *An enclosure on the east side of the cage houses three propane burners, which shall be remotely activated from inside Building 6715 during treatment operations. The burners shall be positioned to heat the pan and ignite the wastes in the burn pan and the flammable vapors above the pan.*		

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286.	DOE 286	169	Permit Attachment 4, 4.4	DOE	DOE/Sandia note this condition is not consistent with Permit NM5890110518-2 or with the description of operations in the Application. Liquid wastes are pumped to the TTU to the extent possible to minimize personnel handling of the explosive wastes. Solid items that are treated at the TTU are loaded manually; however, they are kept saturated or submerged because the explosive sensitivity is significantly reduced by saturating the explosive with acetone or water. To ensure the solid items are fully saturated, there is generally free liquid in the waste containers; this liquid is manually loaded into the burn pan. Specifying that all liquids shall be transferred through the tubing will lead to operations that are less protective of worker safety by prohibiting full saturation of solid items. Please revise to read: *Liquid wastes to be treated may be transferred from Building 6715 to the TTU through flexible transfer hoses utilizing a remotely operated peristaltic pump. The hoses shall be contained inside a metal channel to provide secondary containment. The flexible hoses and channel terminate approximately 5 feet from the burn pan and metal tubing shall be used to transfer the waste the final distance into the burn pan. Solid items to be treated in the TTU (e.g., wipes, rags, filters, and small pieces of combustible or inert test debris) saturated or submerged in water and/or acetone shall be manually loaded into the burn pan.*		
287.	DOE 287	169	Permit Attachment 4, 4.4	DOE	Precipitation that accumulates on the pad (because the TTU is located outside) drains in to the catch tank, as described here. Liquids should not be released from the pan during treatment, loading, or unloading. If liquid wastes were released into the secondary containment area, they would be collected and transferred to the burn pan for treatment of explosives. Please revise to read: *Any liquids released during waste transfer or treatment will accumulate in the secondary containment. The collected liquids shall be transferred to the burn pan for treatment.*		
288.	DOE 288	170	Permit Attachment 4, 4.4	DOE	DOE/Sandia test the water in the tank to check for the presence of SASN residues. If residues are present, the water may or may not exhibit the hazardous waste characteristic of toxicity due to the presence of silver. The presence of residues means the water must be treated in the same manner as other SASN-containing wastes; it is transferred to the TTU for treatment of the SASN. Please revise to read: *A circular tank located north of the Unit and south of building 6715 is primarily utilized as a process tank for collecting non-hazardous water waste from test operations. The contents of this tank are sampled to check for the presence of explosive SASN residues. If such residues are detected in this tank, the contents of this tank shall be treated at the TTU.*		

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289.	DOE 289	170	Permit Attachment 4, 4.4	DOE	As described in the Application, the Unit is not operated continuously during treatment operations. Please revise as follows: *Treatment operations occur periodically at the TTU and typically involve intermittent burns during one to three days.*		
290.	DOE 290	170	Permit Attachment 4, 4.5.1	DOE	Items 1 and 3 [Section 4.5.1] are not consistent with Permit NM5890110518-2 or with the information provided in the Application. The quantities and composition of the non-explosive constituents may vary according to the waste-generating activities; thus the waste is best described according to the net explosive weight. DOE/Sandia generate up to 86 kg of waste contaminated with less than 1.092 kg of explosives. All the wastes must be treated in the TTU as soon as possible to minimize hazards to Unit personnel and the environment. The maximum quantities in Item 3 are applicable to each individual treatment event, not to the entire calendar year. The 1200 gallon limit is unnecessary. Please revise to read: *1. The maximum net explosive weight of explosives treated during any treatment operation shall not exceed 2.4 pounds (1.092 kilograms).* *3. The maximum amount of waste (solid and liquid combined) that can be treated per treatment operation shall not exceed 190 pounds (86 kilograms).*		
291.	DOE 291	171	Permit Attachment 4, 4.5.2	DOE	The lid does not need to be raised to ignite the burners. However, the lid does need to be raised during treatment. The need to keep the lid closed as much as possible is addressed in the last sentence of the previous paragraph. Please revise to read: *The burn pan lid shall be raised during treatment.*		
292.	DOE 292	171	Permit Attachment 4, 4.5.2	DOE	The burners are operated for at least 30 minutes after each treatment instead of once at the end of the day; this provides additional protection for workers and the environment. At the completion of this additional post-treatment burn, the lid is immediately lowered. Operating personnel do not check for the absence of liquids to determine treatment completion because this inspection cannot be performed remotely with the facility cameras. Inspecting for liquids in the burn pan would require close proximity of the facility operators. Due to the elevated temperature of the burn pan and its surroundings, personnel inspection cannot be performed safely until the pan has cooled. Please revise to read:		

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					The Permittees shall use visual and audible evidence to determine if treatment has been completed. The cessation of audible popping noises and visual flashes of light and puffs of smoke indicate complete deactivation of the reactive waste. Evidence of the complete combustion of ignitable liquids includes the absence of large yellow flames and the absence of black smoke from the burn pan. To provide additional assurance of complete combustion, the Permittees shall operate the burners for at least 30 minutes after the last visual or audible evidence of waste treatment to ensure that all the explosives are deactivated and the ignitable liquids are combusted. After treatment and the additional post-treatment burn, the Permittees shall turn off the propane burners and immediately lower the burn pan lid to preclude wind dispersal of treatment residues and water infiltration into the burn pan during the cool-down period.		
293.	DOE 293	171	Permit Attachment 4, 4.5.2	DOE	Based on operating experience, DOE/Sandia have determined four hours is the minimum cool-down period to allow personnel to safely approach the burn pan. The post-treatment inspection generally occurs within 24 hours, but it would be delayed if the treatment event preceded a non-work day. Please revise to read: *The cool-down period varies, but shall be at least 4 hours. After the cool-down period, the Permittees shall perform a post-treatment inspection within one business day to check for any untreated waste in the burn pan and contamination or "kick-out" of untreated waste on the steel-lined concrete pad.*		
294.	DOE 294	171	Permit Attachment 4, 4.5.2	DOE	DOE/Sandia note treatment may not be possible on the day of kick-out clean up due to restrictions of the Permit, (e.g. weather conditions, time of day). This Permit Condition includes two different instructions for the timing of the treatment. As an alternative to returning the cleaned up kick-out wastes to the burn pan, operating personnel can accumulate the wastes (saturated with water and/or acetone) in a satellite accumulation area inside Building 6715 until treatment in compliance with the Permit is possible. Accumulating the wastes inside the building will further minimize the potential for wind dispersal. Please revise to read: *If any kick-out is observed, the Permittees shall wet it with water and wipe it up with wet paper wipes. The wet paper wipes shall either be returned to the burn pan for treatment later that same day or returned to Building 6715 until treatment in compliance with the Permit is possible. Untreated waste remaining in the pan and kick-out cleanup wastes shall be treated as soon as possible subject to the conditions of this Permit.*		

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295.	DOE 295	172	Permit Attachment 4, 4.5.2	DOE	This condition [last paragraph in Section 4.5.2] is not consistent with Permit NM5890110518-2. During normal TTU operations and maintenance, personnel frequently perform a wide variety of routine activities that involve contact with parts of the Unit. Residual untreated explosive material is not routinely present during normal operations, and therefore would not cause a hazard to workers performing most of the frequent and routine activities that involve direct contact with the burn cage, equipment, pad, or surrounding area. Thus the additional review is not necessary in all cases. DOE/Sandia note that periodic inspections using the portable propane burner seldom detect any unreacted explosive kick-out. Depending on the TTU operations, the post-treatment inspection may be performed on a day preceding a non-work day, or the weather may not be suitable for use of the portable propane burner within 24 hours. During the reviews, DOE/Sandia have observed that detecting small particles with a propane flame effectively decomposes these small particles (as evidenced by small popping sounds, sparkles, and small puffs of smoke), eliminating the reactive characteristic of the particles. The residue from this review and decomposition process can be safely managed along with the treatment residue from the burn pan. Please revise to read: *Following the post-treatment inspection and removal of treatment residues in cases where kick-out was observed, the Permittees may perform an additional review within one business day (subject to weather restrictions listed in Permit Part 4 and this Attachment) by checking surfaces of the affected area with a portable propane burner to determine whether small quantities of additional kick-out (small particles that are not visually observed during the post-treatment inspections) are present. Removable kick-out identified during this review shall be collected as described above and treated in the burn pan unless the kick-out particles are effectively decomposed (as evidenced by small popping sounds, sparkles, and small puffs of smoke). Decomposed kick-out may be managed along with the treatment residue from the burn pan.*		
296.	DOE 296	172	Permit Attachment 4, 4.5.3	DOE	The operating hours and upper limit in allowable wind speed are not consistent with the current Permit, and it is not clear from the draft Permit that either of these restrictions applies only to treatment operations at the TTU. In order to protect workers and the environment, Unit personnel should be able to adjust the operations as needed in response to the weather, and to complete treatment in a timely manner if it has started.		

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					During the past four years, DOE/Sandia have demonstrated that the TTU can be operated at wind speeds up to 20 miles per hour in compliance with the Permit conditions, and in a manner that is protective of human health and the environment. The windscreens on the south and north sides of the TTU and the burner housing on the east side of the cage, coupled with the depth and relatively small capacity of the burn pan and the close proximity of the burners provide adequate combustion at ambient wind speeds up to 20 mph. The windscreens and burner housing extend more than 20 inches above the top of the burn pan and burners. The windscreens are attached at the top and have openings at the bottom to provide protection from direct winds while allowing airflow for combustion. The positive pressure and flow rate of the burners provide a sturdy flame, and the burners are located near the burn pan to maximize treatment effectiveness. Following treatment, the burn pan lid is lowered to provide containment and the ash is removed from the pan in accordance with the Permit. Please revise as follows: *To minimize exposure of people to toxic or hazardous air emissions, the TTU open burning activities shall be conducted only:* *1. Between 7 AM and 7 PM. Operations may continue beyond 7 PM only in case of an emergency or if necessary to complete treatment that is underway.* *2. When the wind speed at the TTU is less than or equal to 20 miles per hour (32 km/hour).*		
297.	DOE 297	172	Permit Attachment 4, 4.5.3	DOE	As discussed in Comment No. 294, dust or sandstorms caused by blowing wind are addressed by the general restrictions on wind speed, making inclusion of sandstorms in the description of threatening weather redundant. DOE/Sandia note sandstorms that are "dust devils" are sporadic and unpredictable. Due to their rapid formation and cessation, the Unit operator cannot effectively cease treatment operations for dust devils. Please revise item 3 to read: *3. When threatening weather is less than 10 miles (16 km) of the TTU. Threatening weather is defined as winds in excess of 35 miles per hour (56 km/hr); tornadoes; electrical storms with or without precipitation of any type; snow storms with a visibility of less than 2000 feet; rain with accumulations greater than 0.3 inch per hour; or any hail, sleet, and/or ice storms.*		

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298.	DOE 298	172	Permit Attachment 4, 4.5.4	DOE	As discussed in Comment No. 292, this Permit condition is not consistent with current operations, in which DOE/Sandia operate the burners for at least 30 minutes at the end of each treatment, rather than once at the end of the day to provide additional protection for workers and the environment. The criteria for determining when untreated waste is no longer present should be clarified. Additionally, this Permit condition should not require non-compliance with the conditions restricting operation in the event of weather, daylight, or other factors. Please revise to read: *Waste treatment operations shall be monitored for evidence of untreated waste including audible evidence such as popping sounds and visual evidence such as flashes of light, puffs of smoke, and large yellow flames. When the wastes have been treated as indicated by no visual or audible evidence of unreacted waste, the burners will be operated for a minimum of 30 minutes to provide further assurance of treatment completion, unless weather or other conditions do not permit continued operation.*		
299.	DOE 299	173	Permit Attachment 4, 4.5.5	DOE	DOE/Sandia note any soil is incidental, and the water can be characterized in accordance with Permit Attachment 9 and this Attachment without sampling and analysis. This is not consistent with Permit Part 4, which requires the Permittees to make a waste determination in accordance with 40 CFR 262.11, and manage the water appropriately. Please revise to read: Because the TTU is located outside, the steel-lined concrete pad periodically collects water from precipitation events, and the water drains through a filter into a catch tank. The water typically contains incidental dust and soil that has blown on to the pad and may also contain elemental silver if the pad is contaminated with kick out that was not removed. The water shall be characterized in accordance with Permit Attachment 9 and shall be managed appropriately.		
300.	DOE 300	173	Permit Attachment 4, 4.5.5	DOE	As discussed in Comment No. 293, DOE/Sandia have determined four hours is the minimum cool-down period to allow personnel to safely approach the burn pan. The post-treatment inspection generally occurs within 24 hours, but it would be delayed if the treatment preceded a non-work day. Additionally, this condition should indicate that cleaning is required only if contamination is identified. Please revise to read: *This assessment for the presence of contamination and the cleansing of the burn pad and surrounding areas shall be performed within one business day of the termination of treatment operations. If contamination is identified, the Permittees shall wet contaminated areas with water and decontaminate them with wet paper wipes as described below in Section 4.8.3 of this Permit Attachment. The wash*		

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					water shall be managed in accordance with Permit Condition 4.5.2; it shall be treated if known or suspected to contain unreacted SASN. Otherwise, the water shall be characterized in accordance with Permit Attachment 9 and shall be managed appropriately.		
301.	DOE 301	173	Permit Attachment 4, 4.5.5	DOE	As generators of the water in the catch tank, DOE/Sandia are responsible for compliance with the requirements of 40 CFR 261, 262, and some parts of 40 CFR 265, as discussed in Comment No. 2. These include (but are not limited to) determining whether the water is a solid waste and characterizing it as needed to determine appropriate management requirements as specified in Permit Part 4. DOE/Sandia have collected water in the catch tank during the past four years of TTU operations. It has been sampled and analyzed, and meets the City of Albuquerque wastewater discharge limits. The requirement to sample the water within 24 hours is not consistent with the WAP (Permit Attachment 9). Please revise to read: *The accumulated wash water and/or precipitation or other wastewater in the catch tank shall be characterized in accordance with Permit Attachment 9 and shall be managed appropriately.*		
302.	DOE 302	173	Permit Attachment 4, 4.5.6.1	DOE	Personnel safety, weather, darkness, power failures, and equipment failures are some of the more common conditions that will limit DOE/Sandia's ability to follow this requirement to treat all wastes within 8 hours in compliance with Permit operating requirements. These must be considered, and this condition must be consistent with Section 4.6.4 of this Permit Attachment. Please revise to read: *Wastes shall not be stored at the TTU prior to treatment, and all wastes shall be treated within eight (8) hours after placement into the TTU burn pan, unless precluded by weather, darkness, power failure, or other conditions that do not permit operation. If treatment cannot be completed within eight (8) hours, the Permittees shall consider personnel safety and existing conditions in determining whether to unload the burn pan or allow the waste to remain in the burn pan with the lid closed until normal operations can resume. If waste is to remain in the burn pan, the operator shall ensure the waste is saturated with water and shall close the lid. The Permittees shall continue treatment after resumption of normal operating conditions. Prior to igniting the burners, the operator shall ensure the waste is saturated with water.*		
303.	DOE 303	173	Permit Attachment 4, 4.5.6.1	DOE	This condition [last sentence, 2nd paragraph of this section] should be clarified to reflect that small detonations may occur during normal operations at the TTU; such detonations would have no effect outside the burn cage. Please revise to read:		

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					No other materials or wastes that would produce undesirable reactions (e.g., toxic fumes, ejected fragments, or structural damage) at the TTU shall be located or treated at the TTU.		
304.	DOE 304	174	Permit Attachment 4, 4.5.7.1	DOE	DOE/Sandia use an elevated flashing red light to indicate TTU treatment operations; this is more visible than a sign on the gate. The TTU access gates must remain open during manual waste transfer operations. The gates in the fence surrounding the Building 6715 compound are closed and locked. Please revise to read: *A flashing red light shall be on during treatment operations to indicate hazardous operations are in progress. The TTU access gates shall be closed and locked except when Unit personnel need to enter. Access gates through the fence surrounding the Building 6715 compound shall be closed and locked during TTU waste transfer and treatment operations.*		
305.	DOE 305	174	Permit Attachment 4, 4.5.7.2	DOE	DOE/Sandia note the items may be submerged in water and/or acetone to maintain the explosive-contaminated solids in a safe condition. The water is poured into the burn pan and treated. Please see Comment No. 286 for additional discussion. Please revise to read: *Solid items, saturated or submerged in liquid (water and/or acetone), shall be loaded manually into the burn pan, with the liquid.*		
306.	DOE 306	174	Permit Attachment 4, 4.5.7.2	DOE	The operator controls the burner system by keeping the key. Please revise to read: *The same operator who manually loads the TTU burn pan shall control the gas burner system key.*		
307.	DOE 307	174	Permit Attachment 4, 4.5.7.3	DOE	As noted in Section 4.5.7.2, liquids may be included with the solid items that are manually placed in the burn pan. Please revise to read: *Liquids shall be transferred to the burn pan through the waste transfer pump and lines or carried with solid items and placed in the burn pan.*		
308.	DOE 308	174	Permit Attachment 4, 4.5.8	DOE	DOE/Sandia note the portable propane burner provides valuable information with respect to treatment effectiveness. Additionally, 40 CFR 270.14(b)(9) addresses contents of permit applications and is not directly relevant to the requirements of 40 CFR 264.17 that the Permittees are required to meet in operating the TTU. Please delete the reference to 40 CFR 270.14 and add the following item: *3. Evaluation of treatment effectiveness and kickout inspection: Permittees may periodically review TTU surfaces with portable propane burner to evaluate treatment effectiveness. Permittees may also use the portable propane burner to inspect for small amounts of kickout that are visually undetectable.*		

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309.	DOE 309	175	Permit Attachment 4, 4.6.3	DOE	DOE/Sandia note this section of the draft Permit addresses loading and unloading; it should not contain requirements for management of treatment residues and wastewater. Please revise to read: *Unloading activities include removal of treatment residue from the burn pan and contaminated water from the catch tank followed by containerizing the treatment residue and waste water. Vehicles shall be loaded on the paved area southeast of Building 6715 as shown in Figure 4-3 of this Permit Attachment. The surface where loading takes place shall be level and the pavement shall be maintained in good condition. There shall also be sufficient room for vehicles used to transport wastes to safely maneuver in the loading area.*		
310.	DOE 310	176	Permit Attachment 4, 4.6.5	DOE	This condition [Item 5] is not consistent with Section 4.5.8 of the draft Permit or with current Permit NM5890110518-2. Please revise to: *5. In order to ensure that residual untreated reactive hazardous waste is not present to cause a hazard to workers, the Permittees shall check the surfaces of the burn cage and the pad with a portable propane burner before maintenance and repair activities that involve hot work or friction (such as welding, cutting, or grinding).*		
311.	DOE 311	176	Permit Attachment 4, 4.6.5	DOE	DOE/Sandia note the buzzer is adequate for alerting personnel to treatment operations; however, it is not quite as loud as the loudest detonations observed during treatment operations over the past four years. Please revise as follows to clarify: *In addition to the hazards associated with equipment operation and treatment of explosives, there are three sources of noise during treatment:* *3. Warning bell/buzzer: The warning bell/buzzer is designed to alert Unit personnel to treatment operations. The bell/buzzer sound is louder than that of the propane burners and comparable with the detonation of SASN crystals.*		
312.	DOE 312	179	Permit Attachment 4, Table 4.1	DOE	DOE/Sandia note that not all the explosive is applied during the tests; the quantity applied depends on the test, and there is always some waste. Please revise footnote d in Table 4-1 to read: *d. In normal operations, most of the explosive would be applied to the test article, and residual explosive would remain in the liquid to be treated at the TTU. Some explosive would also be present on the solid items treated.*		
313.	DOE 313	179	Permit Attachment 4, 4.7.3	DOE	Liquids may be present with the solid items, and should be noted in this description for clarity. Please revise to read: *At the TTU, eight situations present the potential for the release of hazardous waste or hazardous constituents to the*		

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					environment. Each situation is addressed below: *<u>1. Transfer of liquid wastes to the TTU burn pan</u>* *Liquid wastes shall be transferred to the Unit through enclosed tubing equipped with secondary containment or manually placed in the burn pan with the solid items described below. No more than 20.8 gallons of liquid wastes shall be present in the Unit at any time, limiting the maximum release to 20.8 gallons. Spills on the ground or on the TTU pad will be wetted with water using spray hoses. When saturated with water, the reactive hazardous waste is considered stable by the Permittees. The spilled, wet waste shall then be wiped or scooped up and deposited in the burn pan for treatment. Similarly, contaminated soils shall be wetted, excavated, and placed in the TTU burn pan for treatment.* *<u>2. Transfer of solid items to the TTU open burn pan</u>* *Solid items such as explosive-contaminated paper and filters shall be containerized and carried to the TTU burn pan by personnel trained and qualified to manage the waste. The containerized solids may contain free liquids to ensure the solids are fully saturated. Solids that are spilled during transfer shall be handled in the same manner as described above for liquids.*		
314.	DOE 314	180	Permit Attachment 4, 4.7.3	DOE	Treatment and removal of residue from the burn pan may be delayed, as noted in previous comments, because of weather restrictions, and because the activities that generate the explosive wastes occur over several days, with intermittent TTU operations as needed. Operating personnel do not remove residues until the end of the test; this maximizes personnel safety and prevents unnecessary delays in TTU operation. The reference to Section 4.5.1 is incorrect; the reference should be to Section 4.5.5. DOE/Sandia note treatment may not be possible on the day of kick-out clean up due to restrictions in the Permit, (e.g. weather conditions, time of day). As an alternative to returning the cleaned up kick-out wastes to the burn pan, operating personnel can accumulate the wastes in a satellite accumulation area inside Building 6715 until treatment in compliance with the Permit is possible. Accumulating the wastes inside the building will further minimize the potential for wind dispersal. Please revise to read: *At the TTU, eight situations present the potential for the*		

Comment No.	Index No.	Page No.	Section No.	Commentator's Name	Summary of Comment	NMED Response	Modification Made to Permit Y/N
					release of hazardous waste or hazardous constituents to the environment. Each situation is addressed below: *<u>3. Run-off of potentially contaminated precipitation</u>* *Once waste is transferred to the burn pan, treatment shall take place immediately in accordance with the conditions of this Permit, unless weather or other conditions preclude or delay treatment. In the unlikely event of spillage from the burn pan, spilled waste shall be contained on the steel-lined concrete pad. Any precipitation or spillage in the steel-lined concrete pad drains through a filter into the catch tank. Treatment residues shall be removed from the burn pan within one business day, unless another burn is scheduled within one business day, or removal is precluded or delayed due to weather or unforeseeable conditions, including emergencies.* *<u>4. Discharge of potentially contaminated precipitation from the catch tank</u>* *Water collected in the catch tank is managed as described in Section 4.5.5 of this Permit Attachment.* *<u>7. Kick- out of untreated waste during treatment</u>* *Kick-out (described in Section 4.5.2) may occur, and has been occasionally observed on the steel-lined concrete pad. Kick-out on the pad shall be identified during the post-treatment inspection, wetted, wiped up, and placed back into the pan for treatment or returned to the adjacent building 6715 until treatment in compliance with the Permit is possible. Untreated waste remaining in the pan and kick-out cleanup wastes shall be treated as soon as possible subject to the conditions of this Permit. Kick-out on the berm shall be handled in the same manner as described above for spilled liquids.* *<u>8. Emission of particulates following treatment</u>* *Treatment residues shall be removed from the burn pan within one business day unless another burn is scheduled within one business day or weather or other conditions preclude or delay removal. The burn pan shall be covered between treatment operations.*		
315.	DOE 315	182	Permit Attachment 4, Table 4-2	DOE	Migration to groundwater and transformation/degradation are not important because they do not exist at the TTU. Thus they should not be considered at all. Please revise Table 4-2 to read: *Fate and Transport Mechanism: Migration to groundwater* *Degree of Importance: None*		

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					Fate and Transport Mechanism: Transformation/degradation *Degree of Importance: None*		
316.	DOE 316	183	Permit Attachment 4, Table 4-3	DOE	Building 6536 has been demolished, and Building 6539 has additional full-time occupants. Please delete the row for Building 6536, delete footnotes c and d, and revise Table 4-3 as follows: Building: 6539 Number of Full-time Occupants: 10		
317.	DOE 317	184	Permit Attachment 4, 4.9.2	DOE	Building 6539 is complete and has full-time occupants. It is now the building nearest the TTU. Please revise item 6 to read: *6. The nearest continuously occupied building is 470 feet away from the TTU and upwind most of the time (Table 4-3).*		
318.	DOE 318	165	Permit Attachment 4, 4.0	DOE	DOE/Sandia note the area within fence surrounding the Building 6715 complex is not relevant to the Permitted Unit. The area within the fence surrounding the TTU is 8,140 square feet, and the TTU itself occupies 196 square feet. Please revise accordingly.		
319.	DOE 319	166	Permit Attachment 4, 4.1.1.1	DOE	This traffic information applies to the Building 6715 compound, rather than the TTU. Please revise to read: *Fewer than 15 vehicles typically enter or exit the Building 6715 compound per week. Fewer than 15 vehicles enter or exit the TTU per year.*		
320.	DOE 320	166	Permit Attachment 4, 4.1.1.2	DOE	The entire complex is paved. Please revise accordingly.		
321.	DOE 321	175	Permit Attachment 4, 4.6.2	DOE	There is no Section 2.1.2.4; the correct reference is Section 2.1.3.1. Please revise accordingly.		
322.	DOE 322	166 - 189	Permit Attachment 4	DOE	The following acronyms appear in the text of this Permit Attachment but are not defined in the list of acronyms at the beginning of the draft Permit. Please include them in the Acronym List: A/BCAQCB - Albuquerque/Bernalillo County Air Quality Control Board COPC - chemical of potential concern		
323.	DOE 323	After 188	Permit Attachment 4	DOE	The figures and photographs do not reflect the most current information provided in the Application. DOE/Sandia will provide updated figures and photographs under separate cover.		
324.	DOE 324	190 - 208	Permit Attachment 5	DOE	DOE/Sandia note several instances that mention mixed wastes in requirements that are applicable to both hazardous and mixed wastes (e.g., Section 5.3). Please see Comment No. 1 for additional discussion and revise throughout this Attachment. DOE/Sandia also note numerous parts of this Permit Attachment that address hazardous constituents; these should address hazardous waste constituents instead		

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					for consistency with the applicable regulations (e.g., Section 5.7). Please see Comment No. 3 for additional discussion and revise throughout this Attachment.		
325.	DOE 325	192	Permit Attachment 5, 5.3	DOE	The Application includes numerous descriptions of items such as spill pallets and spill pans that illustrate ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. DOE/Sandia note that these items are available from multiple vendors, and they come in sizes, shapes, and materials for various applications, including but not limited to applications where it is necessary for the units to be impervious to corrosives, solvents, and other liquids. Thus, the description represents a typical design rather than a prescriptive specification because the units are selected for the specific application. The prescriptive requirements regarding design and features of spill pallets are unnecessary because the Permittees are required to provide adequate secondary containment as required by 40 CFR 264.175(b)(1-4). Please revise to read: *In each waste management area (except where noted), containers holding liquid hazardous or mixed wastes shall be stored on portable spill pallets or pans. These are commercially available units consisting of a tub made of a heavy-duty inert material such as polyethylene or polypropylene with an inert grating cover. The pallets come in various sizes and capacities designed for use with 55-gallon drums or other standard containers and shall provide adequate secondary containment as required by 40 CFR 264.175(b)(1-3). The containers shall be stored in a stable configuration; the weight shall not exceed the grating capacity.*		
326.	DOE 326	192	Permit Attachment 5, 5.3	DOE	DOE/Sandia note this requirement is unnecessarily prescriptive. In most cases, containers of hazardous or mixed wastes or self-contained hazardous or mixed waste items are stored inside transportainers, unless they are too large. However, such storage is not required. The wastes are stored in compliance with 40 CFR 264 Subpart I, and adequate secondary containment is provided for containers of liquids that are stored in the outdoor area. Please see Comment No. 324 and Comment No. 1 regarding limitations on management of hazardous and mixed wastes. DOE/Sandia note 40 CFR 270.14 is cited; however, this provision addresses contents of permit applications and is not directly relevant to the requirements of 40 CFR 264 that the Permittees are required to meet in operating the RMWMU. Please revise to read: *Hazardous and mixed wastes are typically stored inside one of the buildings or inside transportainers in the outdoor storage area. Mixed wastes may be stored outside due to large size, large quantity, and lack of available space in the*		

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					buildings or transportainers, or other reason. Mixed or hazardous wastes that are stored outside shall meet the requirements of 40 CFR 264 Subpart I.		
327.	DOE 327	192	Permit Attachment 5, 5.3.1	DOE	This information is not correct and it is inconsistent with the rest of the building description in this paragraph. Please delete the 9th and 10th sentences in the 1st paragraph.		
328.	DOE 328	193	Permit Attachment 5, 5.3.1	DOE	There is no direct access from the office area to either bay. Please revise to read: *Building 6920 consists of two bays (north and south) that are isolated from each other by a wall, with an interior airlock and an office area near the west end of the building.*		
329.	DOE 329	193	Permit Attachment 5, 5.3.1	DOE	Please revise to provide the correct number of doors. There are six exterior personnel doors and four cargo entrances to the building, as well as separate entrances to the exterior mechanical and electrical rooms. The personnel doors provide access to the North and South Bays and to all sides of the building but the south side. There is a cargo entrance (i.e., roll-up door) at each end of each bay. Rollup doors enclose the airlocks on the south bay.		
330.	DOE 330	193	Permit Attachment 5, 5.3.2	DOE	This storage capacity is not consistent with Part A of the Application approved by NMED on June 21, 2002. Neither the storage nor the types of treatment are consistent with Part A or Part B of the current Application, as discussed in Comment No. 6. Please revise to read: *The storage capacity of the existing north bay shall be limited to 6000 gallons of waste. Thermal deactivation shall not be performed in the north bay; all other RMWMU treatment is permitted.*		
331.	DOE 331	193	Permit Attachment 5, 5.3.2	DOE	Not all the sumps in the north bay are covered with grating, and they are not used to provide secondary containment. DOE/Sandia note that 40 CFR 264.175(b)(1) requires that the base underlying the containers be free of cracks or gaps and be sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed; this requirement is fully satisfied through use of spill pallets and pans. The floor and walls in the north bay are painted, but sealing the concrete floor, sumps, and walls with a chemical-resistant epoxy is not required for compliance with the regulations or for protection of human health or the environment. Please revise to read: *The floor in the north bay slopes from the doorways toward one or more shallow (6-in.-deep) blind sumps, some of which are covered with grating. Containers of liquid hazardous and mixed wastes shall be stored on portable spill pallets or pans. The floors and walls in the waste management areas of Building 6920 are painted. The floors shall be maintained as needed to be free from cracks and gaps.*		
332.	DOE 332	193	Permit	DOE	DOE/Sandia note the enclosures and exhaust systems are		

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			Attachment 5, 5.3.2		designed and operated to address radiological constituents. In addition, they serve to control particulate hazardous waste constituents. Prescriptive requirements in the draft Permit regarding the enclosures and exhaust systems may limit DOE/Sandia's ability to protect Unit workers from physical or radiological hazards associated with repackaging or treating mixed wastes. Please revise to read: *The RMWMU north bay includes two enclosed areas (shown in Figure 5-2 of this Permit Attachment) that are equipped with a negative-pressure exhaust system. The exhaust passes through a high-efficiency particulate air (HEPA) filter train before being released to the environment through an exhaust stack. The filters remove particulates entrained in the airflow.*		
333.	DOE 333	193	Permit Attachment 5, 5.3.3	DOE	As noted in Section 5.7.4 of this Permit Attachment and discussed in Comment No. 360, stabilization and solidification often occur simultaneously and both may be goals of the treatment process; thus, it is appropriate to mention both. Accordingly, please revise to read: *Treatment in the South Bay shall be limited to chemical and thermal deactivation, stabilization and solidification, amalgamation, macroencapsulation, and physical treatment.*		
334.	DOE 334	193	Permit Attachment 5, 5.3.3	DOE	This storage capacity is not consistent with Part A of the Application approved by NMED on June 21, 2002. Neither the storage nor the types of treatment are consistent with Part A or Part B of the current Application, as discussed in Comment No. 6. Please revise to read: *The storage capacity of the south bay and airlocks shall be limited to 7,430 gallons.*		
335.	DOE 335	193	Permit Attachment 5, 5.3.3	DOE	DOE/Sandia note that one blind sump (along the south wall) in the south bay is used to provide secondary containment. The concrete sides and base in the sump underlying the containers are free of cracks or gaps, and are sufficiently impervious to contain leaks and spills until the collected material is detected and removed in compliance with 40 CFR 264.175(b)(1). In other parts of the south bay and airlocks, the requirements of 40 CFR 264.175(b)(1-4) are fully satisfied through use of portable spill pallets or pans, as discussed in Comment No. 331. The floor and walls of the south bay are painted, but sealing the concrete floor and walls with a chemical-resistant epoxy is not required for compliance with the regulations or for protection of human health or the environment. Please revise to read: *The south bay has a shallow (6-inches-deep) concrete blind sump covered with grating along the south wall. Containers of liquid hazardous and mixed wastes shall be stored over the sump or on portable spill pallets or pans. In the airlocks, containers of liquid hazardous and mixed waste shall be*		

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					stored on portable spill pallets or pans. The floors and walls in the waste management areas of Building 6920 are painted. The floors and sump shall be maintained as needed to be free from cracks and gaps.		
336.	DOE 336	194	Permit Attachment 5, 5.3.3	DOE	Please see Comment No. 332 regarding the fume hood and ventilation systems protecting Unit workers from physical or radiological hazards associated with repackaging or treating the wide variety of mixed wastes managed at the Permitted Unit. DOE/Sandia also perform repackaging operations in these rooms. Please revise to read: *In the RMWMU, there are four small rooms in the south bay (Figure 5-2 of this Permit Attachment) where the Permittees conduct repackaging, treatment, and storage. A commercially available fume hood with a negative-pressure ventilation system is located in one of these rooms. Another local ventilation system is located in another of the rooms. The exhaust from both of these systems is combined and passes through a HEPA filter train before being released to the environment through the exhaust stack. The filters remove particulates entrained in the airflow of each system.*		
337.	DOE 337	194	Permit Attachment 5, 5.3.4	DOE	Please see Comment No. 331 regarding secondary containment. DOE/Sandia use portable spill pallets and pans in the assay area to fully satisfy the requirements of 40 CFR 264.175(b)(1-4). Sealing the floor and walls with a chemical-resistant epoxy is not required for compliance with the regulations or for protection of human health or the environment. Please revise to read: *The floors are 6 inches thick concrete slab-on-grade. The floors throughout the waste management areas shall be maintained as needed to be free from cracks and gaps.*		
338.	DOE 338	194	Permit Attachment 5, 5.3.4	DOE	This storage capacity and types of treatment are not consistent with Part A of the Application approved by NMED on June 21, 2002 or with Part A or Part B of the current Application, as discussed in Comment No. 6. Please revise to read: *The maximum storage capacity shall be limited to 7,810 gallons.*		
339.	DOE 339	194	Permit Attachment 5, 5.3.4	DOE	Please see Comment No. 332 regarding use and requirements for the fume hood. Please revise to read: *Building 6921 waste treatment area, shown on Figure 5-3 of this Permit Attachment is equipped with a commercially available fume hood with a negative-pressure ventilation system. The ventilation airflow from the hood passes through a HEPA filter train before being released to the environment through an exhaust stack. The filters remove particulates entrained in the airflow.*		

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340.	DOE 340	194	Permit Attachment 5, 5.3.4	DOE	As discussed in Comment No. 360, both stabilization and solidification may be goals of the treatment process, thus, it is appropriate to include both. Please revise to read: *Treatment in Building 6921 shall be limited to chemical and thermal deactivation, stabilization and solidification, amalgamation, macroencapsulation, and physical treatment.*		
341.	DOE 341	194	Permit Attachment 5, 5.3.5	DOE	Limited repackaging operations may also be conducted in these buildings. Please revise to read: *Buildings 6925 and 6926 are used for storage, repackaging, and some treatment of hazardous and mixed waste at the RMWMU.*		
342.	DOE 342	194	Permit Attachment 5, 5.3.5	DOE	The prohibition on hazardous and mixed waste storage in Building 6926 is not consistent with the information in Table 3-1 in Permit Part 3, with the information in Permit Attachment 8, or with the information in Part A of the Application approved by NMED on June 21, 2002. The capacities for Buildings 6925 and 6926 are not consistent with Part A or Part B of the current Application, as discussed in Comment No. 6. Please revise to read: *Each building (6925 and 6926) has a total storage area of approximately 4,000 ft2. The maximum storage capacity of each building shall be 83,160 gallons.*		
343.	DOE 343	194	Permit Attachment 5, 5.3.5	DOE	Please see Comment No. 331 regarding use of portable spill pallets or pans to fully satisfy the requirements of 40 CFR 264.175(b)(1-4). Sealing the floors with a chemical-resistant epoxy is not required for compliance with the regulations or for protection of human health or the environment. Please revise to read: *The concrete floors in both buildings shall be maintained as needed to be free from cracks and gaps.*		
344.	DOE 344	195	Permit Attachment 5, 5.3.6	DOE	The description of the doors is not accurate; the total width is 5 feet, which facilitates container movement. The locking and venting features provide additional protection for Unit personnel but are not required for management of hazardous or mixed wastes or hazardous waste constituents. DOE/Sandia note the inside surfaces (walls, bottom, ceiling, and floor) of each building are painted; these painted surfaces in the sump at the bottom of each modular building are free of cracks or gaps and are sufficiently impervious to contain leaks and spills until the collected material is detected and removed in accordance with 40 CFR 264.175(b)(1). The painted sump and the floor grating fully satisfy the requirements of 40 CFR 264.175(b)(1-4). Sealing the inside surfaces with a reactive-chemical-resistant epoxy is not required for compliance with the regulations or for protection of human health or the environment.		

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					Please revise to read: *Each building is vented and has double doors with an inside safety release. Each modular storage building shall have a 5.5-inch deep integral spill containment reservoir under the entire building; the capacity is 650 gallons. The reservoirs are constructed of 10-gauge American Society for Testing and Materials A36 steel or equivalent. The inside surfaces (bottom and sides) of each reservoir shall be painted to provide additional protection against degradation of the secondary containment. The sumps shall be maintained as needed to be free from cracks and gaps.* *Containers shall be stored on painted steel grating or equivalent over the reservoirs. The grating shall be maintained as needed to support containers and elevate them above any accumulated liquid.*		
345.	DOE 345	195	Permit Attachment 5, 5.3.6	DOE	DOE/Sandia note the storage capacities for the modular buildings in the draft Permit are not consistent with current permitted capacities as specified in Part A of the Application approved by NMED on June 21, 2002. Furthermore, DOE/Sandia note that all the capacities in Part A and Part B of the Application have been established in full compliance with the requirements of 40 CFR 264 Subpart I, with consideration of the physical size and characteristics of each area and the requirements for secondary containment, as discussed in Comment No. 6. The modular buildings rest on structural supports which serve to elevate the units slightly. It is not necessary or effective to inspect the underside of the modular buildings on a regular basis because degradation of the containment reservoirs will be evident in the inspections that include the inside surfaces of each reservoir. Including the undersides of the buildings does not increase protection of human health or the environment; it increases the risk of injury to site personnel due to the difficulties of physical access. Please revise to read: *Each building rests on structural supports that elevate it and shall allow visual checks if there is evidence of deterioration on the interior surfaces. Visual checks for deterioration of the spill containment reservoirs are made by inspecting the interior of the units. The maximum storage capacity at each building shall be limited to 1,100 gallons.*		
346.	DOE 346	195	Permit Attachment 5, 5.3.7	DOE	DOE/Sandia note the storage capacities for the outdoor area in the draft Permit is not consistent with the capacity as specified in Part A of the Application approved by NMED on June 21, 2002. Please see Comment No. 6 for further discussion.		

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					DOE/Sandia also note this requirement is unnecessarily prescriptive. As discussed in Comment No. 326, containers or individual items are stored inside transportainers, unless they are too large. However, such storage is not required, nor is use of steel transportainers. The wastes are stored in compliance with 40 CFR 264 Subpart I, and adequate secondary containment is provided in compliance with 40 CFR 264.175(b)(1-4) for containers of liquids that are stored in the outdoor area. The outdoor area is not covered. Further, DOE/Sandia note the RMWMU retention pond is designed and used for management of storm water; it does not provide secondary containment for hazardous or mixed waste management activities. Spills, fire-fighting water, and other releases of hazardous or mixed wastes or hazardous waste constituents to the pond are addressed in the Contingency Plan in Permit Attachment 12. The pond and discharges from it are subject to National Pollutant Discharge Elimination System (NPDES) requirements established under the Clean Water Act. Therefore, as discussed in Comment No. 2, it is not necessary to include requirements for routine operations of the retention pond in this Permit, and it should be deleted from this section of the Permit. Please revise to read: *The outdoor waste storage area may be used for storage of hazardous or mixed wastes. It has an area of approximately 48,500 ft2. The total storage capacity shall be limited to 19,800 gallons.* *Hazardous and mixed wastes are typically stored inside one of the buildings or inside transportainers in the outdoor storage area. Hazardous or mixed wastes may be stored outside due to large size, large quantity, and lack of available space in the buildings or transportainers, or other reason. Mixed or hazardous wastes that are stored outside shall meet the requirements of 40 CFR 264 Subpart I.*		
347.	DOE 347	196	Permit Attachment 5, 5.4.2	DOE	DOE/Sandia note these requirements [2, 3, 5 and 6] are unnecessarily prescriptive and are not consistent with the information provided in the Application. With respect to the location of ignitable and water-reactive wastes, treatment, repackaging, and staging operations may take more than one day to complete. Ignitable or reactive wastes may be stored in any of the buildings as needed to utilize features of that particular building (e.g., separate rooms). It is not always feasible to label containers during treatment operations. It is not necessary to specify the length of the grounding rods for the modular buildings, because the rods are fully defined by their protective function.		

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					DOE/Sandia use the most current edition of the NIOSH Pocket Guide to Chemical Hazards; the Permit should reflect that it is updated periodically. Please revise as follows: *2. Ignitable and reactive wastes may also be stored in Buildings 6920, 6921, 6925, and 6926 for treatment, packaging, storage, and staging for shipment. Individual containers shall be labeled during storage and they shall be kept apart from other wastes. The Permittees shall place a portable sign near the wastes or use prominent labels to identify them as ignitable and/or reactive.* *3. Water-reactive wastes shall not be stored in areas equipped with water sprinklers for fire suppression. They may be managed only temporarily in Buildings 6920, 6921, 6925, and 6926 for treatment, packaging, and staging for shipment.* *5. The modular storage buildings shall be grounded by a grounding rod and cable or equivalent method. They shall be equipped with a dry chemical fire suppression system to assure that water-reactive wastes shall not be exposed to water during any fire emergencies.* *6. Wastes shall be mixed together only on a limited basis during treatment and repackaging operations at the Permitted Unit. Ignitable and reactive wastes shall be treated or mixed on a case-by-case basis. The Permittees shall plan each such operation carefully to identify the hazards and potential consequences. The Permittees shall use waste characterization data and/or published chemical information (e.g., "NIOSH Pocket Guide to Chemical Hazards" [DHHS, 1994] as revised and updated, or other chemical or engineering handbook) as appropriate for each waste in the planning process. The Permittees shall conduct the operations according to the plan in order to control the hazards and prevent uncontrolled reactions.*		
348.	DOE 348	197	Permit Attachment 5, 5.4.3.3	DOE	DOE/Sandia note 40 CFR 264.34 does not require that personnel have access to other personnel and multiple means of communication at all times. Rather, the requirement is for "immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee", "whenever hazardous waste is being poured, mixed, spread, or otherwise handled". Two-way radios, pagers, cellular telephones, and working in pairs are illustrations of means of communication that are typically available. DOE/Sandia note that requiring two personnel to be present at all times when managing waste or requiring use of particular communications equipment will not enhance safety in some cases (e.g., small quantities, limited work space, or operations involving reactive wastes). The		

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					Application describes use of two persons only during waste handling operations at the MSB; this precaution is taken as needed to provide additional protection of human health and the environment because these Units are not routinely occupied. Please revise to read: *If the communications and alarm systems described in each Unit-specific Attachment of this Permit are not immediately available, on-site personnel working alone shall carry two-way radios or cellular telephones so that they can contact emergency personnel. Alternatively, waste management personnel shall work in pairs and maintain visual or voice contact, and one member of the pair shall have access to two-way radios, cellular telephones, or the communications and alarm systems described in each Permit Attachment [40 C.F.R. § 264.34].*		
349.	DOE 349	198	Permit Attachment 5, 5.5.1	DOE	DOE/Sandia note the Application includes descriptions of typical waste handling equipment and operations as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. The equipment and detailed operations are typical rather than prescriptive because they are continually adjusted as needed for the specific hazardous and mixed wastes being handled at any time in the Permitted Units. Including prescriptive handling requirements for fastening containers to lifts is redundant, and the requirement to use specific fastening methods or waste handling equipment may lead to operations that are less protective of worker safety (e.g., containers that are strapped together may block the forklift driver's view and be more cumbersome than using a special forklift attachment to transport two drums at a time). Additionally, 40 CFR 270.14(b)(8)(i) should not be cited, as discussed in Comment No. 326. Please revise to read: *The ramp on the west side of Building 6926 slopes up to the dock, allowing forklift operators to drive onto trailers of trucks parked at the dock. The dock and ramp shall be maintained in good condition.* *Containers of waste shall be handled in a manner to prevent shifting or falling. A forklift, hydraulic lift, or other mechanical device may be used as needed for loading or unloading larger containers and for transporting them within the Permitted Unit.*		
350.	DOE 350	199	Permit Attachment 5, 5.5.3	DOE	DOE/Sandia note this condition is not consistent with conditions in the Permit Parts or Permit Attachments applicable to the HWMU, TTU, and AHCU. Please revise to read: *The Permittees shall conduct waste management activities at the RMWMU in accordance with this Permit.*		

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351.	DOE 351	200	Permit Attachment 5, 5.5.8	DOE	DOE/Sandia note that the requirements of 40 CFR 264 Subpart BB apply only to air emissions from equipment (e.g., pumps, valves, or compressors) that contacts hazardous wastes with organic concentrations equal to or greater than 10 percent by weight. Such equipment may used at the RMWMU during treatment and could potentially be used during storage. Please revise to read: *During storage and treatment activities, the Permittees do not routinely manage hazardous or mixed waste with organic concentrations equal to or greater than 10% by weight in process equipment that is subject to the requirements of 40 CFR 264 Subpart BB. Equipment used in such service shall be used for less than 300 hours per calendar year if it is to be exempt from the regulatory requirement (40 C.F.R. § 264.1052 through 1060) as noted in 40 C.F.R. § 264.1050(f). In addition, the equipment list shall be maintained in the RMWMU records. The hours of equipment use shall also be noted in the records.*		
352.	DOE 352	201	Permit Attachment 5, 5.7	DOE	Treatment operations at the RMWMU have historically required 15 to 30 separate detailed treatment plans each year due to the variety of wastes generated at SNL/NM, as discussed in Comment No. 121. Immediate modifications to the plans are sometimes required in response to conditions encountered during treatment operations. DOE/Sandia note NMED has historically required 60 to 120 days to acknowledge receipt of documents submitted in accordance with the FFCO; this time has been considerably longer for documents that require review and approval. The mutual goal of NMED and the Permittees should be timely treatment of the waste and protection of human health and the environment. Please see Comment No. 7 for additional discussion regarding this requirement. Please revise as follows: *Prior to any treatment at the RMWMU and the AHCU, the Permittees must prepare a detailed treatment plan. The treatment plan shall describe, at a minimum, the wastes to be treated, the volume of the wastes, the methods of treatment, and how treatment efficacy will be verified. These plans will be retained in the Operating Record in accordance with Permit Attachment 13.*		
353.	DOE 353	201	Permit Attachment 5, 5.7	DOE	DOE/Sandia note the requirements restricting treatment to the south bay of 6920 are not consistent with the Application. Additionally, stabilization and solidification may both result from a single treatment process and should both be mentioned. Please revise as follows: *The Permittees' waste treatment practices currently involve various technologies at the RMWMU, and include the*		

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					following methods. *1. Chemical deactivation (performed in Buildings 6920 or 6921).* *3. Stabilization and/or solidification (performed in Building 6920 or Building 6921).* *4. Amalgamation (performed in Building 6920 or Building 6921).*		
354.	DOE 354	201	Permit Attachment 5, 5.7	DOE	DOE/Sandia note it is not necessary to specify the maximum weight if the maximum quantity and the process are specified, as these are sufficient to guide and control operations, and to protect human health and the environment. Additionally, not all treatment occurs in containers. Please revise to read: *All of the treatment at the RMWMU is batch treatment; it is typically performed on single packages of waste (each package is one 85-gallon drum or less, or a single item that may be larger than a drum). In the case of macroencapsulation, several containers or large items may be treated in a single batch.* *Treatment shall be conducted in containers unless the physical properties of the waste and the nature of the treatment process require treatment without containers (e.g., chemical deactivation of thermal batteries and some physical treatment). Liquid wastes shall be treated in batches; the Permittees shall ensure containment when liquid wastes are not treated in containers.*		
355.	DOE 355	202	Permit Attachment 5, 5.7.1	DOE	The Application includes descriptions of treatment operations as illustrations, and this description contains a typographic error. DOE/Sandia tailor the specifics of the treatment processes to address the properties of each waste (e.g., adding reactive waste to an appropriate alcohol/water solution). The activities needed to meet this prescriptive condition may lead to operations that are less protective of worker safety (e.g., requiring use of an alcohol/water solution in all cases). Please revise to read: *Hydrides, deuterides, and tritides are deactivated by slow addition to an ice water bath. Deactivation of water-reactive metals such as elemental sodium and lithium involves the slow and controlled addition to an appropriate alcohol/water solution. Deactivation of pyrophoric metal powders and particulates may be achieved by mixing waste in a Portland cement matrix.* *Water-soluble oxidizers in particulate form are typically slowly dissolved in water to deactivate them as the first step in the treatment process. The resulting solution may undergo further treatment (e.g., neutralization and stabilization/solidification).*		

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					Water-soluble concentrated liquid oxidizers such as hydrogen peroxide are typically diluted with water in a controlled manner to make them safer to handle before deactivation with an appropriate chemical agent such as iron filings.		
356.	DOE 356	203	Permit Attachment 5, 5.7.1	DOE	DOE/Sandia note that thermal batteries may be deactivated by introducing an electrical current to individual batteries; the current induces a chemical reaction that deactivates the reactive material contained in the battery and generates heat. This treatment is best described as chemical deactivation of the reactive component of the battery; it should be included in the discussion of chemical deactivation. Please add the following paragraph after it. *The reactive material in thermal batteries may be deactivated through introduction of an electrical current that induces a chemical reaction in the material, deactivating it and generating heat. Batteries are treated one at a time in this manner; this process is not conducted in containers due to the need to dissipate the heat generated during the chemical reaction.*		
357.	DOE 357	204	Permit Attachment 5, 5.7.2	DOE	There are final polyethylene caps on both ends. Please revise to read: *After the resin cools and solidifies, the mold is removed, the waste form is turned over and more polyethylene is added to form final caps on the ends.*		
358.	DOE 358	204	Permit Attachment 5, 5.7.2	DOE	DOE/Sandia note it is not necessary to specify the design features of the containers. The containers are manufactured by a commercial vendor. They are designed to provide treatment for hazardous and mixed wastes that can be macroencapsulated in accordance with 40 CFR 268.45. Please revise to read: *The container may also include an outer metal shell to provide additional structural strength, if appropriate.*		
359.	DOE 359	204	Permit Attachment 5, 5.7.3	DOE	The Application includes descriptions of treatment operations as illustrations. DOE/Sandia tailor the specifics of the treatment process to address the properties of each waste. It may not be physically feasible to conduct these activities within a fume hood (e.g. large or oddly shaped items). The activities needed to meet this prescriptive condition may lead to operations that are less protective of worker safety Please revise as follows: *2. Removing coating and filler materials (e.g. resins) by dissolution in containers (e.g., trays or pails) in order to facilitate separation of items with hazardous waste constituents from each other or from other items. Whenever possible, dissolution shall take place within the fume hood(s) that are present in each building.*		
360.	DOE 360	204	Permit Attachment 5,	DOE	Both stabilization and solidification may be goals of the treatment process, thus, it is appropriate to mention both.		

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			5.7.4		Please revise to read: ***5.7.4 Stabilization and Solidification***		
361.	DOE 361	205	Permit Attachment 5, 5.7.4	DOE	As noted in the preceding comment, it is appropriate to mention both stabilization and solidification. Please revise to read: *The primary use of stabilization is to immobilize toxicity characteristic metals but many stabilization agents also eliminate free liquids. Typical waste forms often suitable for stabilization and /or solidification include liquids, sludge, soils, and particulate-type wastes.*		
362.	DOE 362	205	Permit Attachment 5, 5.7.4	DOE	Please see preceding two comments regarding stabilization and solidification. Additionally, DOE/Sandia note the Application includes descriptions of treatment operations as illustrations; the specifics are tailored to address the properties of each waste, and bench-scale testing may not be appropriate in all cases. Please revise to read: *Waste characteristics that are important to the success of the stabilization and/or solidification process for liquids may include volume percent of water, oil, solvents, or other organics, pH and hazardous constituents. Waste characterization data shall be used to determine whether waste is amenable to stabilization or solidification, any necessary pretreatment requirements, and the appropriate binding agent(s).* *Once the stabilization or solidification method is selected, the binding agent is identified based on chemical compatibility with the waste form and hazardous waste constituents present. Pretreatment may be required to assure compatibility between the waste, the binding agent, and the containers (e.g., neutralization of liquid wastes to an acceptable pH range of 5.0 to 11.0). Once the proper binding agents have been identified, bench-scale testing is performed as needed to determine optimum amounts of each agent.*		
363.	DOE 363	205	Permit Attachment 5, 5.7.5	DOE	The plate is more accurately described as a covered tray. Please revise to read: *The device is a thick-walled stainless steel vacuum apparatus equipped with an internal heated covered tray and sensors to measure temperature and pressure. The device was designed to contain a detonation of 25 grams TNT-equivalents of reactive hazardous waste. The inside diameter of the cylinder is 8 inches, and it is 18 inches long. The device is portable and may be used in any of the treatment areas in Building 6920 or 6921. It is shown in Figure 5-8 of this Permit Attachment.* *Reactive waste is placed on the tray, inserted into the cold unit, the unit is sealed and filled with an inert atmosphere*		

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					(e.g., nitrogen), and the temperature of the tray is slowly raised until reaching a temperature at which the reactive waste being treated decomposes. The Permittees shall use waste characterization data and/or published chemical information (e.g., "DOE Explosives Safety Manual" [DOE, 2002] as revised and updated, or other chemical or engineering handbook) as appropriate to determine the required temperature to decompose the reactive waste.		
364.	DOE 364	207	Permit Attachment 5, 5.8.1	DOE	The list of methods used to verify effectiveness of chemical deactivation is not complete, and the methods for visually checking completeness of chemical reactions for solid items can be further clarified by adding examples. Please revise as follows: *The Permittees shall also verify treatment effectiveness using one or more of the following methods, as appropriate.* *1. Visual check for completeness of chemical reaction for solid items of waste that were treated to remove the characteristic of reactivity (e.g., color change or structural change).* *7. Knowledge of process to determine whether chemical reaction(s) were completed.*		
365.	DOE 365	207	Permit Attachment 5, 5.8.4	DOE	As discussed in Comment No. 360, stabilization and solidification often occur together and both may be goals of the treatment process. Please revise as follows: ***5.8.4 Stabilization and Solidification Effectiveness***		
366.	DOE 366	197	Permit Attachment 5, Table 5-1	DOE	The modular buildings do not have sprinklers, the grounding rods are previously described, the table number is incorrect, and the NFPA standards are updated periodically. Please revise as follows: All buildings at the RMWMU shall be equipped with automatic fire suppression systems, summarized in Table 5-1 of this Permit Attachment. Building Number: TP150 Sprinkler Actuation: N/A Building Number: TP153 Sprinkler Actuation: N/A a National Fire Protection Association (NFPA), 2000, 2002, as revised and updated		
367.	DOE 367	198	Permit Attachment 5, 5.5.2	DOE	Please revise to clarify a typographical error: The water retention pond is not intended to provide secondary containment for waste.		
368.	DOE 368	206 - 207	Permit Attachment 5,	DOE	DOE/Sandia note the titles of these sections are not consistent with the titles of corresponding sections in Permit		

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			5.8.1 5.8.2 5.8.3 5.8.5 5.8.6		Attachment 6; the sections in Permit Attachment 6 include the word "effectiveness" in each title, which is appropriate since the sections discuss effectiveness. Please revise accordingly.		
369.	DOE 369	After 207	Permit Attachment 5	DOE	The figures and photographs do not reflect the most current information provided in the Application. DOE/Sandia will provide updated figures and photographs under separate cover.		
370.	DOE 370	209-221	Permit Attachment 6	DOE	DOE/Sandia note several instances that mention mixed wastes in requirements that are applicable to both hazardous and mixed wastes (e.g., the second paragraph in Section 6.0). Please revise throughout this Permit Attachment. Please see Comment No. 1 for additional discussion.		
371.	DOE 371	210	Permit Attachment 6, 6.1.1.3	DOE	DOE/Sandia note this requirement is unnecessarily prescriptive. The Application includes descriptions of vehicle traffic as illustrations of the current configuration. These vehicles are not directly related to hazardous or mixed waste management operations at the AHCU. Please revise to read: *Vehicle presence within TA-V is generally limited to waste transporters and other job related vehicles.*		
372.	DOE 372	211	Permit Attachment 6, 6.4	DOE	DOE/Sandia note that containers that meet the requirements of 40 CFR 262.30 are not required (and in some cases are not appropriate) for on-site management of hazardous or mixed wastes, and the specific containers in this list are not necessary for some wastes (e.g., small items or used PPE). DOE/Sandia note that a container is defined in 40 CFR 260.10 as "any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled." Acceptable containers are compatible with the waste, in good condition, and kept closed. Containers at the Permitted Units meet this definition and are managed in compliance with 40 CFR 264 Subparts I and CC. Furthermore, DOE/Sandia note that DOT hazardous materials transportation regulations in 49CFR 171 through 179 are incorporated by reference into 40 CFR 263 as applicable. 40 CFR 263.10 (b) specifies "These regulations do not apply to on-site transportation of hazardous waste by generators or by owners or operators of permitted hazardous waste management facilities." As discussed in Comment No. 3, the language of the Permit must be identical to the language of the regulations. Also, this requirement is not consistent with the container requirements for the other Permitted Units. Accordingly, please revise to read: *The Permittees shall use the container types, labeling, and handling practices as described in Permit Attachment 2 (Design and Operation of the Treatment and Storage Units at the Facility).*		
373.	DOE 373	211	Permit	DOE	Please see the following comment regarding secondary		

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			Attachment 6, 6.5		containment. DOE/Sandia use portable spill pallets and pans at the AHCU to fully satisfy the requirements of 40 CFR 264.175(b)(1-4). The floors are painted, but sealing them with a chemical-resistant epoxy or similar coating is not required for compliance with the regulations or for protection of human health or the environment. Please revise to read: *The concrete floors of the work area and container storage area are painted and shall be maintained as needed to be free from cracks and gaps.*		
374.	DOE 374	211	Permit Attachment 6, 6.5	DOE	The Application includes numerous descriptions of items such as spill pallets and spill pans that illustrate ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. DOE/Sandia note that these items are available from multiple vendors, and they come in sizes, shapes, and materials for various applications, including but not limited to applications where it is necessary for the units to be impervious to corrosives, solvents, and other liquids. Thus, the description represents a typical design rather than a prescriptive specification because the units are selected for the specific application. The prescriptive requirements regarding design and features of spill pallets are unnecessary because the Permittees are required to provide adequate secondary containment as required by 40 CFR 264.175(b)(1-4). Please revise to read: *In each waste management area (except where noted), containers holding liquid hazardous or mixed wastes shall be stored on portable spill pallets or pans. These are commercially available units consisting of a tub made of a heavy-duty inert material such as polyethylene or polypropylene with an inert grating cover. The pallets come in various sizes and capacities designed for use with 55-gallon drums or other standard containers and shall provide adequate secondary containment as required by 40 CFR 264.175(b)(1-4). The containers shall be stored in a stable configuration; the weight shall not exceed the grating capacity.*		
375.	DOE 375	212	Permit Attachment 6, 6.5.1	DOE	This storage capacity is not consistent with Part A of the Application approved by NMED on June 21, 2002 or with Part A or Part B of the current Application, as discussed in Comment No. 6. Please revise to read: The storage capacity of the hot cell shall be limited to a maximum of 900 gallons (or an equivalent volume) of waste.		
376.	DOE 376	212	Permit Attachment 6, 6.5.2	DOE	The storage capacity and treatment description for the work area is not consistent with Part A of the Application approved by NMED on June 21, 2002 or with Part A or Part B of the current Application, as discussed in Comment No. 6. As noted in Section 6.11.4 of this Permit Attachment and discussed in Comment No. 391, stabilization and solidification		

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					often occur simultaneously and both may be goals of the treatment process; thus, it is appropriate to mention both. DOE/Sandia also note physical treatment is not necessarily limited to items that are small enough to fit in containers and chemical deactivation may not take place in containers; moreover, it is not necessary to specify in this section whether any of the treatment occurs in containers, as that is specified in later sections of this Permit Attachment. Accordingly, please revise to read: *Treatment methods shall be limited to deactivation, stabilization and solidification, macroencapsulation, and physical treatment. The storage capacity of the work area shall be limited to 1,100 gallons.* *Personnel also repackage wastes for shipment to off-site TSDFs. From time to time, a temporary tent-like room may be erected in the work area north of the hot cell and east of the permanent shield wall to accommodate large items and containers of mixed wastes. If the mixed waste item or container must be handled remotely, the temporary room shall be built directly against the permanent shield wall to allow the use of the manipulators at the shield wall. Each time the temporary room is erected, package-specific considerations will determine details of the design; however, basic construction will consist of polyvinyl chloride or metal framing, clear or translucent plastic roof and walls, and plastic doors. The temporary room shall operate at a slight negative pressure.* *A 6-ft-wide walk-in fume hood is located in the work area northeast of the Auxiliary Hot Cell. It can accommodate two 55-gallon drums placed side by side or individual items. Unit personnel treat and repackage hazardous and mixed wastes in the fume hood. The fume hood is included in the maximum storage capacity for the overall work area.*		
377.	DOE 377	212	Permit Attachment 6, 6.5.3	DOE	The storage capacity of the silos is not consistent with Part A of the Application approved by NMED on June 21, 2002 or with Part A or Part B of the current Application, as discussed in Comment No. 381. Accordingly, please revise to read: *The silos can be used for storage of mixed wastes that exhibit high external radiation dose rates that are hazardous to personnel. The maximum waste storage capacity of the silos shall be 1,456 gallons.*		
378.	DOE 378	212	Permit Attachment 6, 6.6	DOE	The storage capacity of the high bay is not consistent with Part A of the Application approved by NMED on June 21, 2002 or with Part A or Part B of the current Application, as discussed in Comment No. 6. Please see Comment No. 370 and Comment No. 1 regarding limitations on management of hazardous and mixed wastes.		

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					Please see Comment No. 374 regarding use of portable spill pallets or pans to fully satisfy the requirements of 40 CFR 264.175(b)(1-4). The floor is painted, but sealing it with a chemical-resistant epoxy is not required for compliance with the regulations or for protection of human health or the environment. Accordingly, please revise to read: *Containers of hazardous and mixed wastes may be stored in the high bay, south and west of the hot cell. The maximum waste storage capacity of the storage area shall be limited to 3,520 gallons. The floor of the storage area shall be maintained as needed to be free from cracks and gaps.*		
379.	DOE 379	212	Permit Attachment 6, 6.6.1	DOE	DOE/Sandia note that hazardous and mixed wastes are subject to the requirements of this Permit and should be specified in this section of the draft Permit. Additionally, as discussed in Comment No. 372, containers at the Permitted Units meet the definition in 40 CFR 260.10 and are managed in compliance with 40 CFR 264 Subparts I and CC. Please delete this sentence.		
380.	DOE 380	213	Permit Attachment 6, 6.6.4	DOE	DOE/Sandia note the enclosures and exhaust systems are designed and operated to address radiological constituents. In addition, they serve to control particulate hazardous waste constituents. Prescriptive requirements in the draft Permit regarding the enclosures and exhaust systems may limit DOE/Sandia's ability to protect Unit workers from physical or radiological hazards associated with repackaging or treating mixed wastes. Please revise to read: *The fume hood in the work area is equipped with a negative pressure ventilation system. In addition, a flexible exhaust hose can be attached to the same system, allowing for localized negative pressure ventilation from the work area. The airflow from the ventilation system passes through a two-stage high-efficiency particulate air filter train before being released to the environment through an exhaust stack. The filters remove particulates entrained in the airflow.*		
381.	DOE 381	214	Permit Attachment 6, 6.8	DOE	DOE/Sandia note these requirements are unnecessarily prescriptive and are not consistent with the information provided in the Application. With respect to the location of ignitable and water-reactive wastes, treatment, repackaging, and staging operations may take more than one day to complete. Ignitable or reactive wastes may be stored in any of the areas as needed to utilize particular features (e.g., remote handling). It is not always feasible to label containers during treatment operations. DOE/Sandia use the most current edition of the NIOSH Pocket Guide to Chemical Hazards; the Permit should reflect that it is updated periodically. Additionally, 40 CFR 270.14(b)(9) addresses contents of permit applications and is not directly relevant to the		

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					requirements of 40 CFR 264 that Permittees are required to meet. Please delete the regulatory citation and revise as follows: *Sources of ignition that may be present at the AHCU include welding activities, open flames, hot surfaces, frictional heat, radiant heat, sparks, and engines. The Permittees shall employ among others the following precautions and practices: all containers of hazardous and mixed wastes shall be kept closed unless waste is being added, removed, inspected, sampled, repackaged, or treated. Additional AHCU-specific features, potential ignition and reaction sources, precautions, and practices shall include, but not be limited to the following.* *2. Water-reactive wastes shall not be stored at the Unit, except on a temporary basis during treatment, packaging, and staging for shipment. If water-reactive wastes are present, they shall be isolated from water and their location shall be identified through the use of signs or labels until their removal from the Unit.* *4. Wastes may be mixed together on a limited basis during treatment and repackaging operations at the AHCU. Ignitable and reactive wastes shall be treated in containers or mixed on a case-by-case basis. The Permittees shall plan each such operation carefully to identify the hazards and potential consequences. The Permittees shall use waste characterization data or published chemical information (e.g., "NIOSH Pocket Guide to Chemical Hazards" [DHHS, 1994] as revised and updated, or other chemical or engineering handbook), as appropriate, for each waste in the planning process. The Permittees shall conduct the operations according to the plan in order to control the hazards and prevent uncontrolled reactions.*		
382.	DOE 382	214	Permit Attachment 6, 6.9.3	DOE	DOE/Sandia note the Application includes descriptions of typical waste handling equipment and operations as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. The equipment and detailed operations are typical rather than prescriptive because they are continually adjusted as needed for the specific hazardous and mixed wastes being handled at any time in the Permitted Units. Including prescriptive handling requirements for strapping containers together is redundant, and the requirement to use specific fastening methods may lead to operations that are less protective of worker safety (e.g., containers that are strapped together may block the forklift driver's view and be more cumbersome than using a special forklift attachment to transport two drums at a time). Please delete the regulatory citation as discussed in Comment No. 381 and revise to read:		

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					Containers of waste shall be handled in a manner to prevent shifting or falling. Containers are typically transported within the Unit using drum dollies or pallet jacks, as appropriate.		
383.	DOE 383	215	Permit Attachment 6, 6.9.3	DOE	DOE/Sandia note it may be necessary to use the rollup door on the south side of the high bay if the AHCU is occupied by personnel and the mixed waste presents a hazard to worker safety. This additional loading/ unloading area is within the waste management area identified in the Part A Application approved by NMED on June 21, 2002. Please revise to read: *The Permittees shall perform loading and unloading activities just inside the rollup door on the north or south side of Building 6597 (See Figure 6-6 in this Permit Attachment).*		
384.	DOE 384	216	Permit Attachment 6, 6.9.6	DOE	DOE/Sandia note that mitigating the effects of power outages during an in-air transfer of mixed wastes does not always require that the waste be lowered. The capability for lowering the waste is needed only for mixed wastes that exhibit high external radiation dose rates; this will serve to protect Unit workers. Please revise to read: *Backup power to the chain hoist shall be required only during the periods that the bridge crane is being used for an in-air transfer of wastes/material that exhibit high external radiation dose rates.*		
385.	DOE 385	217	Permit Attachment 6, 6.10	DOE	DOE/Sandia note stabilization and solidification may both result from a treatment process and should both be mentioned. Please revise as follows: *Treatment methods for hazardous and mixed wastes that will be treated in containers at the AHCU are as follows.* *2. Stabilization and/or solidification (performed in the work area, including the fume hood);*		
386.	DOE 386	217	Permit Attachment 6, 6.10	DOE	Section 6.10 of the draft Permit is not consistent with the information provided in the Application or with other requirements in the draft Permit. DOE/Sandia note the hot cell is similar to the fume hood: it serves to protect workers and the environment during waste management activities. The hot cell is not a waste management unit itself. None of the equipment or waste management activities at the AHCU is subject to the standards in 40 CFR 264 Subpart X. Please delete this sentence.		
387.	DOE 387	217	Permit Attachment 6, 6.11	DOE	DOE/Sandia note it is not necessary to specify the maximum weight if the maximum quantity and the process are specified, as these are sufficient to guide and control operations, and to protect human health and the environment. Additionally, not all treatment occurs in containers. Please revise to read: *All of the treatment at the AHCU is batch treatment; it is typically performed on single packages of waste (each package is one 55-gallon drum or less, or a single item that may be larger than a drum). In the case of*		

Comment No.	Index No.	Page No.	Section No.	Commentator's Name	Summary of Comment	NMED Response	Modification Made to Permit Y/N
					macroencapsulation, several containers or large items may be treated in a single batch. *Treatment shall be conducted in containers unless the physical properties of the waste and the nature of the treatment process require treatment without containers (e.g., chemical deactivation of thermal batteries and some physical treatment). Liquid wastes shall be treated in batches; the Permittees shall ensure containment when liquid wastes are not treated in containers.*		
388.	DOE 388	218	Permit Attachment 6, 6.11.1	DOE	The Application includes descriptions of treatment operations as illustrations, and this description contains a typographic error. DOE/Sandia tailor the specifics of the treatment processes to address the properties of each waste (e.g., adding reactive waste to an appropriate alcohol/water solution). The activities needed to meet this prescriptive condition may lead to operations that are less protective of worker safety (e.g., requiring use of an alcohol/water solution in all cases). Please revise to read: *Hydrides, deuterides, and tritides shall be deactivated by slow addition to an ice water bath. Deactivation of water-reactive metals such as elemental sodium and lithium involves the slow and controlled addition to an appropriate alcohol/water solution. Deactivation of pyrophoric metal powders and particulates may be achieved by mixing waste in a Portland cement matrix. Water-soluble oxidizers in particulate form are typically slowly dissolved in water to deactivate them as the first step in the treatment process. The resulting solution may undergo further treatment (e.g., neutralization and stabilization). Water-soluble concentrated liquid oxidizers such as hydrogen peroxide are typically diluted with water in a controlled manner to make them safer to handle before deactivation with an appropriate chemical agent such as iron filings.*		
389.	DOE 389	218	Permit Attachment 6, 6.11.1	DOE	DOE/Sandia note that thermal batteries may be deactivated by introducing an electrical current to individual batteries; the current induces a chemical reaction that deactivates the reactive material contained in the battery and generates heat. This treatment is best described as chemical deactivation of the reactive component of the battery; it should be included in the discussion of chemical deactivation. Please see the preceding comment; the changes discussed therein have been incorporated into the paragraph shown to the left. Please add the following paragraph after it: The reactive material in thermal batteries may be deactivated through introduction of an electrical current that induces a chemical reaction in the material, deactivating it and generating heat. Batteries are treated one at a time in this manner; this process is not conducted in containers due to the need to dissipate the heat generated during the chemical		

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					reaction.		
390.	DOE 390	219	Permit Attachment 6, 6.11.2	DOE	DOE/Sandia note it is not necessary to specify the design features of the containers. The containers are manufactured by a commercial vendor. They are designed to provide treatment for hazardous and mixed wastes that can be macroencapsulated in accordance with 40 CFR 268.45. Please revise to read: *The container may also include an outer metal shell to provide additional structural strength, if appropriate.*		
391.	DOE 391	220	Permit Attachment 6, 6.11.4	DOE	Both stabilization and solidification may be goals of the treatment process, thus, it is appropriate to mention both. Please revise to read: ***6.11.4 Stabilization and Solidification*** *The Permittees shall perform stabilization in containers only in the Work Area, (including the fume hood) which is located at the AHCU. Stabilization is the process of binding hazardous waste metals so that the metals become chemically part of the matrix or are physically bound within the matrix. The primary use of stabilization is to immobilize toxicity characteristic metals but many stabilization agents also eliminate free liquids. Typical waste forms often suitable for stabilization and /or solidification include liquids, sludge, soils, and particulate-type wastes.*		
392.	DOE 392	220	Permit Attachment 6, 6.11.4	DOE	Please see preceding comment regarding stabilization and solidification. Additionally, DOE/Sandia note the Application includes descriptions of treatment operations as illustrations; the specifics are tailored to address the properties of each waste, and bench-scale testing may not be appropriate in all cases. Please revise to read: *Waste characteristics that are important to the success of the stabilization and/or solidification process for liquids may include volume percent of water, oil, solvents, or other organics, pH and hazardous constituents. Waste characterization data shall be used to determine whether waste is amenable to stabilization or solidification, any necessary pretreatment requirements, and the appropriate binding agent(s).* *Once the stabilization or solidification method is selected, the binding agent is identified based on chemical compatibility with the waste form and hazardous constituents present. Pretreatment may be required to assure compatibility between the waste, the binding agent, and the containers (e.g., neutralization of liquid wastes to an acceptable pH range of 5.0 to 11.0). Once the proper binding agents have been identified, bench-scale testing is performed as needed to determine optimum amounts of each agent.*		
393.	DOE 393	221	Permit	DOE	The list of methods used to verify effectiveness of chemical		

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			Attachment 6, 6.12.1		deactivation is not complete, and the methods for visually checking completeness of chemical reactions for solid items can be further clarified by adding examples. Please revise as follows: *The Permittees shall also verify treatment effectiveness using one or more of the following methods, as appropriate.* *1. Visual check for completeness of chemical reaction for solid items of waste that were treated to remove the characteristic of reactivity (e.g., color change or structural change).* *7. Knowledge of process to determine whether chemical reaction(s) were completed.*		
394.	DOE 394	221	Permit Attachment 6, 6.12.2	DOE	As discussed in Comment No. 391, stabilization and solidification often occur together and both may be goals of the treatment process. Please revise as follows: ***6.12.2 Stabilization and Solidification Effectiveness***		
395.	DOE 395	209	Permit Attachment 6, 6.0	DOE	Wind roses are shown in Figure 1-2 rather than Figure 1-8 in Permit Attachment 1. Drainage control features are shown in Figure 6-4, fire hydrant locations are shown in Figure 6-5, and loading and unloading areas are shown in Figure 6-6. Please revise accordingly.		
396.	DOE 396	215	Permit Attachment 6, 6.9.1 Table 6.1	DOE	This reference has been revised and updated since the Permittees submitted the Application; the Permit should reflect that. Please revise the footnote as follows: *a National Fire Protection Association (NFPA), 2002, as revised and updated*		
397.	DOE 397	After 221	Permit Attachment 6	DOE	The figures and photographs do not reflect the most current information provided in the Application. DOE/Sandia will provide updated figures and photographs under separate cover.		
398.	DOE 398	209-222	Permit Attachment 6	DOE	The following acronym appears in the text of this Permit Attachment but is not defined in the list of acronyms at the beginning of the draft Permit. Please include it in the Acronym List: CABQ - City of Albuquerque		
399.	DOE 399	223-230	Permit Attachment 7	DOE	DOE/Sandia note several instances that mention mixed wastes in requirements that are applicable to both hazardous and mixed wastes (e.g., the second paragraph in Section 7.0). Please revise throughout this Permit Attachment. Please see Comment No. 1 for additional discussion.		
400.	DOE 400	223	Permit Attachment 7, 7.0	DOE	The information for Type C bunkers (Bunker 37118) in the Application was updated in March 2007 to correct typographical errors; the maximum size is 2,400 square feet. Also, the wastes may include large pieces of equipment and other self-contained items, as discussed in Comment No. 252. To clarify, please revise to read:		

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					The Manzano Storage Bunkers (MSB) comprise five Units, each with approximately 1,600 to 2,400 square feet of space, and used for storage of mixed wastes in containers as specified in Permit Attachment 2.		
401.	DOE 401	224	Permit Attachment 7, 7.2.1	DOE	The roof is not waterproofed, as the concrete is sufficiently impervious to water and the soil slope serves to direct water away. DOE/Sandia note the storage capacity for Bunker 37034 in the draft Permit is not consistent with the current permitted capacity as specified in Part A of the Application approved by NMED on June 21, 2002. It is also not consistent with Part A or Part B of the current Application, as discussed in Comment No. 6. Please revise to read: *The bunker is covered by at least 2 ft of earthen fill over a 6-in. thick concrete roof. The soil surface above and around each bunker is sloped for water to drain away from the bunker. Access to the waste management area of the bunker is through two sets of double doors that are 9 ft high and 9 ft wide. One set is at the entrance to the access tunnel, and the other set is at the entrance to the main chamber.* *Based upon the available floor space (2,100 square feet [ft2]) in Bunker 37034, the maximum storage capacity shall be limited to 25,080 gallons.*		
402.	DOE 402	224	Permit Attachment 7, 7.2.2	DOE	The roof is not waterproofed, as the concrete is sufficiently impervious to water and the soil slope serves to direct water away. The information for Type C bunkers (Bunker 37118) in the Application was updated in March 2007 to correct typographical errors. DOE/Sandia note the storage capacity for Bunker 37118 in the draft Permit is not consistent with the current permitted capacity as specified in Part A of the Application approved by NMED on June 21, 2002 or with Part A or Part B of the current Application, as discussed in Comment No. 6. Please revise to read: *Each bunker is covered by at least 2 ft of earthen fill over a 6-in. thick concrete roof. The soil surface over and around each bunker is sloped for water to drain away from the bunker.* *Based upon the available floor space (approximately 2,400 ft2) in Bunker 37118, it can hold a maximum of 35,200 gallons.*		
403.	DOE 403	225	Permit Attachment 7, 7.2.3	DOE	The roofs are not waterproofed, as the concrete is sufficiently impervious to water and the soil slope serves to direct water away from each bunker. DOE/Sandia note the storage capacity for Type D bunkers		

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					(Bunkers 37045, 37055, and 37057) in the draft Permit is not consistent with the current permitted capacity as specified in Part A of the Application approved by NMED on June 21, 2002 or with Part A or Part B of the current Application, as discussed in Comment No. 6. Please revise to read: *Each bunker is covered by at least 2 ft of earthen fill over a 6-in. thick concrete roof. The soil surface over and around each bunker is sloped so that water drains away from each bunker.* *Based on the available floor space (1,600 ft2) in each of the Type D bunkers, the maximum storage capacity of each bunker shall be limited to 18,480 gallons.*		
404.	DOE 404	225	Permit Attachment 7, 7.3.2	DOE	This description is not applicable to the MSB and does not reflect the information included in the Application. Please revise to read: *Traffic volumes on Wyoming and Eubank Boulevards are generally light to moderate. Traffic volumes on Pennsylvania Avenue are generally light. Vehicle types are generally cars, light- and medium-duty trucks, and vans. Flatbed trucks or trailers also use primary traffic routes to transport waste containers.*		
405.	DOE 405	225	Permit Attachment 7, 7.3.3	DOE	DOE/Sandia note the Application includes descriptions of traffic control signs and signals as illustrations of the configuration at the time the Application was submitted. These are not directly related to hazardous or mixed waste management operations at the MSB. Please revise to read: *Traffic control signals within Manzano Base include stop signs, yield signs, and posted speed limits as appropriate.*		
406.	DOE 406	226	Permit Attachment 7, 7.5	DOE	The Application includes numerous descriptions of items such as spill pallets and spill pans that illustrate ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. DOE/Sandia note that these items are available from multiple vendors, and they come in sizes, shapes, and materials for various applications, including but not limited to applications where it is necessary for the units to be impervious to corrosives, solvents, and other liquids. Thus, the description represents a typical design rather than a prescriptive specification because the units are selected for the specific application. The prescriptive requirements regarding design and features of spill pallets are unnecessary because the Permittees are required to provide adequate secondary containment as required by 40 CFR 264.175(b)(1-3). Additionally, DOE/Sandia note that the requirement to immediately clean liquids upon detection is not consistent with the information provided in the Application and may lead to operations that are less protective of worker safety (e.g., unnecessary exposure to chemical or radiological hazards).		

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					Please revise to read: *In each MSB bunker, containers holding liquid hazardous or mixed wastes shall be stored on portable spill pallets or pans. These are commercially available units consisting of a tub made of a heavy-duty inert material such as polyethylene or polypropylene with an inert grating cover. The pallets come in various sizes and capacities designed for use with 55-gallon drums or other standard containers. The containers shall be stored in a stable configuration; the weight shall not exceed the grating capacity. The Permittees shall take immediate action to evaluate and remove accumulated liquids in the spill pallets upon discovery.*		
407.	DOE 407	226	Permit Attachment 7, 7.6	DOE	DOE/Sandia note 40 CFR 264.34 does not require that personnel have access to other personnel at all times, and as this is discussed in Section 7.6.3.2 of this Permit Attachment, it is not necessary to detail it in this introduction to Section 7.6. Rather, the requirement is for "immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee", "whenever hazardous waste is being poured, mixed, spread, or otherwise handled". Working in pairs is an illustration of means of communication that are typically available. DOE/Sandia note that requiring two personnel to be present at all times is not necessary (e.g., during inspections when wastes are not being handled). Specific requirements (such as turning out the lights) that are appropriate for commonly encountered situations are best addressed through the training program in Permit Attachment 14. The training materials are available in the Operating Record for NMED review. Please revise to read: *Only personnel trained in accordance with the Training Plan in Permit Attachment 14 shall be allowed to handle waste at the MSB.*		
408.	DOE 408	227	Permit Attachment 7, 7.6.2	DOE	Use of a portable sign is not required to identify the containers of wastes as ignitable and/or reactive in 40 CFR 264.17(a); it is also redundant with the labels on individual containers. Use of signs is included in the Application as an illustration of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. Please revise to read: *Ignitable and reactive wastes shall be segregated from other wastes within each bunker and each container shall be prominently labeled or identified with a portable sign. The Permittees shall protect these wastes from sources of ignition or reaction. Although water-reactive wastes will not be routinely stored in the bunkers, if present, they shall be segregated from other wastes and similarly protected.*		
409.	DOE 409	227	Permit	DOE	DOE/Sandia note 40 CFR 264.32(d) includes several types of		

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			Attachment 7, 7.6.3.1		fire-fighting systems. The Application includes descriptions of fire-fighting equipment as illustrations of the emergency response resources currently available and the agreements currently in place. All emergency response resources are more completely described in the Contingency Plan in Permit Attachment 12. Please revise to read: *Information about fire-fighting services and other required equipment, including testing and maintenance of the equipment located at each of the MSB bunkers, is provided in the Contingency Plan in Permit Attachment 12. [40 C.F.R. § 264.32]*		
410.	DOE 410	227	Permit Attachment 7, 7.6.3.2	DOE	DOE/Sandia note 40 CFR 264.34 does not require that personnel have access to other personnel and multiple means of communication at all times. Rather, the requirement is for "immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee", "whenever hazardous waste is being poured, mixed, spread, or otherwise handled". Two-way radios, pagers, and cellular telephones are illustrations of means of communication that are typically available. DOE/Sandia note that requiring all personnel to use particular communications equipment at all times is not necessary. Please revise to read: *If no communications or alarm system is immediately available, on-site personnel working alone shall carry two-way radios or cellular telephones so that they can contact emergency personnel. Alternatively, waste management personnel shall work in pairs and maintain visual or voice contact, and one member of the pair shall have access to two-way radios, cellular telephones, or the communications and alarm systems described in Permit Attachments 5, 7, and 12 [40 C.F.R. § 264.34].*		
411.	DOE 411	228	Permit Attachment 7, 7.6.4.1	DOE	DOE/Sandia note the Application includes descriptions of typical waste handling equipment and operations as illustrations of ways in which DOE/Sandia meet the requirements of 40 CFR 264 and protect human health and the environment. The equipment and detailed operations are typical rather than prescriptive because they are continually adjusted as needed for the specific hazardous and mixed wastes being handled at any time in the Permitted Units. Including prescriptive handling requirements for fastening containers to lifts is redundant, and the requirement to use specific fastening methods or waste handling equipment may lead to operations that are less protective of worker safety (e.g., containers that are strapped together may block the forklift driver's view and be more cumbersome than using a special forklift attachment to transport two drums at a time). Additionally, 40 CFR 270.14(b)(8)(i) addresses contents of permit applications and is not directly relevant to the requirements of 40 CFR 264 that Permittees are required to		

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					meet. Please delete the regulatory citation. As discussed in Comment No. 407, specific requirements (such as awareness of weather conditions) that are appropriate for commonly encountered situations are best addressed through the training program in Permit Attachment 14. The training materials are available in the Operating Record for NMED review. Please revise to read: *Vehicles, forklifts, drum dollies, pallet jacks, and other tools used for the transport and management of wastes shall be used as appropriate during loading and unloading operations. Small containers may be loaded or unloaded manually from waste-transport vehicles. A forklift, hydraulic lift, or other mechanical device may be used as needed to load or unload larger containers. In all cases, containers of waste shall be handled in a manner to prevent shifting or falling. Waste-handling equipment shall be maintained and operated in accordance with manufacturers' guidance.* *Only personnel trained in accordance with the Training Plan in Permit Attachment 14 shall be allowed to handle waste at the MSB.*		
412.	DOE 412	228	Permit Attachment 7, 7.6.4.2	DOE	The concrete roof and walls are not waterproofed, as the concrete is sufficiently impervious and the soil slope serves to direct water away from each bunker. Please revise to read: *The concrete provides a barrier to moisture.*		
413.	DOE 413	228	Permit Attachment 7, 7.6.4.3	DOE	DOE/Sandia note this requirement is not consistent with conditions in the Permit Parts or Attachments applicable to the HWMU, TTU, and AHCU. Additionally, please delete the regulatory citation as discussed in Comment No. 411 and revise to read: *The Permittees shall conduct waste management activities at the MSB in accordance with this Permit.*		
414.	DOE 414	228	Permit Attachment 7, 7.6.4.4	DOE	DOE/Sandia note that storage, which is a waste management activity addressed in this condition, will not be affected by equipment failures or power outages. Additionally, please delete the regulatory citation as discussed in Comment No. 411 and revise to read: *Hazardous and mixed waste management activities at the MSB that are affected by equipment failures or power outages shall be suspended in response to such outages. Electrical power is not required for safe operation. Equipment and/or power failures shall not result in a loss of hazardous or mixed waste containment.*		
415.	DOE 415	223	Permit Attachment 7,	DOE	The MSB are not located in TA-V. Please revise to indicate the correct location:		

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			7.0		The MSB are located approximately one mile east of the road leading to the entrance of TA-III and TA-V, at the end of Pennsylvania Avenue.		
416.	DOE 416	223	Permit Attachment 7, 7.0	DOE	The information for Type C bunkers (Bunker 37118) in the Application was updated in March 2007 to correct typographical errors. Please revise to incorporate the current correct information: The Manzano Storage Bunkers (MSB) comprise five Units, each with approximately 1600 to 2400 square feet of space, and are used for storage of hazardous or mixed wastes in containers.		
417.	DOE 417	224	Permit Attachment 7, 7.2.2	DOE	The information for Type C bunkers (Bunker 37118) in the Application was updated in March 2007 to correct typographical errors. Please revise to incorporate the current correct information: Please revise to read: *The main chamber is approximately 83 ft long, 29 ft wide and 12.8 ft high.*		
418.	DOE 418	226	Permit Attachment 7, 7.5	DOE	A detailed description of each bunker can be found in Permit Attachment 7. Please delete this sentence, as it is unnecessary.		
419.	DOE 419	After 229	Permit Attachment 7	DOE	The figures and photographs do not reflect the most current information provided in the Application. DOE/Sandia will provide updated figures and photographs under separate cover.		
420.	DOE 420	231	Permit Attachment 8, Table 8-1	DOE	DOE/Sandia note some of the liquid SASN waste that is pumped to the TTU potentially exhibits the hazardous waste characteristic of corrosivity; it contains nitric acid, but is not aqueous. It is not known whether this waste is sufficiently corrosive to corrode steel in accordance with the criteria in 40 CFR 261.22(a)(2), because safety considerations (due to the presence of explosives in the waste) preclude the testing needed to make a determination. DOE/Sandia note the destruction of the waste during thermal treatment serves to deactivate it and effectively treat the corrosive characteristic that may be present. A footnote should be added to the table to indicate that the D002 code is potential. Toluene is not currently used in waste generating activities at the TTU, but may be used in the future; thus it should be included in this table as Line 6. Please revise the table as follows: *Line Number: 2* *EPA Hazardous Waste No. D002 ** *Line Number: 6* *EPA Hazardous Waste No.: F005*		

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					Process Code: X01 Thermal Treatment ** Some of the wastes are potentially corrosive*		
421.	DOE 421	232 - 244	Permit Attachment 8, Table 8-2	DOE	X01 is used only at the TTU and should be deleted from Table 8-2. Several lines (Lines 401-410) are displaced and the handling methods do not correspond with the wastes. Several lines (Lines 442-446) are repeated at the end of the table. Please revise as follows: *Line Number: 374* *Process Code: S01, T04 - Macroencapsulation, stabilization, physical treatment* *Line Number: 376* *Process Code: S01, T04 – Macroencapsulation, stabilization, physical treatment* *Line Number: 400* *EPA Hazardous Waste No.: D001* *Process Code: S01, T04, - Thermal deactivation, chemical deactivation, physical treatment* *Line Number: 401* *EPA Hazardous Waste No.: D002* *Line Number: 402* *EPA Hazardous Waste No.: D003* *Process Code: S01, T04 - Thermal deactivation, chemical deactivation, physical treatment* *Line Number: 403* *EPA Hazardous Waste No.: D004* *Line Number: 404* *EPA Hazardous Waste No.: D005* *Line Number: 405* *EPA Hazardous Waste No.: D006* *Process Code: S01, T04 - Stabilization, macroencapsulation, physical treatment* *Line Number: 406* *EPA Hazardous Waste No.: D007* *Line Number: 407* *EPA Hazardous Waste No.: D008* *Line Number: 408* *EPA Hazardous Waste No.: D009* Line Number: 409 EPA Hazardous Waste No.: D010		

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					Line Number: 410 *EPA Hazardous Waste No.: D011* *Line Number: 442* *EPA Hazardous Waste No.: D043*		
422.	DOE 422	232 - 244	Permit Attachment 8, Table 8-2	DOE	Stabilization is listed for many wastes in this Table. DOE/Sandia use it to immobilize toxicity characteristic metals, and note many stabilization agents also eliminate free liquids. Solidification to eliminate free liquids may be an additional treatment goal for the wastes listed and should be included with stabilization throughout this table. Please note the changes requested in the preceding comment about displaced lines and handling codes are incorporated into Lines 403-410 below. Please revise as follows: *Line Number: 221* *Process Code: S01, T04 – Stabilization/solidification* *Line Number: 225* *Process Code: S01, T04 – Stabilization/solidification* *Line Number: 372* *Process Code: S01, T04 – Macro-encapsulation, stabilization/solidification, physical treatment* *Line Number: 373* *Process Code: S01, T04 – Macro-encapsulation, stabilization/solidification, physical treatment* *Line Number: 374* *Process Code: S01, T04 - Macroencapsulation, stabilization, physical treatment* *Line Number: 376* *Process Code: S01, T04 – Macro-encapsulation, stabilization/solidification, physical treatment* *Line Number: 403* *EPA Hazardous Waste No.: D004* *Process Code: S01, T04 – Stabilization/solidification, macroencapsulation, physical treatment* *Line Number: 404* *EPA Hazardous Waste No.: D005* *Process Code: S01, T04 - Thermal deactivation, chemical deactivation, stabilization/solidification, macroencapsulation, physical treatment* *Line Number: 405*		

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					EPA Hazardous Waste No.: D006 *Process Code: S01, T04 – Stabilization/solidification, macroencapsulation, physical treatment* *Line Number: 406* *EPA Hazardous Waste No.: D007* *Process Code: S01, T04 – Stabilization/solidification, macroencapsulation, physical treatment* *Line Number: 407* *EPA Hazardous Waste No.: D008* *Process Code: S01, T04 – Stabilization/solidification, macroencapsulation, physical treatment* *Line Number: 408* *EPA Hazardous Waste No.: D009* *Process Code: S01, T04 – Stabilization/solidification, macroencapsulation, amalgamation, physical treatment* *Line Number: 409* *EPA Hazardous Waste No.: D010* *Process Code: S01, T04 – Stabilization/solidification, macroencapsulation, physical treatment* *Line Number: 410* *EPA Hazardous Waste No.: D011* *Process Code: S01, T04 – Stabilization/solidification, macroencapsulation, physical treatment*		
423.	DOE 423	232 - 244	Permit Attachment 8, Table 8-2	DOE	Macroencapsulation should be included as a treatment code for all wastes F001 through F005, and D004 through D011, D018 through D043 for consistency with the treatment capabilities at the RMWMU as described in Permit Attachment 9. Please revise the rows (Lines 417 – 442) to add macroencapsulation.		
424.	DOE 424	244	Permit Attachment 8, Table 8-3	DOE	Please see Comment No. 6 for discussion of reduction in storage and treatment capacity of Permitted Units, including the HWMU. Please revise capacities to be consistent with capacities in Permit NM5890110518-1 and the Application: ***S01 Container Storage*** *Capacity: 59,950 gallons* *Associated Structure/Building: Building 958* *Capacity: 7,590 gallons* *Associated Structure/Building: Building 959* *Capacity: 5,000* *Associated Structure/Building: Modular Storage Building 958B*		

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					Capacity: 5,000 gallons *Associated Structure/Building: Modular Storage Building 958C* *Total S01 Capacity 77,540 gallons*		
425.	DOE 425	245	Permit Attachment 8, Table 8-5	DOE	Please see Comment No. 6 for discussion of reduction in storage and treatment capacity of Permitted Units, including the RMWMU. Please revise as follows: • *Revise storage capacities to be consistent with capacities in the Application.* • *Delete the additional modular storage buildings. They were proposed in the Application as part of the Consolidated Waste Management Facility in November 2004 and were deleted in October 2005.* • *Incorporate treatment processes and capacities from the Application.* • *Include solidification with stabilization.* Revise Table 8-5 as follows: ***S01 Container Storage*** *Capacity: 13,420 gallons* *Associated Structure/Building: Building 6920* *Capacity: 7,810 gallons* *Associated Structure/Building: Building 6921* *Capacity: 83,160 gallons* *Associated Structure/Building: Building 6925* *Capacity: 83,160 gallons* *Associated Structure/Building: Building 6926* *Capacity: 1,100 gallons* *Associated Structure/Building: Modular Storage Building* *Capacity: 1,100 gallons* *Associated Structure/Building: Modular Storage Building* *Capacity: 19,800 gallons* *Associated Structure/Building: Asphalt area N, E, and W of Building 6920* ***Total S01 Capacity: 209,550 gallons*** ***T04 Other Treatment (in containers)*** *Description: Chemical deactivation* *Capacity: 65 gallons/day* *Associated Structure/Building: Buildings 6920, 6921*		

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					Description: Macroencapsulation *Capacity: 840 gallons/day* *Associated Structure/Building: Buildings 6920, 6921, 6925* *Description: Stabilization/solidification* *Capacity: 550 gallons/day* *Associated Structure/Building: Buildings 6920, 6921* *Description: Thermal deactivation* *Capacity: 10 pounds/hour* *Associated Structure/Building: Buildings 6920, 6921* *Description: Amalgamation* *Capacity: 2 pounds/hour* *Associated Structure/Building: Buildings 6920, 6921* ***Total T04 Capacity: 1,455 gallons/day and 12 pounds/hour*** ***T04 Other Treatment (physical treatment)*** *Description: Physical treatment* *Capacity: 20 pounds/hour* *Associated Structure/Building: Buildings 6920, 6921* ***Total T04 Capacity: 20 pounds/hour***		
426.	DOE 426	246	Permit Attachment 8, Table 8-6	DOE	Please see Comment No. 422 regarding stabilization and solidification. Please see Comment No. 6 for discussion of reduction in storage capacity of the Permitted Units, including the AHCU. Please revise as follows to include solidification and to be consistent with capacities in the Application: ***S01 Container Storage*** *Description: Container storage area* *Capacity: 3,520 gallons* *Associated Structure/Building: Building 6597* *Description: Storage silos* *Capacity: 1,456 gallons* *Associated Structure/Building: Building 6597* *Description: Hot Cell* *Capacity: 900 gallons* *Associated Structure/Building: Building 6597* *Description: Fume Hood* *Capacity: 110 gallons (capacity included in work area)* *Associated Structure/Building: Building 6597*		

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					Description: Work Area *Capacity: 2,200 gallons* *Associated Structure/Building: Building 6597* ***Total S01 Capacity: 6,976 gallons*** ***T04 Other Treatment (in containers)*** *Description: Stabilization/solidification* *Associated Structure/Building: Building 6597*		
427.	DOE 427	246	Permit Attachment 8, Table 8-7	DOE	Please see Comment No. 6 for discussion of reduction in storage and treatment capacity of Permitted Units, including the MSB. Please revise storage capacities to be consistent with capacities in the Application: ***Line 1 S01 Container Storage*** *Capacity: 25,080 gallons* *Associated Structure/Building: Type B Bunker Bunkers 37034* *Capacity: 35,200 gallons* *Associated Structure/Building: Type C Bunker Bunkers 37118* *Capacity: 55,440 gallons* *Associated Structure/Building: Type D Bunkers Bunkers 37045, 37055, and 37057* ***Total S01 Capacity: 115,720 gallons***		
428.	DOE 428	247 - 289	Permit Attachment 9	DOE	DOE/Sandia note several instances that mention either hazardous or mixed wastes in requirements that are applicable to both (e.g., the title of Table 9-1). Please revise throughout this Attachment. DOE/Sandia also note numerous parts of this Permit Attachment that address hazardous constituents; these should address hazardous waste constituents instead. Please revise throughout this Attachment. Please see Comment No. 1 for additional discussion.		
429.	DOE 429	248	Permit Attachment 9, 9.1.1	DOE	As discussed in Comment No. 1, DOE/Sandia do not believe it is necessary or appropriate to specify whether radionuclides are present or absent in RCRA-regulated wastes managed at any of the Units except the TTU. Accordingly, please revise to read: *1. Hazardous Waste Management Unit (HWMU): Container storage and repackaging of hazardous and mixed wastes;* *2. Thermal Treatment Unit (TTU): Thermal treatment of a reactive hazardous waste stream by open burning in a miscellaneous unit;* *3. Radioactive and Mixed Waste Management Unit (RMWMU): Container storage and repackaging of hazardous*		

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					and mixed wastes, and treatment of hazardous and mixed wastes in containers; *4. Auxiliary Hot Cell Unit (AHCU): Container storage and repackaging of hazardous and mixed wastes, and treatment of hazardous and mixed wastes in containers; and* *5. Manzano Storage Bunkers (MSB): Container storage of hazardous and mixed wastes in five bunkers.* *6. Corrective Action Management Unit (CAMU): post-closure care and long-term containment of hazardous and mixed remediation waste.*		
430.	DOE 430	249	Permit Attachment 9, 9.1.2	DOE	This description of operations at SNL/NM is not fully relevant to waste analysis or operations at the Permitted Units. In order to present the information necessary for this Permit Attachment, please revise to read: *Hazardous and mixed wastes generated from Facility operations are managed at the Permitted Units. These include a wide variety of wastes generated from research, design, development, and testing activities, laboratory support, Resource Conservation and Recovery Act (RCRA) Corrective Action activities (through the Permittees' Environmental Restoration Project); and decontamination and decommissioning (D&D) activities. The Permittees also accept small volumes of hazardous and mixed wastes from off-site operations and facilities. Some of the mixed wastes also meet the definition of low-level or transuranic waste as these terms are defined in DOE Order 435.1-1 (DOE, 2001, as revised and updated).* *Table 9-1 summarizes general information on hazardous and mixed waste types managed at the Permitted Units.*		
431.	DOE 431	250	Permit Attachment 9, Table 9-1	DOE	DOE/Sandia note that explosive and reactive wastes may also exhibit the hazardous waste characteristic of toxicity due to the presence of barium. Toluene is not currently used in waste-generating activities at the TTU. However, it may be used in the future. The explosive waste treated at the TTU also may potentially exhibit the hazardous waste characteristic of corrosivity as discussed in Comment No. 420. Additionally, leachate generated at the CAMU is included with decontamination, purge and treatment waters rather than with treated wastes and treatment residues. Please revise as follows: *Waste Type Description: Explosive Waste* *Potential EPA Hazardous Waste Numbers: D002*		

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					Potential Hazardous Waste Constituents and/or Characteristics in the Waste: Corrosivity *Waste Type Description: Explosive Waste* *Potential EPA Hazardous Waste Numbers: D005* *Potential Hazardous Waste Constituents and/or Characteristics in the Waste: Barium* *Waste Type Description: Explosive Waste* *Potential EPA Hazardous Waste Numbers: F005* *Potential Hazardous Waste Constituents and/or Characteristics in the Waste: Toluene* *Waste Type Description: Decontamination, Purge, and Treatment Waters* *Potential EPA Hazardous Waste Numbers: F039* *Potential Hazardous Waste Constituents and/or Characteristics in the Waste: Leachate* *Waste Type Description: Treated Waste and Treatment Residues* *Potential EPA Hazardous Waste Numbers: ~~F039~~* *Potential Hazardous Waste Constituents and/or Characteristics in the Waste: ~~Leachate~~*		
432.	DOE 432	254	Permit Attachment 9, 9.2.5	DOE	This does not fully or clearly describe the batteries that are managed at the Permitted Units, particularly with respect to the properties of spent thermal batteries. Please revise to read: *Batteries, in solid or liquid waste form, or both, are used in numerous Facility activities, and unused or spent batteries may exhibit the hazardous waste characteristics of reactivity, corrosivity, or toxicity (due to the presence of metals such as cadmium, mercury, and lead). Information about the battery content, hazards, and EPA Hazardous Waste Numbers is determined using manufacturer's data. Unfired and spent thermal batteries are managed at the Permitted Units; thermal batteries are specialized single-use batteries that contain electrolytes and reactive materials. When a thermal battery is "fired" or used to produce power, the reactive materials undergo chemical reactions that generate heat; the heat activates the electrolytes, and the battery produces power. Unfired thermal batteries contain metals and exhibit the hazardous waste characteristics of reactivity and toxicity. Many types of spent thermal batteries no longer contain reactive material; some types require additional deactivation of reactive materials after firing. Lithium batteries may exhibit the characteristic of reactivity, while mercury batteries, silver batteries, and nickel-cadmium batteries may exhibit the characteristic of toxicity.*		
433.	DOE 433	254	Permit Attachment 9,	DOE	DOE/Sandia note that availability of historical information and other acceptable knowledge is not limited to ER project sites;		

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			9.2.8		it is available for all areas of the Facility. Therefore the use of acceptable knowledge to limit sampling and analysis in characterization should not be limited to ER project sites. Please revise to read: *This waste type includes soil from ER Project activities, or other cleanup and excavation operations. Acceptable knowledge may be used to limit sampling and analysis for the hazardous constituents most likely to be present in the waste, as appropriate.*		
434.	DOE 434	255	Permit Attachment 9, 9.2.10	DOE	Please see preceding Comment Nos. 431 and 433 regarding inclusion of leachate generated at the CAMU and the availability of historical information and other acceptable knowledge. Please revise to read: *This waste type includes decontamination, purge, and treatment water (i.e., wastewater) from ER Project, D&D activities, and waste management. Decontamination, purge, or treatment waters may be listed wastes (e.g., leachate generated at the CAMU), contaminated with or contain listed waste(s), or may exhibit a hazardous waste characteristic (i.e., corrosivity and/or toxicity). Acceptable knowledge may be used to limit sampling and analysis for the hazardous constituents most likely to be present in the waste, as appropriate.*		
435.	DOE 435	256	Permit Attachment 9, 9.3.2	DOE	DOE/Sandia note that wastes treated at the RMWMU and AHCU include radioactive mixed wastes that are not amenable to sampling and analysis; process knowledge is often available for these wastes, and the Permittees use it in characterizing the waste. The waste characterization process consists of obtaining sufficient information to make a hazardous waste determination, identify waste codes, and establish appropriate management at the Permitted Unit(s). The Permittees will obtain as much information as necessary to meet these objectives in each case. Accordingly, please revise to read: *Hazardous and mixed wastes that are treated at the Radioactive and Mixed Waste Management Unit (RMWMU) and Auxiliary Hot Cell Unit (AHCU) include items that are not amenable to sampling and analysis, manufactured items, and wastes generated from specific R&D processes and activities; the Permittees characterize these wastes using process knowledge, which shall be supplemented by sampling and analysis, as appropriate. Process knowledge shall include adequate knowledge of the item or an adequate account of the raw materials used in generating the waste. To ensure that proper and accurate waste characterization occurs, the characterization process outlined in Section 9.4 shall be used as well as sampling and analysis, as appropriate.* *Hazardous and mixed wastes that are treated at the RMWMU*		

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					and AHCU include:		
436.	DOE 436	256	Permit Attachment 9, 9.3.2	DOE	The treatment goals are not entirely accurate. Chemical deactivation is performed to eliminate one or more of the characteristics. DOE/Sandia treat primary and other explosives at the Permitted Units. Additionally, stabilization is not performed to eliminate free liquids in the waste, although such solidification often occurs. Please revise as follows to clarify the nature and goals of the processes: *Treatment processes and the associated treatment goals at the RMWMU and AHCU are discussed in Permit Attachments 5 and 6, respectively. The processes include:* *1. Chemical deactivation to eliminate the hazardous waste characteristics of ignitability, corrosivity, and/or reactivity;* *2. Thermal deactivation to eliminate the hazardous waste characteristic of reactivity in reactive wastes, including explosives;* *3. (not included in comment)* *4. Stabilization and/or solidification to immobilize hazardous waste toxicity characteristic metals or eliminate free liquids, or both;* *5. Macro-encapsulation to immobilize hazardous waste constituents; and* *6. (not included in comment)* *The hazardous and mixed wastes to be treated at the RMWMU and AHCU are typically assigned one or more of the following EPA Hazardous Waste Numbers: D001-D011, D018-D043, and F001-F005.*		
437.	DOE 437	257	Permit Attachment 9, 9.3.2.2	DOE	As discussed in the Application, the explosive deactivation device used at the RMWMU was designed to contain a detonation of 25 grams TNT-equivalents of explosive wastes; (i.e., the energy that would be released through detonation of 25 grams of TNT). Individual explosive compounds may release more or less energy per gram than TNT; thus the actual quantity of explosive treated varies and may exceed 25 grams. Additionally, the explosive may be a component of a waste item; thus the total quantity of waste may exceed 25 grams. DOE/Sandia also note that thermal batteries may be deactivated by introducing an electrical current to individual batteries; the current induces a chemical reaction that deactivates the reactive material contained in the battery and generates heat. This treatment, which does not take place within the deactivation device, is best described as chemical		

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					rather than thermal deactivation of the reactive component of the battery. Accordingly, thermal batteries should also be included in the discussion of chemical deactivation. Please revise to read: *Hazardous and mixed wastes are treated by thermal deactivation at the RMWMU to remove the hazardous waste characteristic of reactivity. These wastes generally consist of solid items and are generated primarily from R&D activities and ER Project activities. The quantity of explosive or reactive waste that is thermally deactivated at the RMWMU at any one time shall not exceed the quantity equivalent to 25 grams of TNT.*		
438.	DOE 438	257	Permit Attachment 9, 9.3.2.1 9.3.2.3	DOE	Please revise "mixed wastes" to "hazardous and mixed wastes" in each case. Please see Comment No. 1 and Comment Nos. 428 and 429 for additional discussion.		
439.	DOE 439	257	Permit Attachment 9, 9.3.2.4	DOE	Please see Comment No. 436 regarding stabilization and solidification. DOE/Sandia note that stabilization is also used to treat items that are smaller than hazardous debris as defined in 40 CFR 268.2(h). Please revise to read: *Hazardous and mixed wastes are treated by stabilization and/or solidification at the RMWMU and AHCU to immobilize hazardous waste toxicity characteristic metals or eliminate free liquids, or both. These wastes generally consist of liquids, soils, particulate-type wastes, and manufactured items that are smaller than hazardous debris as defined in 40 CFR 268.2(h).*		
440.	DOE 440	257	Permit Attachment 9, 9.3.2.5	DOE	Please see Comment Nos. 1 and 428 regarding limitations on management of hazardous and mixed wastes. DOE/Sandia note that hazardous or mixed waste debris may be generated as a result of activities other than those listed (e.g., waste management at the Permitted Units). Please revise to read: *Hazardous and mixed waste solid items, including debris, are treated by macroencapsulation at the RMWMU and AHCU to immobilize hazardous waste constituents. Debris is generated primarily by R&D, D&D, and ER Project activities.*		
441.	DOE 441	258	Permit Attachment 9, 9.3.2.6	DOE	Please see Comment Nos. 1 and 428 regarding limitations on management of hazardous and mixed wastes. DOE/Sandia note that the solid items may exhibit more than one hazardous waste characteristic. Please revise to read: *Hazardous and mixed wastes are treated physically at the RMWMU and AHCU to reduce waste volume and change the physical character of the wastes to make them more amenable to subsequent treatment or storage, or both. Hazardous and mixed wastes that are physically treated at the RMWMU and AHCU generally consist of solid items that exhibit the hazardous waste characteristics of ignitability,*		

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					reactivity, and/or toxicity and include waste types: Unknown Solids, Debris, and aerosol cans and other pressurized containers in the Commercial Products waste type. Debris is generated primarily by R&D, D&D, and ER Project activities. R & D and other activities generate waste aerosol cans and other pressurized containers of waste.		
442.	DOE 442	258	Permit Attachment 9, 9.4.1	DOE	DOE/Sandia established a data quality objective (DQO) process which is described in the Site-Wide Waste Analysis Plan in the Application (General Part B, Appendix B, Section B.2.1.1). The process described in the Application is adequate to ensure that the information used to characterize hazardous and mixed wastes is adequate, proper, and appropriate for that purpose. The DOE/Sandia DQOs are not included in the draft Permit, although they are mentioned in several sections of this Permit Attachment. Please revise as follows to incorporate the DQOs presented in the Application: ***9.4.1. Overall Waste Characterization*** *The application of a data quality objective (DQO) process ensures that the type, quantity, and quality of acceptable knowledge or sampling and analysis documentation and data are suitable for accurate waste characterization. DQOs are qualitative and quantitative statements derived from a series of seven planning steps based on the scientific method. DQOs applicable to waste characterization activities at the Facility are summarized below.* *<u>Define the Problem</u>. A solid waste is generated at SNL/NM and will be accepted at a Permitted Unit for storage. RCRA regulations require that hazardous wastes be identified and such wastes be adequately characterized for management at the Unit in accordance with 40 CFR 264.13.* *<u>Identify the Questions to be Answered</u>. Is the solid waste a hazardous or mixed waste? What are the appropriate EPA Hazardous Waste Numbers (waste codes)? Does the waste meet any of the exclusions in 40 CFR 261.4 at the point of generation? Does the waste meet the definition of a listed hazardous waste in 40 CFR 261 Subpart D at the point of generation? Does the waste exhibit any hazardous waste characteristics as defined in 40 CFR 261 Subpart C at the point of generation? Does the hazardous or mixed waste have any properties that require special management?* *<u>Specify the Objectives</u>. The characterization process is designed to provide information needed for the Permittees to:* *• Determine whether a solid waste is a hazardous waste,* *• Assign appropriate waste codes, and*		

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					• Determine management requirements at the Permitted Units.		
443.	DOE 443	258	Permit Attachment 9, 9.4.2	DOE	Throughout the Application, DOE/Sandia used "DR" as a generic term to represent a disposal request (DR) form or an equivalent electronic or written compilation of information describing the hazardous or mixed waste. The draft Permit does not fully discuss the equivalent forms. With respect to the information that is included in a completed DR, DOE/Sandia note the completed DR must contain the information necessary for DOE/Sandia to perform activities at the Permitted Units under the terms of this Permit. Additional information (e.g., treatment requirements) may be included, but the additional information is not needed to satisfy the requirements of this Permit. Please revise to read: *The waste-generation personnel assemble information about the waste and submit it to Permitted Unit personnel using a disposal request (DR) or equivalent electronic or written compilation of information. The initial information from the waste-generation personnel shall be supplemented with other information as appropriate until Permitted Unit personnel have sufficient information to accurately and properly characterize the waste. When completed, the DR shall include information necessary for waste determinations, identifying physical form, accurately assigning EPA Hazardous Waste Numbers, and determining requirements for safely handling, storing, and/or treating the waste at one or more Permitted Units.*		
444.	DOE 444	258	Permit Attachment 9, 9.4.2	DOE	The second paragraph of Section 9.4.2 should be revised to clearly distinguish the roles of the initial waste generators and the Permitted Unit personnel who determine what, if any, additional characterization is required. Accordingly, please revise to read: *Permitted Unit personnel shall, in accordance with this WAP and the requirements of this Permit, determine what, if any, additional characterization is required. The initial waste generator assembles information about the waste and submits it to Permitted Unit personnel using a disposal request (DR) or equivalent form.*		
445.	DOE 445	259	Permit Attachment 9, 9.4.2	DOE	Please see the preceding comment regarding descriptions of the roles of Permitted Unit personnel. DOE/Sandia note this requirement is not clear as written, and the first two sentences should be combined. As discussed in Comment No. 443, the DR may be either written or electronic; thus a waste-tracking database may not be necessary. Additionally, tracking and record-keeping are addressed at the end of Section 9.4.2. Accordingly, please delete the last sentence and revise to read: *If Permitted Unit personnel determine that documentation provided by the initial generators is incomplete or inadequate*		

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					for waste characterization, or find or suspect changes in the waste-generating process, they shall work with the initial generators to obtain the necessary information to properly complete characterization of the waste.		
446.	DOE 446	259	Permit Attachment 9, 9.4.2	DOE	Changes in the waste-generating process or activity are not important unless they affect the waste. Please revise as follows: *The Permittees shall evaluate waste with respect to the following:* *4. If it is the same as a previously generated waste that was a hazardous waste and there have been no substantive changes in the process, then it is a hazardous waste.* *5. If it is the same as a previously generated waste that was not a hazardous waste and there have been no changes in the process that affect the waste or the regulatory status of the waste, then it is not a hazardous waste.*		
447.	DOE 447	259	Permit Attachment 9, 9.4.2	DOE	It is not feasible to check the waste itself, as it is typically inside containers. Permittees check that the container(s) match the information on the DR. Please revise to read: *Before transporting the waste to the appropriate Permitted Unit, the Permittees shall visually check to verify that the waste container(s) match the information on the DR.*		
448.	DOE 448	260	Permit Attachment 9, 9.4.2	DOE	DOE/Sandia note that not all personnel working at a Permitted Unit will generate hazardous or mixed wastes. Additionally, as discussed in Comment No. 443, the DR or compilation of information about the waste may be either written or electronic. Accordingly, please revise to read: *In some cases, Permitted Unit personnel may also generate hazardous or mixed wastes. In these cases, the Permitted Unit personnel shall characterize the waste, compile the information in a DR or equivalent record, and follow the process described above, except that the waste is already present at the Unit.*		
449.	DOE 449	261-264	Permit Attachment 9, Table 9-2	DOE	The row Explosive Waste appears as both the first and last rows on page 262. Please delete one. DOE/Sandia note the rationales in the right column generally correspond to the parameters in the third column, and thus the parameters and rationales should start at the top of each row. For example, in the row shown above, the source of the waste (first parameter) must be known in order to determine whether the waste meets listing criteria (first rationale); thus these should each be listed on the first line to minimize confusion. Also, the waste characterization process in the Application includes mandatory characterization parameters that		

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					constitute minimum acceptable knowledge for each waste. The remaining parameters shown for each waste are selected as needed until adequate information is obtained for managing the waste at one or more Permitted Units. The mandatory parameters and process were shown in Table B-2 in the Application through italics formatting of the first three parameters listed for each waste type, accompanied by an explanatory footnote. In the Permit, DOE/Sandia recommend that it be shown through an explanatory footnote only. Accordingly, after revising the formatting as shown below, please add the footnote shown below to the end of the table: *Waste Type Description: Explosive Waste* *Characterization Method:* *Acceptable* *Knowledge and* *Sampling and* *Analysis,* *as appropriate* *Note: Parameter selection is based on acceptable knowledge for each waste type. The first three items are mandatory and constitute the minimum acceptable knowledge. The remaining parameters are optional and will be selected for each waste type as necessary, if the results of the first three parameters indicate additional information is needed.*		
450.	DOE 450	265	Permit Attachment 9, 9.4.4	DOE	As noted in Comment No. 7, the Application includes descriptions of typical operations as illustrations of waste management operations. The description of blended photographic wastes in the Application is such an illustration. Mixed or blended wastes from any source are characterized adequately using the process described in the Application, thus no restrictions are needed. Further, DOE/Sandia note that mixing and blending activities are subject to this Permit only if they are performed at one of the Permitted Units. Please revise to read: *Waste generating personnel and Permitted Unit personnel blend wastes on a limited basis. Liquid hazardous wastes and non-hazardous wastes may be blended together in a single container. These blending activities are generally limited to wastes of a single type or wastes from a single process (e.g. developing photographs or emptying aerosol cans). For example, photo developing wastes consist of hazardous waste photographic fixers and non-hazardous waste photographic developers; the resulting mixture is characteristic for silver (D011) and may be corrosive (D002). As another example, Permitted Unit personnel may combine*		

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					compatible liquids drained from aerosol cans (commercial chemical products or characteristic liquids) into a single container. The resulting mixture is typically ignitable.		
451.	DOE 451	266	Permit Attachment 9, 9.4.5.1	DOE	Including sampling and analysis in the characterization process for these wastes is not consistent with the characterization requirements outlined in Table 9-3 of the draft Permit or with the Application. DOE/Sandia noted in the Application that personnel safety concerns preclude sampling and analysis of reactive SASN wastes. Therefore, only a portion of the waste would ever be sampled, and only as deemed necessary by the Permittees. Please add Item 3 as indicated. *Reactive hazardous waste to be treated at the TTU shall be characterized through the use of process knowledge and sampling and analysis, as appropriate. With regard to process knowledge:* *1–2 (not included in comment)* *3. Sampling and analysis, if needed, shall be limited to non-SASN explosive contaminated solids or liquids.*		
452.	DOE 452	266	Permit Attachment 9, 9.4.5.2	DOE	Please see Comment No. 442 regarding inclusion of DQOs in Section 9.4.1 of Permit Attachment 9. Not all treatment standards include UHCs; therefore UHCs would be included only in characterization if needed to determine whether the treatment standard is achieved. To address this issue and correct a typographical error (the word "appropriated"), please revise to read: *Wastes to be treated at the RMWMU and AHCU shall be characterized based on acceptable knowledge and supplemented by sampling and analysis, as appropriate, before treatment takes place to meet the DQOs noted above. For wastes that will be treated to meet the treatment standards, characterization shall include analysis of any underlying hazardous constituents (UHCs) that are reasonably expected to be present if UHCs are part of the treatment standard.*		
453.	DOE 453	266	Permit Attachment 9, 9.4.5.3	DOE	The waste characterization process is described in Section 9.4.2, rather than in Section 9.4.1; please correct the reference. Additionally, the draft Permit does not include Section 9.4.1.1. As discussed in Comment No. 442, DOE/Sandia included DQOs in the Application, but they are not included in the draft Permit. Please incorporate the DQOs provided in that comment. As noted in the preceding comment, UHCs are not part of every treatment standard; thus they are not always included in characterization. DOE/Sandia noted in the Application that treatment is conducted to accomplish various objectives; these do not always include complete treatment or treatment		

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					to meet the standards. The list of items should be clarified to indicate "and/or" to be consistent with "one or more" indicated before the list. The paragraph following the list contains a redundant reference to Section 9.4 and requirements for compliance with regulatory requirements and treatment standards for characteristic wastes that are closely related to Item 2 and would be clearer if combined with Item 2. Please revise as follows: *Treated wastes and treatment residues shall be characterized through knowledge of process and supplemented by sampling and analysis data, as appropriate, using the process described in Section 9.4.2 of this Permit Attachment. In addition to the DQOs listed in Section 9.4.1.1 of this Permit Attachment, treated wastes and treatment residues shall be characterized to determine one or more of the following, as appropriate, for each waste:* *1. Whether the waste characteristic of interest has been treated effectively to meet LDR requirements;* *2. Compliance with applicable treatment standards if compliance is a treatment goal (including standards applicable to wastes that are listed solely because they exhibit one or more of the characteristics of ignitability, reactivity, or corrosivity) [40 C.F.R. § 268.40(c) and 40 C.F.R. Part 261, Subpart C];* *3. UHCs that are part of the treatment standard, if compliance is a treatment goal;* *4 (not included in comment)* *5. Suitability for treatment by one or more methods available on-site to meet treatment standards, and / or* *6 (not included in comment)* *These characterization criteria are summarized in Table 9-3. Characterization of treated wastes and treatment residues shall include consideration of both listed and characteristic wastes that were present in the untreated wastes.*		
454.	DOE 454	267	Permit Attachment 9, 9.4.5.4	DOE	As discussed in Comment No. 292, TTU personnel operate the burners for at least 30 minutes after the last visual or audible evidence of waste treatment to ensure that all the explosives are deactivated and the ignitable liquids are combusted. Personnel visually assess the residue when it is removed from the pan. PETN is rarely used and would not		

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					typically be present in the residue. Please revise to read: *The Permittees shall use visual and audible evidence to determine if treatment has been completed, as discussed in Permit Attachment 4, and shall operate the burners for at least 30 minutes after the last visual or audible evidence of waste treatment to ensure that all the explosives are deactivated and the ignitable liquids are combusted. Operating personnel shall visually observe the residue as it is removed from the burn pan to check for the presence of unreacted SASN (and PETN, as applicable).*		
455.	DOE 455	267	Permit Attachment 9, 9.4.5.4	DOE	Please see Comment Nos. 2 and 301. As generators of the water in the catch tank, DOE/Sandia are responsible for compliance with the requirements of 40 CFR 261 and 262. The management of the collected water does not affect TTU operations, and therefore the management requirements should not be specified in this Permit. Please revise to read: *Because the TTU is located outside, some residual soil is present on the steel-lined concrete pad, the pad periodically collects water from precipitation, and the water drains through a filter into a catch tank. If operating personnel wash the pad, the wash water collects in the tank. Untreated waste "kick out" is occasionally ejected from the burn pan during treatment and may be present on the pad. The residual soil and kickout (if present) are collected in the filter when the water drains into the catch tank. The filter and accumulated water in the catch tank shall be characterized using the process described in Section 9.4.2 of this Permit Attachment and shall be managed appropriately.*		
456.	DOE 456	267-268	Permit Attachment 9, 9.4.5.5	DOE	DOE/Sandia note that underlying hazardous constituents (UHCs) are defined in 40 CFR 268.2(i) as "any constituent listed in §268.48, Table UTS – Universal Treatment Standards, except fluoride, selenium, sulfides, vanadium, and zinc, <u>which can reasonably be expected to be present at the point of generation</u> of the hazardous waste at a concentration above the constituent-specific UTS treatment standards." (emphasis added). Thus characterization of treated wastes is limited to UHCs that are reasonably expected to be present. Thermal batteries may be chemically deactivated as discussed in Comment No. 437; the effectiveness of the treatment can be determined visually or through knowledge of process (item 4 in this list). Macroencapsulation is a treatment technology specified in 40 CFR 268.42 Table 1; compliance is achieved through the specified treatment method and no further analysis is needed. Indeed, analysis would be counterproductive, as it would involve breaching the encapsulating material to obtain a sample (item 4 in this list).		

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					As noted in Comment No 437, liquid wastes are solidified and stabilized as needed (items 6 and 7 in this list). Wastes subject to physical treatment may exhibit multiple characteristics and contain more than one listed waste or both; item 10 indicates such wastes have only one characteristic. The final requirement in this section is redundant, as UHCs are addressed as appropriate in each numbered item. Please revise to read. *1. Reactive metals, pyrophoric metal-containing particulates, and oxidizers treated by chemical deactivation at the RMWMU and AHCU are deactivated using water, a water/alcohol solution, other organic liquid, or Portland cement. Alcohol and other organic liquids may exhibit the characteristic of ignitability, and can typically be characterized using knowledge of the treatment process. The Permittees may use acceptable knowledge of process, as appropriate, to determine whether treated waste or treatment residues exhibit the hazardous waste characteristics of reactivity or ignitability, and the flash point test, as appropriate, for determination of ignitability. The treated wastes and treatment residues shall be analyzed for UHCs reasonably expected to be present in the untreated waste if they will not undergo further treatment on-site.* *3. Reactive wastes treated by chemical deactivation at the RMWMU and AHCU and their treatment residues, if any, shall be characterized for the presence of sulfides and cyanides if their presence caused the waste to be reactive. The treated wastes and treatment residues shall be analyzed for UHCs reasonably expected to be present in the untreated waste if they will not undergo further treatment on-site and the information is required for off-site management.* *4. Reactive batteries and other reactive/explosive items treated by thermal or chemical deactivation at the RMWMU and their treatment residues, if any, shall be characterized for reactivity through knowledge of the treatment process and operations or through visual evidence, as appropriate. The wastes may also exhibit the hazardous waste characteristic of toxicity. The treated wastes and treatment residues shall be characterized for UHCs reasonably expected to be present in the untreated waste through process knowledge and/or sampling and analysis, as appropriate, if they will not undergo further treatment on-site and the information is required for off-site management.* *6. Aqueous liquids treated by stabilization/solidification at the*		

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					RMWMU and AHCU (including liquids that have previously been neutralized) shall be checked for the presence of free liquids. The treated wastes shall be analyzed for the UHCs reasonably expected to be present in the untreated waste if they will not undergo further treatment on-site. *7. Oils and organic liquids exhibiting the hazardous waste characteristics of toxicity that are treated by stabilization/solidification at the RMWMU and AHCU shall be characterized through process knowledge and sampling and analysis, as appropriate. The treated wastes shall be analyzed for toxicity characteristic constituents and the UHCs reasonably expected to be present in the untreated waste if they will not undergo further treatment on-site.* *8. Soils and particulates exhibiting one or more of the hazardous waste characteristics of ignitability, reactivity, and toxicity are treated by deactivation and stabilization at the RMWMU and AHCU, and may contain UHCs. Once the treated wastes no longer exhibit the characteristics of ignitability and reactivity, the treated wastes shall be characterized for toxicity through sampling and analysis, as appropriate. The treated wastes shall be analyzed for UHCs reasonably expected to be present in the untreated waste if they will not undergo further treatment on-site.* *9. Wastes exhibiting the characteristic of toxicity or containing or contaminated with spent solvents and that are treated by macroencapsulation at the RMWMU and AHCU shall be visually examined to determine whether treatment met the requirements of the technologies specified in 40 C.F.R. §§ 268.40-45.* *10. Wastes treated by physical treatment include components containing listed wastes and/or exhibiting one or more characteristics of ignitability, reactivity, corrosivity, or toxicity. After components are successfully separated from larger items, all of the items shall be characterized as described in Section 9.4.2.* *12. Liquids and pressurized containers treated by physical treatment at the RMWMU shall be characterized separately following treatment. If the containers are empty as defined in 40 C.F.R. § 261.7, the containers are not hazardous waste. The collected liquids shall be characterized in the same manner as any other waste. If the liquid wastes will not undergo further treatment on-site, they shall be characterized as described in Section 9.4.4 as needed for appropriate off-site management.*		
457.	DOE 457	270	Permit Attachment 9, Table 9-3	DOE	DOE/Sandia note several items in the Table that are unclear. Explosive waste is treated by open burning only at the TTU; no sampling and analysis is needed for characterization of		

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					these wastes. UHCs are not included in the parameters for wastes that have been macroencapsulated. DOE/Sandia note that the waste characterization process in the Application includes mandatory characterization parameters that constitute minimum acceptable knowledge for each waste. The remaining parameters are selected as needed. This was shown in Table B-3 in the Application through italics formatting and an explanatory footnote. The footnote is included in the draft Permit but the items in the table are no longer in italics. Additionally, UHCs in every case are limited to those that are reasonably expected to be present in the untreated waste. Please revise the footnote as noted to address the mandatory characterization parameters in all rows of the table, and revise the specified rows of the table to read: *Waste Type Description: Explosive waste to be treated by open burning* *Characterization Method: Knowledge of Process ~~at the TTU, otherwise knowledge of process and sampling and analysis, as appropriate~~* *Rationale: Verify that waste has same characteristics and constituents as previous wastes treated at TTU* *Determine treatment standards* *~~Identify UHCs reasonably expected to be present in characteristic waste~~* *Waste Type Description: Wastes that have been treated through thermal deactivation* *Parameter: All characterization information previously obtained for untreated waste* *Physical characteristics* *Knowledge of treatment process* *DOT hazard class* *Stability, DOT hazard class* *UHCs* *Waste Type Description: Waste to be treated through stabilization/solidification* *Waste Type Description: Wastes that have been treated through stabilization/solidification* *Waste Type Description: Waste that have been treated through macroencapsulation* *Parameter: All characterization information previously obtained for untreated waste* *Physical characteristics,* *~~UHCs~~* *Knowledge of treatment process*		

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					Note Parameters listed are in addition to those shown in Table 9-2. Parameter selection is based on acceptable knowledge for each waste. Parameters up to and including "knowledge of the treatment process" are mandatory; the others are selected based on obtaining additional information necessary for treatment or for characterizing the treated waste. UHCs are always limited to those constituents that are reasonably expected to be present in the untreated waste.		
458.	DOE 458	273	Permit Attachment 9, 9.5	DOE	DOE/Sandia note this requirement applies only to personnel at the Permitted Units, and one of the regulatory citations is unclear. Please revise to read: *Permitted Unit personnel involved in verification activities shall be trained and qualified for the activities they perform. 40 C.F.R. §§ 264.13(a)(3)(i) and 264.13(b)(4) and 40 C.F.R. § 268.7(b).*		
459.	DOE 459	273	Permit Attachment 9, 9.5	DOE	As discussed in Comment No. 9, the air emissions standards in 40 CFR 264 Subpart CC apply to individual containers rather than to entire container storage units, and containers of mixed wastes are not subject to the standards. Please revise to read: *The Permittees shall review air emissions data and status at least once every 12 months for containers of hazardous wastes subject to 40 C.F.R. Part 264, Subpart CC.*		
460.	DOE 460	274	Permit Attachment 9, 9.5.2	DOE	DOE/Sandia note characterization of wastes in this Permit Attachment is limited to the information needed for proper management of the wastes at the Permitted Units. Additionally, waste streams are defined in Section 9.5.2. Please revise as follows: *In addition to the verification activities described in Section 9.5.1 above for non-routine wastes, the Permittees shall re-evaluate characterization information for routinely generated hazardous waste streams for any of the following reasons (routinely generated waste streams are those that are generated at least once per month in quantities of 30 gallons or greater):* *1–5 (not included in comment)* *6. When regulatory requirements change and additional information is required for proper management of the waste at one or more Permitted Units at the Facility.* *In addition to the re-evaluations performed for one or more of the reasons listed above, the Permittees shall annually re-evaluate waste streams for ten percent by volume of the total routinely generated hazardous and mixed wastes streams at the Facility that meet all of the following conditions:* *1 (not included in comment)*		

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					2. The waste is part of a waste stream as defined in Section 9.5.2; and *3 (not included in comment)* *In each case, the Permittees shall evaluate a single sample randomly selected from the waste stream, and the re-evaluation will be limited to such information necessary for the proper management of the waste at one or more of the Permitted Units at the Facility.*		
461.	DOE 461	275	Permit Attachment 9, 9.6.1	DOE	Please delete "(EPA, 1994)" unless a list of references is included in the final Permit. DOE/Sandia note that waste characterization for the Permitted Units is performed in accordance with 40 CFR 264.13. Per 40 CFR 264.13(a)(2), "analysis may include data developed under part 261 of this chapter, and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes". Thus a reference to 40 CFR 264.13 is more appropriate than a general reference to 40 CFR Part 264. Accordingly, please revise to read: *According to the EPA guidance, acceptable knowledge is defined to include process knowledge, supplemental waste analysis data, and facility records of analysis. Process knowledge is described as data developed under 40 C.F.R. Part 264.13 and existing published or documented data on a specific hazardous waste or a waste generated from similar processes.*		
462.	DOE 462	276	Permit Attachment 9, 9.6.2	DOE	In the case of extensive process information, the Permittees may choose to keep it in another location at the Facility, with a reference in the Unit Operating Record. Please revise to read: *Process knowledge documentation for each RCRA-regulated waste or waste stream is kept in the operating record of the Unit with other waste characterization information, or in a reference file that includes the documents or identifies them and their locations.*		
463.	DOE 463	276	Permit Attachment 9, 9.6.2	DOE	Due to the nature of wastes (e.g., wastes from D&D operations or mixed wastes from research and testing), DOE/Sandia use information from similar processes and additional methods for documenting process knowledge as discussed in the Application. Please revise the list of documentation examples as shown: *12. Analytical data from studies of common industry processes that are similar to or the same as Facility processes;* *16. Information from personnel (documented interviews)*		

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					17. Sampling and analysis data from comparable wastes or waste streams *18. Analysis of a surrogate waste or waste stream*		
464.	DOE 464	276	Permit Attachment 9, 9.7	DOE	This statement requires clarity that these sampling and analysis requirements apply only to wastes and activities subject to this Permit. Please revise to read: *Sampling and analysis shall be performed to provide supplemental information when acceptable knowledge does not provide sufficient information to adequately and properly characterize a hazardous or mixed waste as needed for the activities conducted under this Permit.*		
465.	DOE 465	277	Permit Attachment 9, 9.7.2	DOE	As noted in previous comments, UHCs are limited to those reasonably expected to be present in the untreated waste. Please revise to read: *Pursuant to 40 C.F.R. 264.13(b)(1), Table 9-4 identifies the applicable analytical testing requirements and specific test methods for parameters of interest, including underlying hazardous constituents that are reasonably expected to be present in the untreated waste.*		
466.	DOE 466	277	Permit Attachment 9, 9.7.3	DOE	The 3rd sentence in the first paragraph implies that a representative sample includes distinct samples from each layer, rather than an aliquot or portion from each layer. Please revise to read: *Some wastes separate into distinct layers with time, and representative samples must include portions from each layer.*		
467.	DOE 467	277	Permit Attachment 9, 9.7.3	DOE	As discussed in Comment No. 446, changes in the waste-generating process or activity are not important unless they affect the waste and the information is needed for conducting waste management activities under this Permit. If the waste to be managed at one of the Permitted Units has been identified as clearly hazardous or mixed (e.g., a listed waste or a characteristic waste with toxicity contaminant concentrations well above the regulatory limits), the existing determination is adequate unless the changes were substantive. Please revise to read: *At a minimum, the sampling shall be repeated if the waste-generating process changes in a substantive way, or if inspection of the waste reveals it has changed such that the previous determination is no longer applicable.*		
468.	DOE 468	278	Permit Attachment 9, Table 9-4	DOE	For consistency, the reference to the New Mexico Administrative Code in the first row shown should be deleted. The analytical references to cyanides should be revised to total and amenable (rather than amendable). Also, DOE/Sandia note method numbers listed in this table may change in future updates and revisions to SW-846 and the ASTM standards referenced in the table.		

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					Please revise the footnote to reflect this: *Parameter: Spent nonhalogenated solvents* *Method Numbers: EPA Methods SW-846 (1311, 8260B, 8275A)[f] or equivalent methods[e]* *Methods included in 40 C.F.R. §§ 265.1084(a)(2), (a)(3), and (a)(4)* *b The Permittees shall use the most current methods for analysis. Method numbers shown in this table are subject to change through future updates and may differ from those shown here*		
469.	DOE 469	279	Permit Attachment 9, 9.7.3	DOE	The draft Permit requires that DOE/Sandia comply with the requirements of SW-846 with respect to sampling and analysis conducted under this Permit Attachment. Therefore, if DOE/Sandia find that a particular hazardous or mixed waste is not amenable to the sampling strategies listed in this section of the WAP, any alternate strategy that meets the requirements of Chapter 9 in SW-846 would be appropriate and would meet the requirements of the Permit. Prior NMED approval of the specific strategy should not be required unless the sampling strategy does not meet the requirements of SW-846. As described in Comment No. 7, DOE/Sandia are concerned about applying prescriptive requirements such as prior NMED approval for alternative sampling strategies to the variety of hazardous and mixed wastes managed at the Permitted Units. For example, NMED approval of alternative sampling and analysis plans as described in this draft Permit Condition would necessitate a review before approval; this could prevent timely acquisition of information (e.g., waste characteristics and properties) that is necessary to manage the wastes appropriately at the Permitted Units. Furthermore, DOE/Sandia note sampling information will be retained in the Operating Record and will therefore be available for NMED review. This section does not clearly acknowledge that sampling is not always needed as discussed in the rest of the WAP. DOE/Sandia also note concerns with the detailed information in the detailed sampling elements, and one additional item is needed. Please revise as follows: *When sampling is required, the following strategies shall be used at the Permitted Units, unless an alternative sampling strategy that meets the requirements of SW-846 is determined to be more appropriate for a specific waste item*		

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					based on specific historical, process, or waste information: *1. (not included in comment)* *2. If the sampling or analysis of the waste would pose a serious threat to human health, the Permittees shall evaluate additional sources of acceptable knowledge or make a conservative hazardous waste determination;* *3. (not included in comment)* *4. For solid items whose surface is suspected to be contaminated with hazardous and mixed wastes, such as contaminated equipment, various sampling methods can be employed (e.g., surface swipes, crushing, grinding, and shredding) depending on the physical form of the waste and the suspected contaminants;* *5. (not included in comment)* *6. For the same kind of liquid waste in multiple containers, the sampling strategy shall be determined in accordance with SW-846, Chapter 9;* *7. For the same kind of solid items in multiple containers, the sampling strategy shall be determined in accordance with SW-846, Chapter 9;* *8. (not included in comment)* *9. For solid items that may exhibit hazardous waste characteristics, a sample shall be taken and analyzed from the waste or from a nonwaste item similar to the waste item.*		
470.	DOE 470	283	Permit Attachment 9, 9.8	DOE	DOE/Sandia note "proper and adequate" characterization is limited to that needed for management at one or more SNL Permitted Units in accordance with this Permit. Complete characterization may not be required. DOE/Sandia may use the capabilities at one or more Permitted Units (e.g. remote handling capabilities at the AHCU) to handle hazardous or mixed wastes, obtain additional information, use that information to select further management steps, and prepare the waste as needed. Please revise to read: *Hazardous and mixed wastes from off-site sources may be accepted at the Facility. These wastes and sources include:* *1. Hazardous and mixed wastes generated by Facility employees (or contractors in the service of the Permittees) outside the Facility boundary may be accepted for storage, treatment, or both if the wastes are characterized and transported in compliance with applicable regulatory requirements.*		

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					2. Wastes or waste treatment residues associated with off-site treatment of Facility wastes or waste streams managed or treated by off-site facilities may be returned to the Facility for storage, treatment, or both if all such wastes are characterized and transported in compliance with applicable regulatory requirements. *3. Wastes received from other (non-Facility) off-site DOE facilities for storage, treatment, and/or transport to other off-site facilities, only if all such wastes are characterized and transported in compliance with applicable regulatory requirements, and only if such wastes are not being shipped to the Facility for the purpose of avoiding compliance with the requirements of 40 C.F.R. Part 268.*		
471.	DOE 471	284	Permit Attachment 9, 9.8	DOE	This requirement should clarify that these activities are performed by Permitted Unit personnel. Please see Comment No. 442 regarding the DQOs in Section 9.4.1.1 of the draft Permit. Please revise to read: *Prior to waste shipment to the Facility, Permitted Unit personnel shall obtain a waste transfer request and characterization data from an off-site generator. The Permittees shall review the request and characterization data from the off-site generator for completeness and conformance with the waste characterization DQOs and process described in Section 9.4.1.1 of this Permit Attachment.*		
472.	DOE 472	285	Permit Attachment 9, 9.8.3	DOE	As discussed in Comment No. 7, the Application includes descriptions of typical operations as illustrations of ways in which DOE/Sandia meet applicable regulatory and Permit requirements; use of fingerprint analyses is such an operation. Fingerprint analyses may not be appropriate for all wastes received from off-site sources (e.g., heterogeneous waste form, wastes with radiological concerns). Please revise to read: *The Permittees shall conduct fingerprint analyses, if applicable for the waste, for waste received from off-site facilities in one-time quantities larger than 30 gallons to verify the waste characterization information provided by the generator.*		
473.	DOE 473	287	Permit Attachment 9, 9.9.4	DOE	DOE/Sandia note these requirements are quite prescriptive and somewhat confusing. Also they do not address some scenarios likely to arise during the term of the Permit: • Characterizing treated wastes and treatment residues as required by off-site TSDFs is a duty of the Permittees. The Application included a description to illustrate how the Permittees comply with the 40 CFR 268 requirements applicable to treatment facilities.		

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					• The requirements of this Permit do not apply to the process of characterizing wastes as required by the off-site TSDF(s) receiving them unless this process is directly related to management of the wastes at the Permitted Unit. • Requiring the Permittees to obtain approval from the TSDF before shipment is not related to operation of the Permitted Units, and should not be included in this Permit. • Meeting treatment standards in 40 CFR 268 is not always a goal of treatment at the Permitted Units; thus comprehensive determinations of compliance with the standards are not always appropriate, as discussed in Comment No. 446. • DOE/Sandia request that this Permit condition be limited to requiring compliance with 40 CFR 268 as applicable to treatment facilities that generate residues. The regulatory requirements are complex, and the documentation is extensive. All the documentation will be maintained in the Operating Record, and will be available for NMED inspection and review. • NMED will be better able to achieve control of a complex process through mandating compliance with the regulations, thus accommodating any potential future changes and avoiding inconsistencies that may be discovered in application of the Permit conditions. For example, requirements applicable to treated characteristic wastes are not included in the list of notification requirements in the draft Permit. • Treatment technologies specified in 40 CFR 268.42 and 45 are applicable to treatment operations at the Permitted Units; 40 CFR 268.44 addresses variances from the treatment standards. • DOE/Sandia note it is difficult to tell whether the requirements in this section apply to the waste before or after treatment, and constituents introduced as part of treatment are discussed in Section 9.4.5.3 of the Permit Attachment. • Recordkeeping is addressed in Permit Attachment 13 rather than Permit Attachment 5. Please revise to read: *Hazardous and mixed waste generated through treatment at the Permitted Units (e.g., treated waste, treatment residue) shall be characterized as required by the off-site TSDF receiving the waste to determine whether it meets the applicable LDR treatment standards if meeting the standards was a treatment goal.*		

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					Waste that must meet concentration-based treatment standards prior to shipment off-site for disposal shall be evaluated by the Permittees to determine if applicable constituent concentration levels have been attained, as described in Section 9.9. If a waste must be treated by one or more specified treatment methods (e.g., macroencapsulation) prior to land disposal, analytical testing to certify LDR compliance for the waste before treatment is not necessary, as described in Section 9.9.2. *If acceptable knowledge or use of a specified treatment technology is not appropriate for determining LDR compliance status, the treated waste or treatment residue shall be sampled and analyzed to determine if it meets LDR treatment standards if meeting the standards was a treatment goal. The analysis shall determine the total concentration of hazardous waste constituents in the waste, or the concentrations of hazardous waste constituents in an extract of the waste obtained using Test Method 1311 in SW-846, as appropriate. Analytical results obtained in compliance with LDR requirements shall be retained within the Unit Operating Record. Characterization of treated waste and treatment residues for LDR compliance will include hazardous waste constituents that were introduced as part of the treatment process, as discussed in Section 9.4.5.3.* *For wastes generated through treatment at one of the Permitted Units, the Permittees shall comply with the applicable requirements of 40 C.F.R. § 268.7(b), §268.9(b) and (d), § 268.40, and § 268.49. Hazardous and mixed waste treatment residues and treated wastes that are determined through characterization to meet the applicable treatment standards will be sent to a permitted TSDF for disposal without further treatment. Wastes that have been generated through treatment using technologies specified in 40 C.F.R. § 268.42 and § 268.45 shall also be sent to a permitted TSDF for disposal without further treatment. Treatment residues that do not meet all of the applicable treatment standards shall be sent to a permitted TSDF for further treatment prior to land disposal.* *Whenever the Permittees send waste to an off-site TSDF for treatment or disposal as described above, it shall be in accordance with that facility's waste acceptance criteria. For treated wastes and treatment residues, the Permittees shall review the LDRs as they relate to the further treatment or disposal of the treated waste or treatment residues at the TSDF that intends to accept the waste. Part of this review includes evaluating the waste for UHCs and Universal Treatment Standards, and documenting the results of the evaluation as part of the certification process. UHCs must be*		

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					declared if reasonably expected to be present in D001 through D043 wastes. The Permittees shall complete an appropriate LDR notification form (including signed certification) that accompanies the Uniform Hazardous Waste Manifest as part of the shipping documentation to the TSDF. Records shall be maintained at the Facility as discussed in Permit Attachment 13.		
474.	DOE 474	288	Permit Attachment 9, 9.11	DOE	Please see Comment No. 443 regarding DR and waste-tracking database. DOE/Sandia maintain both written and electronic information in Facility and Unit Operating Records as appropriate for each Permitted Unit. 40 CFR 264 does not include requirements to maintain data in electronic form.. Also, please see Comment No. 462 regarding the location of process knowledge documentation; this is kept in the Operating Record or in a reference file. Please revise to read: *Once the Permittees have adequate and proper characterization for a hazardous and or mixed waste, the information shall be maintained in the Operating Record or in a reference files that includes the documents or identifies them and their locations.*		
475.	DOE 475	248	Permit Attachment 9, 9.0	DOE	Section 9.11 does not explicitly address analytical data records. Please revise to read: *Section 9.11 Records: Section 9.11 includes a discussion of records that shall be maintained for waste characterization.*		
476.	DOE 476	249	Permit Attachment 9, 9.1.2	DOE	DOE/Sandia note there are seven individual items in the list. In order to clearly express the definition of a waste stream, each item must be listed individually. Please revise as follows: *Also, for the purposes of this WAP, a waste stream is defined as waste that is routinely generated as part of a well-defined waste-generating process and is distinguishable from other waste by some unique combination of one or more of the following:* *1 (not included in comment)* *2. EPA Hazardous Waste Numbers;* *3 (not included in comment)* *4. LDR status;* *5 (not included in comment)* *6. Permitted Unit-specific handling requirements; or* *7. Waste compatibility issues.*		
477.	DOE 477	255	Permit Attachment 9,	DOE	This should clearly state that these wastes are generated at the Permitted Units. Please revise to add "are" before		

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			9.2.11		"generated by."		
478.	DOE 478	255	Permit Attachment 9, 9.2.12	DOE	DOE/Sandia note this description is not accurate. Containment system liquids are not necessarily hazardous waste if they contain constituents of characteristic hazardous or mixed wastes. Also, the liquids may be contaminated with listed hazardous wastes. Please revise to read: *Containment system liquids may be contaminated with or contain listed hazardous and mixed waste(s) or exhibit one or more hazardous waste characteristics (i.e., reactivity, corrosivity, ignitability, or toxicity), depending on the source of the accumulated liquid.*		
479.	DOE 479	259	Permit Attachment 9, 9.4.2	DOE	Please see Comment No 444 regarding descriptions of the roles of Permitted Unit personnel. DOE/Sandia note wastes treated at the RMWMU and AHCU are described in Section 9.3; general waste types are described in Section 9.2. Additional information is discussed in Section 9.6 rather than Section 9.3. Please revise to read: *The Permittees shall consider each waste individually. Each waste is one of the general types described in Section 9.2 of this Permit Attachment. Permitted Unit personnel shall use waste type identification in part to determine whether and what kind of additional information is needed to adequately and properly characterize waste. Types of additional information are discussed in Section 9.6 of this Permit Attachment.*		
480.	DOE 480	261	Permit Attachment 9, 9.4.3	DOE	There is no Section 9.4.1.2 in Attachment 9 of the draft Permit, please revise the reference to Section 9.4.2.		
481.	DOE 481	265	Permit Attachment 9, 9.4.4	DOE	Waste characterization is addressed in Section 9.4.2 instead of Section 9.5, please revise accordingly.		
482.	DOE 482	273	Permit Attachment 9, 9.5.1	DOE	The list of items should be clarified to indicate "and/or" to be consistent with "one or more" indicated before the list. Also, the requirements for re-evaluating waste characterization are more accurately located in Section 9.5.2, and the last sentence is confusing due to incorrect punctuation. Please revise as follows: *Wastes shall be selected for further evaluation as part of the verification program using one or more of the following criteria:* *1–3 (not included in comment)* *4. Incomplete or inconsistent documentation; and/or* *5 (not included in comment)* *Operations at the Facility generate a wide variety of routine and non-routine waste streams. Re-evaluating the*		

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					characterization of waste streams is addressed in Section 9.5.2. Section 9.5.2 also addresses non-routine wastes; thus, it includes a condition that the waste not be part of a waste stream.		
483.	DOE 483	274	Permit Attachment 9, 9.5.2	DOE	DOE/Sandia note Section 9.7.3 addresses waste sampling rather than analytical methods; analytical methods are discussed in Section 9.7. Please revise accordingly.		
484.	DOE 484	275	Permit Attachment 9, 9.6.1	DOE	DOE/Sandia note that 40 C.F.R. §§ 264.13(a)(2) and (b)(5) are waste analysis plan requirements that do not address operating record requirements, and 40 C.F.R. § 270.14(b)(2) addresses information to be included in permit applications. Accordingly, please revise to read: *Documentation of acceptable knowledge shall be maintained in the Unit-specific Operating Record. [40 C.F.R..73(b)(3)]*		
485.	DOE 485	285	Permit Attachment 9, 9.9.1	DOE	This reference has been revised and updated since the Permittees submitted the Application, and consulting such a reference for every waste is not required in other parts of the draft Permit (e.g., Permit Attachment 5). Please revise to read: *The Permittees shall consult waste characterization data and/or published chemical information (e.g., "NIOSH Pocket Guide to Chemical Hazards" [DHHS, 1994] as revised and updated, or other chemical or engineering handbook) as appropriate for each waste in a planned treatment or repackaging operation involving ignitable, reactive, and incompatible wastes.*		
486.	DOE 486	290	Permit Attachment 10, 10.1	DOE	Traffic patterns and KAFB access procedures have changed, and the draft Permit should reflect the most current information. DOE/Sandia note the regulatory requirements in 40 CFR 264.14(b)(2)(i) and (ii) are fully met by the gates or doors at each Permitted Unit, not by the gates to KAFB; thus the regulatory reference should be deleted. Please revise to read: *Entrance is through five general-purpose gates and several special-purpose gates, staffed by armed military police or contractors, and requires appropriate identification issued by KAFB or by the Facility. Visitors must have a KAFB or Facility sponsor and appropriate identification to enter KAFB and the Facility. The gates to KAFB and the Facility are shown on Figure 1-3 in Permit Attachment 1.*		
487.	DOE 487	291	Permit Attachment 10, 10.3.1	DOE	If the gates in the HWMU fence are locked, it is not necessary for the doors to also be locked in order to provide an adequate barrier to entry. Please delete this sentence.		
488.	DOE 488	291	Permit Attachment 10, 10.3.1	DOE	DOE/Sandia note that non-Unit personnel are often present in the Unit to perform various activities (e.g., routine or non-routine maintenance, testing fire suppression systems). Although these individuals are not Unit personnel, it is not necessary that they be escorted at all times, as they are authorized to be present at the Unit. These individuals may		

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					receive a safety briefing or be escorted if necessary for their duties, as discussed in Comment No. 546. Please revise to read: *Signs at the HWMU shall instruct personnel and visitors to report to the Office Trailer for site-entry privileges and safety instructions. HWMU personnel shall have Facility-issued badges. [40 C.F.R. §§ 264.14(b)(2)(i) and (ii)].*		
489.	DOE 489	291	Permit Attachment 10, 10.4.1	DOE	Please see Comment No. 488 regarding non-Unit personnel who are authorized to be at the Unit. As noted in Comment No. 304, the TTU gates must be open during manual waste transfer operations. Please revise to read: *TTU personnel shall have Facility-issued badges. Visitors shall contact TTU personnel for access. Personnel and visitors enter the Building 6715 compound through the east gate. Access gates through the fence surrounding the Building 6715 compound shall be closed and locked during TTU waste transfer operations and treatment events.*		
490.	DOE 490	291	Permit Attachment 10, 10.4.1	DOE	Locking either the gates or the doors is sufficient to restrict access to the TTU controls. Please revise to read: *The Building 6715 doors or the Building 6715 compound gates shall be kept locked during non-operational hours, restricting access to the TTU controls which are inside the building.*		
491.	DOE 491	292	Permit Attachment 10, 10.5.1	DOE	Keeping the gates closed and locked fully satisfies the regulatory requirement to provide an adequate barrier to entry into the RMWMU, and this section as written is not consistent with the requirements for the other SNL Permitted Units. Please see Comment No. 488 regarding non-Unit personnel who are authorized to be present. Please revise to read: *Signs shall be posted to instruct personnel and visitors to report to the office trailer for site-entry privileges and safety instructions. RMWMU personnel shall have Facility-issued badges. [40 C.F.R. § 264.14(b)(2)(i) and (ii)]*		
492.	DOE 492	293	Permit Attachment 10, 10.6.1	DOE	If the doors are locked and monitored, it is not necessary to monitor the gates, as the doors provide an adequate barrier to entry into the AHCU. Please see Comment No. 488 regarding non-Unit personnel who are authorized to be at the Unit. Please revise to read: *During non-operational hours, the doors to Building 6597 shall be kept closed and locked, and security personnel shall periodically monitor the doors. Unit personnel shall have Facility-issued badges. [40 C.F.R. § 264.14(b)(2)(i) and (ii)].*		
493.	DOE 493	293	Permit Attachment 10, 10.7.1	DOE	Please see Comment No. 488 regarding non-Unit personnel who are authorized to be at the bunkers. Please revise to read: *Unit personnel shall have Facility-issued badges.*		

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494.	DOE 494	293	Permit Attachment 10, 10.8	DOE	The location and description of the CAMU containment cell are not correct. Please revise to read: *The Corrective Action Management Unit (CAMU) is located inside of TA III (Figures 1-2 of Permit Attachment 1 and 16-1 of Permit Attachment 16). The following sections describe the security provisions that the Permittees shall employ to prevent unknowing or unauthorized entry of persons, livestock, and wildlife onto the CAMU containment cell.*		
495.	DOE 495	295	Permit Attachment 11, 11.0	DOE	DOE/Sandia note 40 CFR 264.15(a)(1) specifies releases of hazardous waste constituents rather than hazardous constituents. As discussed in Comment No. 3, the Permit language must be identical to the regulations. Accordingly, please revise to read: *In accordance with the requirements of 40 C.F.R. §§ 264.15, 264.174, and 264.602 the Permitted Units shall be inspected for malfunctions and deterioration, operator errors, and discharges that may be causing, or may lead to, a release of hazardous or mixed waste or hazardous waste constituents to the environment or a threat to human health.*		
496.	DOE 496	295	Permit Attachment 11, 11.1	DOE	Retaining inspection records for previous years in multiple locations is not required by 40 CFR 264.15(d). Additionally, recordkeeping is addressed in Permit Attachment 13. Please revise to read: *Current calendar year inspection records shall be maintained at each Permitted Unit. Previous calendar years' inspection records shall be maintained at each Permitted Unit or at the Permittees' Records Center. Previous calendar years' inspection records for the MSB shall be maintained at the RMWMU or the Permittees' Record Center.*		
497.	DOE 497	296	Permit Attachment 11, 11.2	DOE	DOE/Sandia note that corrective actions can be started upon discovery, but they may not be completed for some time, depending on the nature of the action. Please revise to read: *If any defects, deterioration, damage, release of hazardous or mixed waste or constituents, or potential hazards are discovered during an inspection, the Permittees shall begin taking corrective action upon discovery to ensure that the problem does not lead to an environmental or human health hazard or noncompliance with this Permit.*		
498.	DOE 498	296	Permit Attachment 11, 11.3	DOE	DOE/Sandia question both the manner and need for immediacy of contact with the Department in the event access is denied for inspections. In order to clarify, please revise to read: *Should the U.S. Department of Defense, which operates Kirtland Air Force Base (KAFB), for security or other reasons, deny access to Facility personnel performing periodic Unit inspections, the Permittees shall conduct the inspections as soon as possible when access is granted. If access is denied*		

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					for more than 7 days, the Permittees shall call the Hazardous Waste Bureau to submit an oral report. Otherwise, the Permittees shall note the delay in inspections and report the inspection delay in accordance with the noncompliance reporting process in Permit Part 1, Section 1.23.		
499.	DOE 499	297	Permit Attachment 11, 11.3	DOE	DOE/Sandia note the requirements for inspection and testing of the fire protection systems are fully specified through reference to the NFPA requirements. Please revise to read: *The Permittees shall also test fire suppression equipment at intervals based on NFPA 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" (NFPA 2002, as updated and revised).*		
500.	DOE 500	297	Permit Attachment 11, 11.3.4	DOE	There appears to be a sentence missing. DOE/Sandia do use equipment identified in 40 CFR Subpart BB. Please revise to read: *The Permittees do not manage hazardous or mixed wastes with organic concentrations ‡10 ppm by weight using process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, air or steam stripping operations. The Permittees do not routinely manage hazardous or mixed wastes with organic concentrations ≥ 10% in pumps or other process equipment regulated in 40 CFR 264 Subpart BB. Any equipment used in such service shall be used for less than 300 hours per calendar year.*		
501.	DOE 501	298	Permit Attachment 11, 11.3.5	DOE	DOE/Sandia note the inspection requirements do not apply to containers that meet the requirements of 40 CFR 264.1080(b)(2) or 40 CFR 264.1082(c). Additionally, all repairs will be completed as soon as possible, while taking worker safety into account, and accordingly, may take longer than one day due to hazards presented by the waste or complexity of the container. Please revise as follows: *In accordance with 40 C.F.R. § 264.1086, containers in which hazardous or mixed waste is stored shall be visually inspected either at the time of pickup from a generator site or within 24 hours of acceptance at a Unit. Containers that meet the requirements of 40 CFR 264.1080(b)(2) or 40 CFR 264.1082(c) are not subject to this inspection requirement. A visual inspection shall be done to ensure that there are no cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position, in accordance with Container Level 1 air emission standards. At each Permitted Unit where such containers will be stored, the Permittees shall take the following steps.* *2. Take remedial actions if required. The Permittees shall begin taking corrective action immediately upon discovery of a defect in the container, cover, or closure device. Repairs shall be completed as soon as possible.*		

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502.	DOE 502	301	Permit Attachment 11, 11.5	DOE	Please see Comment No. 496 for discussion of records. Please revise to read: *The TTU inspection plan and inspection records for the current calendar year shall be maintained at Building 6715. Inspection records for previous calendar years shall be maintained at Building 6715 or at the Permittees' Records Center.*		
503.	DOE 503	302 - 303	Permit Attachment 11, Table 11-1	DOE	DOE/Sandia note the following: • Safety and emergency equipment is listed in Table 12-5 in Permit Attachment 12. • Operational testing of fire alarms is addressed with the other fire suppression system elements in Section 11.3; it is not necessary here. • Daily inspection of secondary containment is limited to those storage, loading, and unloading areas where containers were actively handled, as discussed in Section 11.3.1. • The storm water retention pond does not provide secondary containment. Spills and other releases of hazardous or mixed wastes or hazardous waste constituents to the pond are addressed in the Contingency Plan in Permit Attachment 12. • The pond and discharges from it are subject to National Pollutant Discharge Elimination System (NPDES) requirements established under the Clean Water Act. Therefore, as discussed in Comment No. 2, it is not necessary to include requirements for routine operations of the catchment pond in this Permit. • As discussed in Comment Nos. 95 and 276, containers are stacked in a stable manner; no additional specifications are necessary in this table. Please revise as follows: *SAFETY AND EMERGENCY EQUIPMENT* *See Table 12-5 "Emergency Equipment and Locations" in Permit Attachment 12 for additional information* *INSPECTED ITEM: Fire alarm(s)* *INSPECTION CRITERIA: Present* *OPERATING AND STRUCTURAL EQUIPMENT* *Buildings 958, 959, 958B, and 958C* *INSPECTED ITEM: Secondary containment* *INSPECTION FREQUENCY: Daily when and where hazardous or mixed wastes are handled, otherwise weekly*		

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					INSPECTED ITEM: Loading and unloading areas *INSPECTION FREQUENCY: Daily when and where hazardous or mixed wastes are handled, otherwise weekly* *INSPECTED ITEM: Storm water retention pond* *INSPECTION CRITERIA: Sampled for presence of released/spilled hazardous waste constituents if there is evidence that such constituents entered the pond, or a spill occurred in outdoor areas that drain to the pond* *INSPECTION FREQUENCY: Within 5 days of a spill or release requiring implementation of the Contingency Plan or other reporting to the NMED Secretary* *CONTAINERS* *INSPECTED ITEM: Location* *INSPECTION CRITERIA: Correct aisle space, correct stacking*		
504.	DOE 504	304 - 305	Permit Attachment 11, Table 11-2	DOE	DOE/Sandia note the following: • Operational testing of fire alarms is addressed with the other fire suppression system elements in Section 11.3; it is not necessary here. • Safety and emergency equipment is listed in Table 12-7 in Permit Attachment 12. Please revise as follows: *SAFETY AND EMERGENCY EQUIPMENT* *See Table 12-7 "Emergency Equipment" in Permit Attachment 12 for additional information* *INSPECTED ITEM: Fire alarm(s)* *INSPECTION CRITERIA: Present*		
505.	DOE 505	306 - 307	Permit Attachment 11, Table 11-3	DOE	DOE/Sandia note the following: • Safety and emergency equipment is listed in Table 12-9 in Permit Attachment 12. • Operational testing of fire alarms is addressed with the other fire suppression system elements in Section 11.3; it is not necessary here. • Daily inspection of secondary containment is limited to those storage, loading, and unloading areas where containers were actively handled, as discussed in Section 11.3.1. • Inspection of treatment equipment is limited to the treatment equipment, and does not include ancillary items such as ventilation systems.		

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					• Treatment equipment that is used infrequently (e.g., the thermal deactivation unit at the RMWMU) may be dismantled and put into storage. Inspections during the storage period will be limited to the presence of the equipment. The equipment will undergo a pre-use inspection before use. • The storm water retention pond does not provide secondary containment. Spills and other releases of hazardous or mixed wastes or hazardous waste constituents to the pond are addressed in the Contingency Plan in Permit Attachment 12. • The pond and discharges from it are subject to National Pollutant Discharge Elimination System (NPDES) requirements established under the Clean Water Act. Therefore, as discussed in Comment No. 2, it is not necessary to include requirements for routine operations of the catchment pond in this Permit. • As discussed in Comment No. 95, containers are stacked in a stable manner; no additional specifications are necessary in this table. Please revise as follows: *SAFETY AND EMERGENCY EQUIPMENT* *See Table 12-9 "Safety and Emergency Equipment" in Permit Attachment 12 for additional information* *INSPECTED ITEM: Fire alarm(s)* *INSPECTION CRITERIA: Present* *OPERATING AND STRUCTURAL EQUIPMENT* *INSPECTED ITEM: Loading and unloading areas* *INSPECTION FREQUENCY: Daily when and where hazardous or mixed wastes are actively handled or managed, otherwise monthly.* *INSPECTED ITEM: Treatment equipment* *INSPECTION CRITERIA: Good condition (i.e., no releases or deterioration); or present if in storage* *INSPECTION FREQUENCY: Daily when used for hazardous or mixed waste treatment, monthly otherwise* *INSPECTED ITEM: Storm water retention pond* *INSPECTION CRITERIA: Sampled for presence of released/spilled hazardous waste constituents if there is evidence that such constituents entered the pond, or a spill occurred in outdoor areas that drain to the pond* *INSPECTION FREQUENCY: Within 5 days of a spill or release requiring implementation of the Contingency Plan or*		

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					other reporting to the NMED Secretary *CONTAINERS* *INSPECTED ITEM: Secondary Containment (liquid waste)* *INSPECTION FREQUENCY: Daily when and where hazardous or mixed wastes are actively handled or managed, otherwise weekly.* *INSPECTED ITEM: Location* *INSPECTION CRITERIA: Correct aisle space, correct stacking*		
506.	DOE 506	308	Permit Attachment 11, 11.7	DOE	Please see Comment Nos. 3 and 495 regarding consistency between the Permit language and regulations, and revise to read: *If the Permittees do not observe any indications of damage to or release from the waste containers as they are removed from the silos that will be considered sufficient to determine that there has not been a release of hazardous or mixed waste or hazardous waste constituents.*		
507.	DOE 507	308	Permit Attachment 11, 11.7	DOE	Please see Comment No. 496 for discussion of records. Please revise to read: *The inspection plan and inspection records for the current calendar year shall be maintained at Building 6597 and/or in an electronic documentation system accessible at the Unit. Inspection records for the previous calendar years shall be maintained in the department offices of AHCU personnel or the Permittees' Records Center.*		
508.	DOE 508	309 - 310	Permit Attachment 11, Table 11-4	DOE	DOE/Sandia note the following: • Safety and emergency equipment is listed in Table 12-11 in Permit Attachment 12. • Operational testing of fire alarms is addressed with the other fire suppression system elements in Section 11.3; it is not necessary here. • Daily inspection of secondary containment is limited to those storage, loading, and unloading areas where containers were actively handled, as discussed in Section 11.3.1. • Inspection of treatment equipment is limited to the treatment equipment, and does not include ancillary items such as ventilation systems. • Treatment equipment that is used infrequently (e.g., the thermal deactivation unit at the RMWMU) may be dismantled and put into storage. Inspections during the storage period will be limited to the presence of the equipment. The equipment will undergo a pre-use inspection before use.		

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					• As discussed in Comment No. 95, containers are stacked in a stable manner; no additional specifications are necessary in this table. Please revise as follows: *SAFETY AND EMERGENCY EQUIPMENT* *See Table 12-11 "Safety and Emergency Equipment" in Permit Attachment 12 for additional information* *INSPECTED ITEM: Fire alarm(s)* *INSPECTION CRITERIA; Present* *OPERATING AND STRUCTURAL EQUIPMENT* *INSPECTED ITEM: Loading and unloading areas* *INSPECTION FREQUENCY: Daily when and where hazardous or mixed wastes are actively handled or managed. Monthly otherwise.* *INSPECTED ITEM: Treatment equipment* *INSPECTION CRITERIA: Good condition (i.e., no releases or deterioration)* *INSPECTION FREQUENCY: Daily when used for hazardous or mixed waste treatment, monthly otherwise* *CONTAINERS* *INSPECTED ITEM: Secondary Containment (liquid waste)* *INSPECTION FREQUENCY: Daily when and where hazardous or mixed wastes are actively handled or managed. Weekly otherwise* *INSPECTED ITEM: Location* *INSPECTION CRITERIA: Correct aisle space, correct stacking*		
509.	DOE 509	310	Permit Attachment 11, 11.8	DOE	Please see Comment No. 496 for discussion of records. Please revise to read: *Inspection records for the current calendar year shall be maintained at each bunker. Inspection records for previous calendar years shall be maintained at the RMWMU or the Permittees' Records Center.*		
510.	DOE 510	311 - 312	Permit Attachment 11, Table 11-5	DOE	DOE/Sandia note the following: • Safety and emergency equipment is listed in Table 12-13 in Permit Attachment 12. • Portable eye wash units are single-use items; it is not possible to inspect them for operability without operating them and rendering them inoperable.		

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					• Operational testing of smoke alarms is addressed with the other fire suppression system elements in Section 11.3; it is not necessary here. • Daily inspection of secondary containment is limited to those storage, loading, and unloading areas where containers were actively handled, as discussed in Section 11.3.1. • As discussed in Comment No. 95, containers are stacked in a stable manner; no additional specifications are necessary in this table. Please revise as follows: *SAFETY AND EMERGENCY EQUIPMENT* *See Table 12-13 "Safety and Emergency Equipment" in Permit Attachment 12 for additional information* *INSPECTED ITEM: Portable eye wash* *INSPECTION CRITERIA: Accessible, in good condition* *INSPECTED ITEM: Smoke alarm* *INSPECTION CRITERIA: Present* *OPERATING AND STRUCTURAL EQUIPMENT* *INSPECTED ITEM: Loading and unloading areas* *INSPECTION FREQUENCY: Daily when and where hazardous or mixed wastes are actively handled or managed. Monthly otherwise.* *CONTAINERS* *INSPECTION ITEM: Secondary Containment (liquid waste)* *INSPECTION FREQUENCY: Daily when and where hazardous or mixed wastes are actively handled or managed. Weekly otherwise.* *INSPECTED ITEM: Location* *INSPECTION CRITERIA: Correct aisle space, correct stacking*		
511.	DOE 511	313	Permit Attachment 12, 12.3	DOE	DOE/Sandia note that Facility security personnel do not perform inspections in accordance with the requirements of Permit Attachment 11 and 40 CFR 264.15. The monitoring provided by security personnel is described in Permit Attachment 10. Facility security personnel shall monitor each Unit periodically during non-operating hours. If an emergency is discovered during this monitoring, the Facility Emergency Operations Center (EOC) and the Unit-specific Emergency Coordinator		

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					(EC) shall be notified immediately.		
512.	DOE 512	315	Permit Attachment 12, 12.5	DOE	This requirement is not consistent with the rest of Permit Attachment 12 (e.g., Section 12.5.4) or with the requirements of 40 CFR 264 Subpart D. DOE/Sandia have established and/or attempted to establish agreements for emergency response resources from other parties, but the other parties are not bound by the conditions of this draft Permit, and DOE/Sandia cannot require them to provide resources as directed by the draft Permit. Please revise to read: *Resources shall be available at each Permitted Unit and at the Facility, as described in this Section. This Section also details that the Permittees shall attempt to establish mutual aid agreements and/or memoranda of understanding for additional response capabilities within KAFB and in Albuquerque.*		
513.	DOE 513	315	Permit Attachment 12, 12.5.1	DOE	DOE/Sandia note that either the EC or an alternate EC can perform this duty. Please revise to read: *The ECs or alternate ECs shall also be available during non-routine hazardous and mixed waste management operations that may be conducted outside normal operating hours.*		
514.	DOE 514	316	Permit Attachment 12, 12.5.2	DOE	DOE/Sandia note the detailed requirements describing the emergency response personnel and process are redundant to the main description. Additionally, as noted in Comment No. 512, some of the resources are obtained from other parties who are not bound by the conditions of this draft Permit. Please revise to read: *The Facility ERO consists of two groups that respond to an emergency situation: (1) a field response group led by an IC under the Incident Command System (ICS) and (2) the EOC. The ICS includes resources as needed: Facility security, the KAFB Fire Department if needed, and Facility or Permitted Unit personnel with relevant technical skills. Facility personnel shall be available as needed. The Permittees shall arrange for additional resources within KAFB and Albuquerque as described in Section 12.5.4 of this Permit. The Facility EOC staff includes personnel who are responsible for the management decisions and notifications to outside parties that are required during an emergency response. EOC and Facility technical personnel are typically available on-site at the Facility from 8:00 am to 4:30 pm, Monday through Friday (except during holidays) and are on call the rest of the time. Permitted Unit personnel are available as shown in Table 12-1.* *At the emergency site, Permitted Unit personnel shall assist the IC as needed. The IC works with safety personnel, the EC, Unit-specific personnel, and other emergency responders (including responders from KAFB and Albuquerque as needed) to develop and execute response plans, including*		

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					on-site protective actions and recommendations for off-site protective actions. The ICS is implemented at the time an emergency occurs and is expanded to control the emergency as needed, and remains in effect until the need for emergency management no longer exists.		
515.	DOE 515	316	Permit Attachment 12, 12.5.3	DOE	Please revise to be consistent with Section 12.5.2: The EC shall remain at the Unit as necessary and assist in emergency response as directed by the IC.		
516.	DOE 516	317	Permit Attachment 12, 12.7	DOE	DOE/Sandia note that implementation of the Contingency Plan applies only to emergencies affecting Permitted Units, as noted in Comment No. 73. Additionally, emergencies involve releases of hazardous waste constituents rather than hazardous constituents in accordance with 40 CFR 264.51. However, emergencies include both existing and imminent situations that threaten human health or the environment. Accordingly, please revise to read: *If the EC determines that an emergency situation exists or is imminent at the Unit, the EC shall immediately notify the EOC and activate this Contingency Plan. The methods for contacting emergency response representatives are listed in Table 12-4.*		
517.	DOE 517	319	Permit Attachment 12, 12.8.1	DOE	DOE/Sandia note some of the individual requirements in this list need additional clarification. In particular, notification associated with activation of the automatic fire alarms is a feature rather than an action (i.e., the manual pull alarms and telephones provide adequate capabilities for summoning emergency assistance in accordance with 40 CFR 264.32(b)). Additionally, some of the listed resources are provided by other parties who are not subject to the conditions of this draft Permit. Please revise as follows: *The following steps shall be implemented as needed in the event of an emergency involving an imminent or existing fire.* *2. The EC (or Unit personnel) shall immediately notify the Facility ERO and KAFB Fire Department by activating a manual pull alarm or by dialing the EOC at 911 or 844-0911. Medical response can also be requested at the same time. The KAFB Fire Department and Facility ERO are also notified by activation of automatic fire alarms at the Units.* *9. The EC shall take actions as directed by the IC. Unless directed otherwise, the EC shall remain near the Unit, but at a safe distance, so he can advise personnel responding to the fire of the known hazards.* *10. Upon arrival at a fire, the KAFB Fire Department officer-in-charge is in command of fire fighting. DOE/Sandia emergency response and Facility Unit personnel shall advise and assist the KAFB Fire Department, but the officer-in-*		

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					charge retains the responsibility of selecting the fire-fighting methods and tactics. *15. If possible and safe, responding personnel shall take measures to contain potentially hazardous run-off and keep it away from storm drains or sewers such as building dikes around storm drains.*		
518.	DOE 518	320	Permit Attachment 12, 12.8.2	DOE	As noted in the preceding comment, some of the individual requirements in this list need additional clarification. Please revise as follows: *The following steps shall be implemented as needed in the event of an emergency involving an imminent or existing explosion.* *2. The EC (or Unit personnel) shall immediately notify the Facility ERO and KAFB Fire Department by activating a manual pull alarm or by dialing the EOC at 911 or 844-0911. Medical response can also be requested at the same time. The KAFB Fire Department and Facility ERO are also notified by activation of an automatic fire alarm.* *4. Upon arrival at a fire, the KAFB Fire Department officer-in-charge is in command of fire fighting. DOE/Sandia emergency response and Facility Unit personnel shall advise and assist the KAFB Fire Department, but the officer-in-charge retains the responsibility of selecting the fire-fighting methods and tactics.* *7. If needed, affected surfaces shall be cleaned using cleaners appropriate to the wastes involved.* *8. If possible and safe, responding personnel shall take measures to contain potentially hazardous run-off and keep it away from storm drains or sewers such as building dikes around storm drains.*		
519.	DOE 519	321	Permit Attachment 12, 12.8.3	DOE	As noted in the preceding comments, some of the individual requirements in this list need additional clarification. DOE/Sandia note the requirement for NMED approval prior to implementing decontamination activities may delay resumption of waste management activities at the Unit, affecting the Permittees' ability to comply with the requirements of 40 CFR 268.50. Please revise as follows: *The following steps shall be implemented by the EC and Unit personnel in the event of an emergency involving an imminent or existing release of hazardous or mixed waste or hazardous waste constituents:* *2. The EC (or Unit personnel) shall immediately notify the Facility ERO and KAFB Fire Department by activating a manual pull alarm or by dialing the EOC at 911 or 844-0911.*		

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					Medical response can also be requested at the same time. The KAFB Fire Department and Facility ERO are also notified by activation of an automatic fire alarm." *10. No waste that may be incompatible with released waste shall be treated, stored, or disposed of in the vicinity of the release location until the released waste is cleaned up or stabilized.* *11. After collection of a released waste, the release site shall be sampled and evaluated. If contamination is found to exist, contaminated media and waste shall be collected, drummed (if appropriate), and removed from the site for disposal at a permitted disposal facility. Depending on the specific conditions, however, the Permittees may choose to implement an alternative decontamination method such as surface cleaning or in-situ neutralization or stabilization. Contaminated environmental media shall be remediated to achieve clean closure as defined in Section 2.20.1 of Permit Part 2 during Unit closure or be subject to corrective action as required under Part 6 of this Permit.*		
520.	DOE 520	322	Permit Attachment 12, 12.9	DOE	Please see preceding comments regarding clarification of individual requirements. Please revise as follows: *During an emergency that threatens the health or safety of personnel within a Permitted Unit, the following steps shall be taken to facilitate safe coordinated evacuation:* *5. Notify the Facility ERO and KAFB Fire Department by activating a manual pull alarm or by dialing the EOC at 911 or 844-0911. Medical response can also be requested at the same time. The KAFB Fire Department and Facility ERO are also notified by activation of an automatic fire alarm.*		
521.	DOE 521	323	Permit Attachment 12, 12.10	DOE	DOE/Sandia note that it is most appropriate to inform those in the areas that could be affected by the incident; thus notifications should be directed to those parties. Please revise to read: *The Permittees shall immediately notify State and Local agencies if State or Local response resources are needed, if human health or the environment outside the SNL Facility is threatened, or if areas outside the SNL Facility may require protective action. The Permittees shall immediately verbally inform the City of Albuquerque, KAFB command, and Isleta Pueblo respectively, in the event that residents of Albuquerque, workers at KAFB, or Isleta Pueblo could be affected.*		
522.	DOE 522	323	Permit Attachment 12, 12.11	DOE	Various DOE and Sandia personnel will perform the tasks in the list. The requirement applies to DOE/Sandia as the Permittees. Therefore, please revise to read: *Immediately after an emergency or incident, the Permittees*		

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					shall:		
523.	DOE 523	324	Permit Attachment 12, 12.13	DOE	As discussed in Comment No. 1, DOE/Sandia believe the draft Permit is to reflect management of hazardous waste and mixed waste at each Permitted Unit, rather than limiting any Unit to only hazardous or mixed waste management. Please revise to read: *The Unit is used to repackage and store hazardous and mixed wastes. The waste management areas at the HWMU include Building 958, Building 959, and two modular storage buildings.*		
524.	DOE 524	326	Permit Attachment 12, Table 12-6	DOE	DOE/Sandia have revised the list of personnel serving as emergency coordinators; this revised list includes personnel who are not yet emergency coordinators. Please revise as follows: *HWMU Emergency Coordinator - Primary:* *Robert Rivera* *Sandia National Laboratories* *P.O. Box 5800* *Albuquerque, New Mexico* *Office Phone:* *(505) 284-6982 (office)* *(505) 980-9151 (cellular)* *(505) 540-9286 (pager)* *Home Phone: (505) 980-9151* *HWMU Emergency Coordinator – First Alternate* *Lorenz Spangler* *Sandia National Laboratories* *P.O. Box 5800* *Albuquerque, New Mexico* *Office Phone:* *(505) 284-1181 (office)* *(505) 264-2106 (cellular)* *(505) 530-2022 (pager)* *Home Phone: (505) 898-5225* *HWMU Emergency Coordinator – Third Alternate* *Ken Tetreault* *Sandia National Laboratories* *P.O. Box 5800* *Albuquerque, New Mexico* *Office Phone:* *(505) 844-1346 (office)* *(505) 270-4089 (cellular)* *(505) 530-1071 (pager)* *Home Phone: (505) 822-6336*		
525.	DOE 525	328	Permit Attachment 12, Table 12-8	DOE	Building 6715 is occupied as needed. Personnel are present whenever TTU operations are actually occurring, including extended operations if needed to complete treatment as described in Comment No. 296. Please revise as follows:		

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					TABLE 12-8 ***Thermal Treatment Unit Emergency Coordinator List*** *(One or more of these personnel shall be available in Building 6715 during TTU operations)*		
526.	DOE 526	328	Permit Attachment 12, 12.15	DOE	As discussed in Comment Nos. 1 and 523, DOE/Sandia believe the draft Permit is to reflect management of hazardous waste and mixed waste at each Permitted Unit, rather than limiting any Unit to only hazardous or mixed waste management. Please revise accordingly.		
527.	DOE 527	329 - 333	Permit Attachment 12, Table 12-9	DOE	DOE/Sandia note 40 CFR 264.34 does not require that personnel have access to other personnel and multiple means of communication at all times. Rather, the requirement is for "immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee", "whenever hazardous waste is being poured, mixed, spread, or otherwise handled". Two-way radios, pagers, cellular telephones, and working in pairs are illustrations of means of communication that are typically available. Please see Comment No. 49 for further discussion. Please revise as follows: *Building 6920* *Category: Internal Communication and Alarm System* *Location: Operating personnel maintain contact capability* *Building 6921* *Category: Internal Communication and Alarm System* *Location: Operating personnel maintain contact capability* *Building 6925* *Category: Internal Communication and Alarm System* *Location: Operating personnel maintain contact capability* *Building 6926* *Category: Internal Communication and Alarm System* *Location: Operating personnel maintain contact capability* *Modular Storage Buildings* *Category: Internal Communication and Alarm System* *Location: Operating personnel maintain contact capability*		
528.	DOE 528	333	Permit Attachment 12, Table 12-10	DOE	DOE/Sandia have revised the list of personnel serving as emergency coordinators, and some personnel contact information has also been revised. Please revise as follows: *RMWMU Emergency Coordinator – Second Alternate* *Phil Zelle* *Sandia National Laboratories* *P.O. Box 5800* *Albuquerque, NM 87185*		

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					Office Phone: *(505) 844-2486 (office)* *(505) 540-7437 (pager)* *Home Phone: (505) 615-7445* *RMWMU Emergency Coordinator – Fourth Alternate* *Jesse Farr* *Sandia National Laboratories* *P.O. Box 5800* *Albuquerque, NM 87185* *Office Phone:* *(505) 284-3041 (office)* *(505) 540-9422 (pager)* *Home Phone: (505) 379-8913*		
529.	DOE 529	334	Permit Attachment 12, 12.16	DOE	As discussed in Comment Nos. 1 and 523, DOE/Sandia believe the draft Permit is to reflect management of hazardous waste and mixed waste at each Permitted Unit, rather than limiting any Unit to only hazardous or mixed waste management. Accordingly, please revise as follows: *The Auxiliary Hot Cell Unit (AHCU) is located in the northeast (high bay) part of Building 6597 in TA-V at the Facility and is used to repackage, store, and treat hazardous and mixed wastes. Building 6597 is a concrete masonry building; the high bay area of the building has a roof height of 35 feet. The AHCU comprises four waste management areas:* *4. Containers of hazardous and mixed waste may also be stored in the high bay south and west of the hot cell.*		
530.	DOE 530	334	Permit Attachment 12, 12.16	DOE	Specifying the actions to be taken by DOE/Sandia security personnel beyond the requirement for unimpeded access is confusing and may delay emergency response. Please revise to read: *Facility security officers shall provide unimpeded access to the AHCU for authorized personnel as directed by the IC.*		
531.	DOE 531	336	Permit Attachment 12, 12.17	DOE	Formally informing the ECs at the beginning of each workday is not required by 40 CR CFR 264 Subpart D, nor is such notification needed for effective emergency response. Accordingly, please revise to read: *The ECs are typically informed of planned work activities at the beginning of each workday. This includes activities at Permitted Units that are not routinely staffed (e.g., MSB).*		
532.	DOE 532	336	Permit Attachment 12, 12.17	DOE	Hazardous and mixed wastes are listed in Permit Attachment 8. Please see Comment No. 1 regarding restrictions on management of hazardous and mixed wastes at each Permitted Unit and revise accordingly to list both types of waste and the correct Permit Attachment.		
533.	DOE 533	336	Permit Attachment 12, Table 12-	DOE	DOE/Sandia note 40 CFR 264.34 does not require that personnel have access to other personnel and multiple means of communication at all times. Rather, the requirement		

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			13		is for "immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee", "whenever hazardous waste is being poured, mixed, spread, or otherwise handled." Two-way radios, pagers, cellular telephones, and working in pairs are illustrations of means of communication that are typically available. Please see Comment No. 49 for further discussion. Please revise as follows: *Category: Spill Control and Decontamination Equipment* *Description/Capability: Spill cleanup items (mops, brooms, and/or shovels)* *Location: In equipment storage at the RMWMU* *Description/Capability: Recovery drums and containers* *Location: In equipment storage at the RMWMU* *Category: Internal Communication and Alarm System* *Location: Operating personnel maintain contact capability.* *Category: External Communication System* *Description/Capability: Mobile Telephone or Portable 2-way radio* *Location: Taken to bunkers by personnel as needed*		
534.	DOE 534	337	Permit Attachment 12, Table 12-14	DOE	The Unit operating hours are not specified, DOE/Sandia have revised the list of personnel serving as emergency coordinators, and some personnel contact information has also been revised. Please revise as follows: ***TABLE 12-14*** ***MSB Emergency Coordinator List*** *(One or more of these personnel shall be available at the RMWMU and can be contacted during operating hours [7:00 am to 5:30 pm, Monday through Thursday])* *RMWMU Emergency Coordinator – Second Alternate* *Phil Zelle* *Sandia National Laboratories* *P.O. Box 5800* *Albuquerque, NM 87185* *Office Phone:* *(505) 844-2486 (office)* *(505) 540-7437 (pager)* *Home Phone: (505) 615-7445* *RMWMU Emergency Coordinator – Fourth Alternate* *Jesse Farr* *Sandia National Laboratories* *P.O. Box 5800* *Albuquerque, NM 87185* *Office Phone:* *(505) 284-3041 (office)* *(505) 540-9422 (pager)*		

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					Home Phone: (505) 379-8913		
535.	DOE 535	313	Permit Attachment 12, 12.0	DOE	The Contingency Plan in Permit Attachment 12 is applicable to all Permitted Units, including the CAMU. Permit Attachment 16 contains the site-specific information for the CAMU, analogous to the information in Sections 12.13 through 12.17 for the other Permitted Units. The site-specific information is not equivalent to a site-specific plan; the Contingency Plan for each Permitted Unit consists of the site-wide plan combined with the site-specific information. Please revise to read: *In accordance with 40 C.F.R. § 264.56, incorporated here by reference, a description of the site-specific contingency information for each Permitted Unit is presented after that of the Facility Contingency Plan, starting with Condition 12.13 of this Permit Attachment. The site-specific contingency information for the Corrective Action Management Unit (CAMU) is located in Appendix 8 of Permit Attachment 16.*		
536.	DOE 536	313	Permit Attachment 12, 12.1	DOE	Please see Comment No. 535 regarding the information for the CAMU. Please revise to read: *The Permitted Units covered by this Contingency Plan are listed in Table 12-1 of this Permit Attachment. Descriptions of Permitted Units are found in Permit Attachments 3 through 7 and 16.*		
537.	DOE 537	314	Permit Attachment 12, Table 12-1	DOE	DOE/Sandia note the following items are inconsistent with information in other Sections of the draft Permit regarding the maximum area of the MSB and operating hours of the TTU. Please revise as follows: *UNIT NAME: Thermal Treatment Unit* *OPERATING HOURS: M-F 7:00 am -7:00 pm* *UNIT NAME: Manzano Storage Bunkers* *LOCATION, SIZE: In Manzano Area on KAFB. 0.4 acres occupied by 5 bunkers (approximately 1600 to 2400 square feet in each bunker)*		
538.	DOE 538	324 - 326	Permit Attachment 12, Table 12-5	DOE	The fire hydrant is shown in Figure 12-2 rather than Figure 3-1. Please revise as follows: *Category: Fire Suppression* *Location: One hydrant, location shown in Figure 12-2 of Permit Attachment 12* *Category: Fire Suppression* *Location: One hydrant, location shown in Figure 12-2 of Permit Attachment 12*		
539.	DOE 539	328	Permit Attachment 12, 12.15	DOE	Figure 1-5 of Permit Attachment 1 does not present evacuation routes, please delete "and Figure 1-5".		
540.	DOE 540	After 337	Permit Attachment 12	DOE	The figures do not reflect the most current information provided in the Application. DOE/Sandia will provide updated figures under separate cover.		

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541.	DOE 541	338	Permit Attachment 13, 13.1	DOE	DOE/Sandia note operations at the MSB are limited to storage of closed containers. Records that are not relevant to MSB operations are maintained at the RMWMU, as described in the Application. The Inspection Plan and Contingency Plan are relevant to MSB operations; these are maintained at each MSB. Please revise to read: *The Permittees shall maintain the following Unit-specific records at each Permitted Unit (other than the CAMU and MSB).* *1. A current copy of this Permit including the Waste Analysis Plan (Attachment 9), Inspection Plan (Attachment 11), Training Plan (Attachment 14), Contingency Plan (Attachment 12), Closure Plan (Attachment 15), and treatment plans (where applicable). A current copy of the Contingency Plan (Attachment 12), Inspection Plan (Attachment 11), and inspection records for the current year shall be maintained at each MSB, all other MSB records shall be maintained at the RMWMU;*		
542.	DOE 542	338	Permit Attachment 13, 13.1	DOE	Item 2k does not apply to the DOE/Sandia operations that are covered by this Permit. Please delete this item.		
543.	DOE 543	339	Permit Attachment 13, 13.1	DOE	The exact physical location of the Records Center is subject to change and does not affect DOE/Sandia's ability to meet the requirements of 40 CFR 264.73. Please revise to read: *The following records shall be maintained in the Facility Operating Record at the Permittees' Records Center.*		
544.	DOE 544	341	Permit Attachment 13, 13.5	DOE	The first two paragraphs in this section discuss requirements that are applicable to generators of hazardous wastes; such activities are not subject to this draft Permit, as discussed in Comment No. 2. Certain requirements for generators are applicable to wastes that have been treated at the Permitted Units; those requirements are included in Item 2.j in Section 13.1. Thus it is unnecessary to repeat them in this section. Each of the 8 listed items in this section is redundant, as each item is addressed in other sections of this Permit Attachment. Please delete this entire section.		
545.	DOE 545	343	Permit Attachment 14, 14.0	DOE	DOE/Sandia note 40 CFR 270.14 addresses contents of permit applications but is not specific to the requirements of 40 CFR 264.16 that the Permittees are required to meet in operating the Permitted Units. Please delete the references to 40 CFR 270.14.		
546.	DOE 546	343	Permit Attachment 14, 14.2	DOE	DOE/Sandia find this description to be somewhat confusing due to repetition and inclusion of some requirements that are not consistent with waste management duties. In particular, it is not necessary for supervisory personnel to receive an overview that covers all aspects of waste management, only that the training be commensurate with their duties,		

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					consistent with the training for other personnel. Short-term personnel include non-Unit personnel who are often present in the Permitted Units to perform various activities (e.g., routine or non-routine maintenance, testing fire suppression systems). Although these individuals are not Unit personnel, it is not necessary that they be extensively trained or escorted at all times, as they are authorized to be present at the Units. If necessary for their duties (e.g., activities in close proximity to hazardous or mixed wastes), these individuals may receive a site-specific safety briefing regarding the Permitted Unit and their responsibilities in the event of an emergency. Alternatively, these personnel may be escorted at all times (if necessary for their duties) in lieu of a briefing. Please revise to read: *This program shall provide employees with training relevant to their positions, commensurate with their duties, and specific to the safe performance of assigned tasks. Personnel who are directly involved in hazardous and mixed waste handling shall be informed regarding the potential hazards associated with waste management activities, procedures for safe handling of wastes, and emergency procedures. Individuals in supervisory or decision-making positions shall receive information on the aspects of waste management relevant to the Permitted Unit.* *Personnel with specific or short-term assignments, such as visitors, non-Unit personnel who are present to perform various activities (e.g., routine or non-routine maintenance, testing fire suppression systems), or temporary contractors not directly involved in waste management, may receive a site-specific safety briefing with emergency response information if necessary for their duties. These personnel may be escorted by Unit personnel in lieu of a briefing.*		
547.	DOE 547	343	Permit Attachment 14, 14.2	DOE	DOE/Sandia note that not all these elements are appropriate for all training that is relevant to the positions and responsibilities of the personnel being trained. Accordingly, please revise to read: *The training program shall include a combination of classroom instruction, reviews of written documents, and on-the-job training exercises as appropriate for the position.*		
548.	DOE 548	345	Permit Attachment 14, Table 14-1	DOE	DOE/Sandia note the title of Table 14-1 incorporates the name of one of the specific Permitted Units. Thus, it appears the material in the table is applicable only to personnel at the HWMU, rather than to personnel at all Units who are performing hazardous or mixed waste management duties. Please revise the title to "Permitted Unit Personnel Training Content" or a similar title to clarify the applicability of the		

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					requirements.		
549.	DOE 549	345 - 346	Permit Attachment 14, Table 14-1	DOE	The duration and scope of each course are variable because they are related to the level of detail provided and the items covered; these in turn are related to the responsibilities of the personnel being trained and the topic of the training. Comprehensive and detailed training in regulations and technical work documents is not required or appropriate for all personnel (e.g., the Training Director and Emergency Coordinator do not necessarily require training in technical work documents). Training in technical work documents generally does not include on-the-job training; it may include periodic refreshers or review each time the document is revised. With respect to these classes, please revise as follows: ***A. RCRA Regulation Training*** *Duration: Variable (1-4 hours)* ***C. Technical Work Documents and Refresher*** ***Duration:*** *Variable, depending on the complexity of the technical work document* ***Frequency:*** *Initial and with each revision, or Initial with periodic refresher* ***Method:*** *Document review* *Minimum Content: This training is function-specific and may be divided into sections or modules. Each employee must participate only in the sections that apply to his or her specific job function.*		
550.	DOE 550	347	Permit Attachment 14, Table 14-2	DOE	Please see Comment No. 548. Please revise the title to "Training for Each Job Title at the Permitted Units" or a similar title to clarify the applicability of the requirements. Please see Comment No. 549 regarding applicability of training for technical work documents for the Training Director and Emergency Coordinator. The situation-specific applicability of the training is best addressed through notes and a footnote. Please revise as follows: *Required Training: Technical Work Documents* *JOB TITLES* *Training Director: X[a]* *Emergency Coordinator: X[a]* *a As applicable for individual technical work documents*		
551.	DOE 551	349	Permit Attachment 14, 14.5	DOE	DOE/Sandia note that implementation of the Contingency Plan is not required or appropriate for incidents that are not emergencies, thus the training should not address incidents.		

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					Further, the on-the-job exercises are more accurately described as classroom exercises. Please revise as follows: *Permitted Unit employees shall participate in Unit-specific emergency response training to assure effective response to emergencies. Emergency response training consists of classroom instruction, document reviews, and classroom exercises. The content shall be reviewed at least annually and revised as necessary to incorporate changes in regulatory compliance requirements. Topics covered shall include at a minimum:* *1 Emergency notification procedures;* *2 Response to emergencies, including fires, explosions, and releases of hazardous and mixed wastes;* *7 Post-emergency reports and actions;*		
552.	DOE 552	349	Permit Attachment 14, 14.6	DOE	Please see Comment Nos. 541 and 543 regarding the location of training records and the location of the Records Center, respectively. Please revise to read: *For current employees, current-year training records shall be kept at the Permitted Unit to which employees are assigned. Training records for previous years shall be maintained at the Unit or at the Facility Records Center until closure of the Unit. For former employees, training records shall be maintained at the Unit or at the Facility Records Center for a minimum of three years from the date the employee last worked at a Permitted Unit. For MSB personnel, all training records to be maintained at the Unit shall be maintained at the RMWMU.*		
553.	DOE 553	350	Permit Attachment 14, Table 14-4	DOE	DOE/Sandia note an Associate's degree from an accredited post-secondary institution is adequate qualification for this position. Please revise as follows: *At a minimum, the qualification for the Training Director is:* *• Associate's or Bachelor's degree from an accredited post-secondary institution; or,*		
554.	DOE 554	351	Permit Attachment 14, Table 14-5	DOE	Please see Comment No. 553 regarding qualifications. Please revise as follows: *At a minimum, the qualification for a RCRA Project Leader is:* *• Associate's or Bachelor's degree from an accredited post-secondary institution; or,*		
555.	DOE 555	352	Permit Attachment 14, Table 14-6	DOE	Please see Comment No. 551 regarding implementation of the Contingency Plan. Additionally, not all duties in the list are needed or appropriate for every emergency or every Permitted Unit. Please revise as follows: *An Emergency Coordinator evaluates, coordinates, and*		

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					implements emergency actions in accordance with the Contingency Plan during an emergency (as defined in the Contingency Plan, Permit Attachment 12). As defined in the Contingency Plan, Emergency Coordinator duties during and after an emergency include, but are not limited to, the following as needed:		
556.	DOE 556	353	Permit Attachment 14, Table 14-7	DOE	As noted in Comment No. 555, not all duties in the list are needed or appropriate for every Permitted Unit. Additionally, a degree in chemistry is not needed; an associate's degree is adequate qualification for this position. Please revise as follows: *A Chemist conducts supporting characterization of hazardous and mixed waste managed at the Facility. Duties include, but are not limited to, the following as needed:* *• (5 items not included in comment)* *Skill, Education, and Other Qualifications:* *At a minimum, the qualification for a Chemist is:* *• Associate's or Bachelor's degree, and*		
557.	DOE 557	354	Permit Attachment 14, Table 14-8	DOE	Please see Comment No. 555 regarding the applicability of all duties at every Permitted Unit. Please revise as follows: *A Waste Handler conducts hazardous and mixed waste handling, segregating, and storing operations at a Permitted Unit. Waste Handler duties include, but are not limited to, the following as needed:*		
558.	DOE 558	355	Permit Attachment 14, Table 14-9	DOE	Please see Comment No. 555 regarding the applicability of all duties at every Permitted Unit. Please revise as follows: *A Special Projects Staff member performs duties associated with non-routine and special projects at a Permitted Unit. Special Projects Staff member duties include, but are not limited to, the following as needed:*		
559.	DOE 559	356	Permit Attachment 14, Table 14-10	DOE	Please see Comment No. 555 regarding the applicability of all duties at every Permitted Unit. Please revise as follows: *An Inspector conducts inspections of both hazardous or mixed waste at a Permitted Unit. Inspector duties include, but are not limited to, the following as needed:*		
560.	DOE 560	357	Permit Attachment 14, Table 14-11	DOE	Please see Comment No. 555 regarding the applicability of all duties at every Permitted Unit. Please revise as follows: *A Transportation Manager coordinates the shipment of hazardous or mixed waste from a Permitted Unit. Transportation Manager duties include, but are not limited to, the following as needed:*		
561.	DOE 561	358	Permit Attachment	DOE	Please see Comment No. 555 regarding the applicability of all duties at every Permitted Unit. Additionally, the duties of		

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			14, Table 14-12		radiation support personnel do include contact with the wastes and containers; this should be noted. Please revise as follows: *Unit Operations Support Staff include, but are not limited to, the following as needed:* *• Administrative personnel;* *• Information systems (database) personnel;* *• Generator interface personnel; and* *• Radiation support personnel. Note that the duties of radiation support personnel involve collecting radiological data; this requires contact with hazardous and mixed wastes and waste containers but is not consistent with the duties of field technician in Table 14-8.*		
562.	DOE 562	359 – 396	Permit Attachment 15	DOE	DOE/Sandia note several instances in this Permit Attachment that mention either hazardous or mixed wastes in requirements that are applicable to both (e.g., the maximum volume of waste in storage at the HWMU in Section 15.13.2). Please see Comment No. 1 for additional discussion and revise throughout this Attachment.		
563.	DOE 563	359	Permit Attachment 15, 15.0	DOE	DOE/Sandia note some equipment and structures will be removed, and others will not require decontamination. Please revise to read: *Partial closure will be deemed complete when all equipment and structures have been removed or decontaminated; the Unit has met the performance criteria for "clean closure"; and a closure certification has been submitted to and approved by the New Mexico Environment Department (the Department).*		
564.	DOE 564	360	Permit Attachment 15, 15.2	DOE	DOE/Sandia note media contaminated with hazardous wastes or hazardous waste constituents will be decontaminated or removed to achieve clean closure; thus, it may not be subject to corrective action. Additionally, it is not necessary to specify the acceptable risk, as the risk assessment will be subject to NMED approval. Please revise as follows: *The Permittees shall also meet the following performance standards for each Permitted Unit that is closed.* *4. For any Permitted Unit for which closure is based upon a risk assessment result, the level of risk shall be subject to approval by the Department. Media contaminated with hazardous wastes or hazardous constituents may be subject to the corrective action requirements of Part 6 of this Permit where applicable.*		
565.	DOE 565	360	Permit Attachment	DOE	This list of TSDFs is out of date. It will periodically become outdated in the future due to business changes at the TSDFs.		

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			15, Table 15-1		DOE/Sandia will update the list prior to closure of each Unit unless it has been updated within the past 12 months. Please revise as follows: *Name: Energy Solutions* *Location: Interstate 80, Exit 49, Clive, UT 84101* *EPA ID Number: UTD982598898* *Name: Perma-Fix of Florida* *Location: 1940 NW 67th Pl, Gainesville, FL 32653* *EPA ID Number: FLD980711071* *Name: Diversified Scientific Services, Inc.* *Location: 157 Gallaher Rd., Kingston, TN 37763* *EPA ID Number: TND982109142* *Name: Materials & Energy Corporation* *Location: 2010 Hwy 58, Suite 1020, Bldg K1005, Oak Ridge, TN 37830* *EPA ID Number: TNR000005397*		
566.	DOE 566	361	Permit Attachment 15, 15.3	DOE	DOE/Sandia note the wastes managed at the Permitted Units include large pieces of equipment and other self-contained items. Please revise as follows: *Closure methods proposed in this plan are based on the following assumptions about conditions during the operational life of the Permitted Units:* *1. Hazardous and mixed wastes were stored in containers (e.g., drums) or were self-contained (e.g., equipment or other large items);*		
567.	DOE 567	361	Permit Attachment 15, 15.3	DOE	DOE/Sandia note some portions of each unit will not need washing to remove waste residues. For example, ceilings and upper portions of walls are not likely to be contaminated unless there was an extreme event that could lead to such contamination (e.g., a drum of waste became pressurized and exploded). In such an event, appropriate cleanup and decontamination procedures would already have been performed in response to such a release. Also, analysis of wash waters, although proposed in the Application, will be of limited use in verifying clean closure because one would expect the wash water to potentially contain contaminants. DOE/Sandia will use wash water samples as qualitative indicators of contamination. Rinse waters will be used to verify clean closure. Wash waters will be collected and characterized to determine appropriate waste management as specified in item 2f. Please revise as follows: *c. Appropriate portions of each waste management area (including equipment, if necessary) shall be washed to remove waste residues.* *d. Rinse waters shall be collected, sampled, and analyzed to*		

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					verify clean closure. *e. Additional decontamination shall be performed, if necessary, in any areas where analytical results indicate that hazardous wastes or hazardous constituents are at levels exceeding the closure criteria or if decontamination rinse waters are hazardous.* *f. Wastes generated during closure activities shall be characterized and managed appropriately.*		
568.	DOE 568	362	Permit Attachment 15, 15.3.1	DOE	The DQO process is designed to ensure that environmental data are appropriate; the process does not specifically identify appropriate data. Also, DOE/Sandia are not aware that concentrations of hazardous waste in the environment have been established. Accordingly, please revise as follows: *The DQO process is designed to ensure that the type, quantity, and quality of environmental data to be used in decision-making are appropriate for the intended application. DQOs are qualitative and quantitative statements derived from a series of seven planning steps based on the scientific method. DQO statements applied to development of this Closure Plan and the closure activities to be implemented at Permitted Units are summarized as follows.* *3. Identify Inputs to the Decision. The inputs include the following:* *f. Established concentrations of hazardous waste constituents in the environment*		
569.	DOE 569	362	Permit Attachment 15, 15.3.1	DOE	Please see preceding comment regarding the objectives of the DQO process. When defining boundaries for the closure process, it is reasonable to limit the Phase II decontamination activities to affected areas, as described in the Application and Comment No. 10. Please add item e to No. 4: *e. Limiting Phase II decontamination activities to affected areas. The decontamination will be limited to the hardened surfaces present in the WMA (e.g., concrete floors). If decontamination of equipment is required, the decontamination effort will be limited to equipment directly associated with waste management. If decontamination of secondary containment surfaces is required, the decontamination effort will be limited to the bottoms and sides up to the secondary containment level, as these are the surfaces that would be contaminated.*		
570.	DOE 570	363	Permit Attachment 15, 15.3.1	DOE	Please see Comment No. 568 regarding the objectives of the DQO process. DOE/Sandia note the rationale for the indicator parameters selected by NMED is not included in each Unit-specific sampling and analysis plan in the Permit Attachment. As discussed in Comment No .10, DOE/Sandia selected non-volatile constituents that are present in many of the wastes		

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					commonly treated and/or stored at each Unit to serve as indicator parameters. If residual contamination is present on the floors, secondary containment, or interior fume hood surfaces, it is more likely to consist of metal constituents than volatile organic compounds. For these reasons, samples will be analyzed for hazardous waste toxicity characteristic metals only. The indicator parameter concentrations in the used wash water will be evaluated to provide a qualitative indication of contamination. Also, the sampling and analysis plan is in Section 15.7 of the Permit Attachment; the closure schedule is in Section 15.8. Please revise as follows: *5. Develop the Decision Rule. The decision consists of two parts: 1) defining Permitted Unit-specific closure criteria to indicate when the closure performance standard has been achieved; and 2) determining whether the results of the closure activities satisfy the closure criteria.* *a. In regard to the first part, the information obtained from records review will be used to select parameters to indicate the potential presence of waste constituents. The indicator parameters are non-volatile constituents present in many of the wastes commonly treated and/or stored at each Unit. If residual contamination is present on the floors, secondary containment, or interior fume hood surfaces, it is more likely to consist of metal constituents than volatile organic compounds. For these reasons, samples will be analyzed for hazardous waste toxicity characteristic metals only. The Sampling and Analysis Plan (SAP) for each Unit lists the indicator parameters currently selected for closure verification sampling.* *b. If analytical results of indicator parameters in residues (e.g. sweepings) and decontamination rinse waters do not show significantly elevated concentrations, the Permitted Unit will be considered to be clean closed, and the closure certification step may commence. For the purpose of this closure plan, for non-naturally occurring constituents, significantly elevated concentrations are those that are greater than 20% higher than their corresponding detection limits. For naturally occurring constituents significantly elevated concentrations are those that are greater than 20% higher than the corresponding concentration in unused wash or rinse waters. All detection limits are subject to approval by the Department.* *6. Specify Limits on Decision Errors. Because measurement data from sampling and analysis can only estimate true*		

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					values, there is always a possibility that decisions made based on measurement data will be in error. Decision errors can be attributed to either sampling error (when incorrect sampling fails to adequately represent the true environment) or measurement errors (when the combinations of random and systematic errors in the measurement process inaccurately represent the true values). Precautions that shall be taken to minimize either type of decision error when performing closure of a Permitted Unit are discussed in the Sampling and Analysis Plan in Section 15.7 of this Permit Attachment.		
571.	DOE 571	364	Permit Attachment 15, 15.3.2	DOE	Please see Comment Nos. 567 and 569. Not all structures, surfaces, and/or equipment at each unit will need washing to remove waste residues. DOE/Sandia note it is not necessary to perform further decontamination on areas that are shown to be acceptable based on the verification sampling. Additionally, the waste items will be characterized according to the requirements of 40 CFR 261 and will be managed appropriately. Please delete "(NAAG, 1998)" and "(DOE, 2000)" unless a list of references is included in the final Permit. Please revise as follows: *All contaminated structures, surfaces, and equipment at a Permitted Unit shall be decontaminated. The following general principles shall apply to decontamination and verification of all Permitted Units at the Facility:* *1. Verification samples shall be collected to determine whether the applicable closure criteria are met. The decontamination verification samples shall be collected as specified in the Unit-specific closure plan SAP. Only those areas (e.g., floor grids) that do not meet closure criteria (based on results from rinse water sampling) will require further decontamination and verification sampling.* *4. Personal protective equipment, plastic sheeting, and sampling equipment used by personnel performing decontamination activities shall be disposed of unless decontaminated. Such wastes shall be placed in containers and characterized to determine if they are hazardous or mixed wastes, in accordance with all applicable requirements of 40 C.F.R. § 261. The wastes shall be managed appropriately.* *7.The Permittees will continue the long-standing practice of providing radionuclide data to the Department on a voluntary basis, in accordance with: 1) joint guidance developed in 1998 by the National Association of Attorneys General (as*		

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					revised and updated), and 2) the data-sharing provisions of the current Agreement-in-Principle established in 2000 between the U.S. Department of Energy (DOE) and the State of New Mexico, (as revised and updated).		
572.	DOE 572	365	Permit Attachment 15, 15.5	DOE	DOE/Sandia note containers of waste will be stored on floors or secondary containment structures. Large self-contained items will be stored on floors, as described in the Application. Therefore, only the floors, sumps, secondary containment structures, and miscellaneous equipment associated with storage or treatment would require decontamination. It is not reasonable to suspect that waste residue is routinely present on walls, doors, or ceilings, because it is not stored or handled in contact with these surfaces. It would not be present unless there was an extreme event as discussed in Comment No. 567. Limited amounts of residue may be present on walls in enclosed treatment areas such as fume hoods; these are addressed in the Unit-specific sampling plans. Similarly, waste residue would not be present in drainage structures unless there were releases not controlled by the secondary containment. Additionally, DOE/Sandia note each Unit-specific closure plan will be reviewed, revised as needed to incorporate relevant information from the Unit operating history, and submitted to NMED for approval before closure begins, as specified in Section 15.3 of this Permit Attachment. As noted in Comment No. 567 samples of used wash water will be analyzed but the data will not be used to determine whether decontamination has been successful. Please revise as follows: *The decontamination procedures described below are the steps that shall be taken to remove or decontaminate all hazardous or mixed waste residues and contaminated containment system components, equipment, and structures during closure. The decontamination techniques described below apply to surfaces present at container storage units (e.g., asphalt, concrete, sheet plastic, and metal). These surfaces include floors, sumps, other secondary containment structures, and miscellaneous equipment.* *5. Washing appropriate hardened surface areas (e.g., floors, secondary containment, and non-disposable equipment) with the non-phosphate detergent solution. Large areas to be washed shall be cleaned according to grids established in Unit-specific SAPs. Washing shall be done with mops, sponges or pressure washers, depending on the degree of contamination or other conditions at the time of closure.* *9. Repeating wash and rinse water collection procedures until all visible signs of contamination have been removed. Visible contamination that cannot be removed by washing shall be*		

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					removed by scraping or chipping or another method using appropriate tools and equipment. *11. Collect two grab samples of rinse water from each decontaminated area or item and analyze them for the parameters identified in the Unit-specific SAP for the Unit being closed.*		
573.	DOE 573	370	Permit Attachment 15, 15.7.9	DOE	DOE/Sandia note the detailed specifications in this section for performing QC checks are unnecessary, as requirements are fully specified through reference to SW-846 and all updates in the preceding paragraph. Also, this requirement is not consistent with QA requirements in other sections of the draft Permit (e.g., Permit Part 6, Section 6.19.1.1 "Quality Assurance"). For consistency, please revise to read: *At a minimum, the laboratories shall use a combination of standards, blanks, surrogates, duplicates, matrix spike/matrix spike duplicates (MS/MSD), and laboratory control samples to assess data quality at a minimum frequency of five percent.*		
574.	DOE 574	370	Permit Attachment 15, 15.7.10	DOE	DOE/Sandia note the detailed specifications in this section for reporting QC data are unnecessary, as requirements are fully specified through reference to SW-846 and all updates in Section 15.7.9. Please revise to read: *The laboratory shall report the data in accordance with their internal QC requirements, and shall include data (e.g., acceptance criteria for bias, percent recovery, precision, and relative percent difference) in the analytical report.*		
575.	DOE 575	372	Permit Attachment 15, 15.13.1	DOE	DOE/Sandia note the information about the epoxy coatings is not consistent with the information that should be specified in Permit Attachment 3, as concrete is sufficiently impervious to serve as secondary containment in accordance with the requirements of 40 CFR 264.175(b)(1-4). Please see Comment No. 259 for further discussion and revise to read: *Building 959 is an 1,800-square-foot pre-cast concrete building that contains eight separate and recessed waste holding cells and a repackaging area. The floor is painted. Small containers of wastes (typically less than 55 gallons) are stored in this building. The repackaging area includes a fume hood and local negative-pressure ventilation systems for use when opening containers of vapor-producing wastes to repackage them.* *Building 958 (west of Building 959) is a 3,520-square-foot pre-cast concrete building that includes eight separate and recessed waste storage compartments for segregation of waste according to compatibility groups. The floor is painted. Containers of wastes are stored in this building.* *Buildings 958B and 958C are modular, prefabricated safety*		

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					storage structures used for container storage of reactive and ignitable wastes. Each structure is constructed of welded 10- and 12-gauge steel with supporting structural steel sections, and a 500-gallon containment reservoir. The inside surfaces are painted.		
576.	DOE 576	373	Permit Attachment 15, 15.13.2	DOE	As discussed in Comment No. 6, these capacities do not reflect the current permitted capacities. Please see Comment Nos. 1 and 562 regarding management of hazardous and mixed waste at each Permitted Unit. Please revise to read: *The maximum volume of hazardous or mixed waste in storage at any time at the HWMU is estimated at 77,540 gallons of liquids or solids (including lab packs that contain substantial quantities of absorbent). This is the maximum volume of hazardous or mixed wastes that could be removed from the waste management areas as part of closure activities. The maximum total waste volume is broken down by structure as follows:* *STRUCTURE AMOUNT OF WASTE* *Building 959 7,590 gallons* *Building 958 59,950 gallons* *Building 958B 5,000 gallons* *Building 958C 5,000 gallons*		
577.	DOE 577	372	Permit Attachment 15, 15.13.3	DOE	As discussed in Comment No. 10, DOE/Sandia do not consider it appropriate to assume that hazardous waste constituents from all wastes managed at the Unit are constituents of concern for closure if there is no history of a release or evidence of any release of hazardous waste constituents. Additionally, the non-volatile indicator parameters chosen for evaluating effectiveness of decontamination are present in particulates; these would be most likely to be present in the exhaust system only up to the first filter, unless there were indications or records to indicate the filter had failed or was not present. If the filter had failed, appropriate cleanup and decontamination procedures would already have been performed. Please revise items 3 and 6 to read: *3. If hazardous or mixed wastes or hazardous waste constituents were inadvertently released into the local exhaust systems during repackaging or bulking activities in Building 959, they would be present up to the first filter, unless there were indications or records to indicate the filter had failed. If the filter was not present, the hazardous and mixed waste constituents would be present in the entire exhaust system.* *6. Hazardous or mixed wastes or hazardous waste constituents are not present except in areas where wastes were managed.*		

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578.	DOE 578	374	Permit Attachment 15, 15.13.4	DOE	Please see the preceding comment and Comment Nos. 567 and 569 regarding Unit operations and the areas where contamination is most likely. Please revise items 1 and 4 to read: *1. Items of equipment within the HWMU shall be evaluated individually to determine whether it is more effective to remove them or decontaminate them. Items that are most likely to be removed include local exhaust systems (to the first filter), filters, and portable equipment. Items that are most likely to be decontaminated include the interior of the fume hood.* *4. The floors and secondary containment structures of each waste management area shall be decontaminated by sweeping and washing as described elsewhere in this Attachment.*		
579.	DOE 579	376	Permit Attachment 15, Table 15-4	DOE	Please see Comment Nos. 10 and 570 regarding selection of indicator parameters based on chemical properties and Unit history. Additionally, the correct footnote for "Indicator Parameters" in the bottom part of the table is "a" rather than "b." Please revise as follows: *Summary of Pre-Wash Sampling* *Media to be Sampled: Floor sweeping* *Indicator Parameters[a]: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver* *Summary of Post-Wash Sampling: Used Wash Water and Used Rinse Water* *Area to be Decontaminated: Building 958* *Indicator Parameters[a]: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver* *c One sample from each pair of used wash water and rinse water samples will be filtered when collected to remove particulates. Secondary containment structures (bottom and sides up to the containment level) within the gridded area are considered part of the grid.*		
580.	DOE 580	379	Permit Attachment 15, 15.14.2	DOE	The cumulative quantity of waste treated over the life of the TTU is not relevant, because the treatment residues are removed and the waste is not present at the time of closure. The maximum inventory of waste that could be present at closure is limited to 20.8 gallons. The cumulative quantity of waste that passed through a treatment facility such as the TTU during its operating life has no effect on the method of closure. Accordingly, please delete the second sentence.		
581.	DOE 581	378	Permit Attachment 15, 15.14.3	DOE	DOE/Sandia note the reference to "other adjacent areas near the pad" needs clarification, as the earthen berm surrounds the TTU on three sides and prevents deposition of kickout		

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					beyond the berm. Kickout would potentially be present only in areas immediately adjacent to the pad; the only such area is the steps and paved surface in front of the Unit. Please revise to read: *If hazardous wastes were kicked out beyond the edge of the steel-lined concrete pad during treatment, they would have been deposited on the earthen berm or the area immediately in front of the TTU.*		
582.	DOE 582	379	Permit Attachment 15, 15.14.5.3	DOE	DOE/Sandia note TCLP is not an appropriate method for analyzing for high explosives (HE). This requirement is included throughout Section 15.14. Additionally, please see Comment Nos. 10 and 570 regarding selection of indicator parameters (e.g. silver) based on chemical properties and presence in the wastes managed at the Unit. Please revise to read: *Each sample shall be analyzed for silver using the Toxicity Characteristic Leaching Procedure (TCLP).*		
583.	DOE 583	380	Permit Attachment 15, 15.14.5.8	DOE	DOE/Sandia note the corrective action requirements in Part 6 of the draft Permit specify contaminant cleanup to residential risk levels or residential land use screening levels (listed in the most current version of "Technical Background Document for Development of Soil Screening Levels") for sites that are to be released without long-term controls; indicating that NMED has determined these risk levels are acceptable to human health and the environment. Thus these contaminant levels are appropriate for closure of the TTU and should be incorporated in this Permit Attachment. Please revise to read: *Total silver concentrations (determined by analysis) from characterization sampling of the soil comprising the earthen berm and surrounding areas, including that beneath the concrete pad and storm-water catchment tank, shall be compared to residential risk standards or residential land use screening levels (listed in the most current version of the Department's "Technical Background Document for Development of Soil Screening Levels") for silver. If characterization-sampling results are equal to or lower than the residential standards, soil contamination is not indicated for silver. Analytical results for soil samples for HE and concentrations of silver exceeding residential standards shall be evaluated by risk assessment. If the characterization sampling results indicate the silver level or the concentration of HE poses unacceptable risk to human health or the environment, the soil shall be excavated, removed, and disposed of.*		
584.	DOE 584	381	Permit Attachment 15, 15.15.1	DOE	DOE/Sandia note the information about the floors in Buildings 6920 and 6921 is not consistent with the information that should be specified in Permit Attachment 5, as concrete is sufficiently impervious to serve as secondary containment in accordance with the requirements of 40 CFR 264.175(b)(1-4).		

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					Please see Comment No. 331 for additional discussion regarding the need for an epoxy coating. Also, Permit Attachment 15 does not include descriptions of Buildings 6925 and 6926, the Modular Storage Buildings, or the Outdoor Waste Storage Area. Please revise as follows: *The floors of the north and south bays are painted concrete. The south bay includes a concrete sump that provides secondary containment for liquid wastes stored in the area. The building is used for treatment of hazardous and mixed wastes, for storage of hazardous and mixed wastes in containers, and for storage of large self-contained hazardous or mixed waste items.* ***15.15.1.2 Building 6921*** *Building 6921 is a single-story CMU building with a concrete floor. It has approximately 1450 square feet of space used for treatment and container storage activities in three areas.* ***15.15.1.3 Buildings 6925 and 6926*** *Buildings 6925 and 6926 are each 4,000-ft2 prefabricated steel buildings on concrete foundations. The buildings are used for storage of hazardous and mixed wastes in containers and for storage of large self-contained hazardous or mixed waste items. Building 6925 is also used for treatment.* ***15.15.1.4 Modular Storage Buildings*** *Two modular, prefabricated storage structures located west of Building 6920 are used for container storage of hazardous and mixed reactive and ignitable wastes. Each structure is constructed of 10- and 12-gauge welded steel with supporting structural steel sections, and includes a welded steel containment pan covered by grating. The inside surfaces are painted.* ***15.15.1.5 Outdoor Storage Area*** *The outdoor waste storage area consists of 48,500 ft2 of asphalt-paved areas to the north, east, and west of Building 6920 within the RMWMU fence. This area is used for storage of hazardous or mixed wastes in containers and for storage of large self-contained hazardous or mixed waste items. Containers of RCRA-regulated wastes are typically stored inside enclosed transportainers at this WMA. Containers with liquids are stored on portable spill containment pallets inside the transportainers.*		
585.	DOE 585	382	Permit Attachment	DOE	Please see Comment No. 6 regarding capacities. Please revise to read:		

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			15, 15.15.2		The maximum total volume of hazardous or mixed waste at any time at the RMWMU is approximately 209,550 gallons of liquids or solids. This is the maximum volume of waste that could be removed from the waste management areas as part of closure activities. The maximum total waste volume is broken down as follows: 1. Building 6920: - 13,420 gallons 2. Building 6921: - 7,810 gallons 3. Building 6925: - 83,160 gallons 4. Building 6926: - 83,160 gallons 5. Modular storage building TP 150: - 1,100 gallons 6. Modular storage building TP 153: - 1,100 gallons 7. Outdoor waste storage area: - 19,800 gallons		
586.	DOE 586	382	Permit Attachment 15, 15.15.3	DOE	Please see Comments No. 567, 569 and 577 regarding Unit operations and the areas where contamination is most likely. The non-volatile indicator parameters chosen for evaluating effectiveness of decontamination are present in particulates; these would be most likely to be present in the exhaust system only up to the first filter, unless there were indications or records to indicate the filter had failed. In such an event, appropriate cleanup and decontamination procedures would already have been performed in response to such a release. Also, DOE/Sandia note transportainers may be materials other than steel. Please revise as follows: *3. If hazardous or mixed waste or hazardous waste constituents were inadvertently released into the local exhaust systems during treatment activities, they would be present up to the first filter, unless there were indications or records to indicate the filter had failed.* *6. Containers of waste were stored in transportainers in the outdoor storage area. Containers of liquids were not routinely stored within the transportainers; those that were present were stored on spill pallets. Containers of waste were not opened within the transportainers.* *7. Hazardous or mixed waste or hazardous waste constituents are not present except in areas where wastes were managed.* *8. The interior floors of the waste management areas in each building were maintained to retain their integrity by following established maintenance and inspection procedures, breaches of protective coatings were repaired in a timely manner, and a small amount of soil present on the floors is due to normal traffic and operations.*		
587.	DOE 587	383	Permit Attachment 15, 15.15.4	DOE	Please see PA15-6 and PA15-8 regarding Unit operations and the areas where contamination is most likely. Such areas at the RMWMU are further reduced by storage practices:		

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					secondary containment in most of the storage areas is provided by portable spill pallets and pans that would be removed with any remaining containers of waste prior to closure. Accordingly, please revise as follows: *The closure approach and general activities described in Sections 15.2 through 15.12 of this Permit Attachment shall be applied to closure of the RMWMU. With respect to the individual waste management areas the Permittees shall use the following approach.* *1. Waste management equipment and other items shall be evaluated individually to determine whether it is more effective to remove them or decontaminate them. Items that are most likely to be removed include local exhaust systems up to the first filter (unless there is evidence or records indicating filter failure), filters, and portable equipment. Items that may be decontaminated include the interiors of fume hoods.* *2. Transportainers used for storage in the outdoor waste management areas shall be visually examined for evidence of releases. The transportainers shall be evaluated individually to determine whether it is more effective to remove and dispose of them or decontaminate them.* *4. The floors and secondary containment structures (if present) of each treatment and storage area shall be decontaminated by sweeping and washing as described in Section 15.3.2 of this Attachment.* *5. The asphalt in the outdoor waste management area shall be visually examined for evidence of deterioration and releases. Decontamination or removal of the asphalt shall be conducted at areas where there is visual evidence or documentation, including sampling results, of a release of hazardous or mixed wastes or hazardous waste constituents. Any soil beneath the asphalt contaminated above established background or risk levels, as appropriate, shall be excavated and disposed of.*		
588.	DOE 588	385	Permit Attachment 15, Table 15-5	DOE	Please see Comment Nos. 10 and 570 regarding indicator parameters and rationale. Additionally, there are no footnotes d and e to this table, please delete the references to them in the body of the table. Please revise as follows: *Summary of Pre-Wash Sampling* *Media to be Sampled: Floor sweepings* *Indicator Parameters[a]: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver*		

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					Summary of Post-Wash Sampling: Used Wash Water and Used Rinse Water *Area to be Decontaminated and applicable Sampling Grid: Building 6920 Figure 15-6, Permit Attachment 15 Bildg. 6920 Closure Grid* *Indicator Parameters[a]: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver* *Area to be Decontaminated and applicable Sampling Grid: Building 6921 Figure 15-7, Permit Attachment 15 Bldg. 6921 Closure Grid* *Samples per Grid[c]: 4* *Area to be Decontaminated and applicable Sampling Grid: Modular Storage Buildings Figure 15-9, Permit Attachment 15 Modular Storage Bldg. Closure Grid* *Samples per Grid[c]: 4* *c One sample from each pair of used wash water and rinse water samples will be filtered when collected to remove particulates. Secondary containment structures (bottom and sides up to the containment level) within the gridded area are considered part of the grid.*		
589.	DOE 589	387	Permit Attachment 15, 15.16.1	DOE	DOE/Sandia note this is not consistent with the information that should be specified in Permit Attachment 6, as concrete is sufficiently impervious to serve as secondary containment in accordance with the requirements of 40 CFR 264.175(b)(1-4). Please see Comment No. 374 for additional discussion regarding the need for an epoxy coating, and revise as follows: *The following is a brief description of each waste management area.* *2. The Work Area is located in the corner of the high bay north and east of the hot cell and the permanent shield wall. Waste management activities in the work area include storage and treatment. The concrete floor is painted. The work area includes a 6-ft-wide walk-in fume hood, which is also used for storage and treatment of waste in containers. The fume hood is equipped with a negative-pressure ventilation system. A flexible exhaust hose can be attached to this system, allowing localized negative-pressure ventilation from the work area. Airflow from the ventilation system passes through a two-stage high-efficiency particulate air filter train before being released to the environment through an exhaust stack. The filter train removes particulates entrained in the airflow.*		

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					4. Containers of Hazardous and Mixed Waste may also be stored in the southern half of the high bay. The footprint of the storage area will vary, depending on the quantity and configuration of waste containers (e.g., containers may also be stored in the northwest portion of the high bay). The concrete floor of the storage area is painted. The high bay area of Building 6597 is also equipped with a system of floor trenches covered with steel plates or grating. These trenches are not used to provide secondary containment for management of hazardous or mixed wastes.		
590.	DOE 590	386	Permit Attachment 15, 15.16.2	DOE	Please see Comment No. 6 regarding capacities. Please revise to read: The maximum volume of hazardous or mixed waste in storage at any time at the AHCU is estimated at 6,976 gallons of liquids and/or solids. This is the maximum volume of hazardous or mixed waste that could be removed from the waste management areas as part of closure activities. The maximum total waste volume is broken down as follows: 1. Building 6597 hot cell - 900 gallons 2. Building 6597 work area - 1,100 gallons 3. Building 6597 container storage area - 3,520 gallons 4. Building 6597 storage silos: - 1,456 gallons		
591.	DOE 591	386	Permit Attachment 15, 15.16.3	DOE	Please see Comment Nos. 567, 569 and 577 regarding Unit operations and the areas where contamination is most likely. Please revise as follows: *In addition to the assumptions listed in Condition 15.3 of this Permit Attachment, closure activities specified in this plan specific to the AHCU assume that the following conditions were met during the operational life of the Unit.* *1 Activities that involved opening waste containers or managing large self-contained hazardous or mixed waste items were confined to the interior of the AHCU waste management areas. If contamination occurred, it would have been confined to those areas.* *2. Treatment activities were conducted in a controlled manner, minimizing the potential for releases of hazardous or mixed wastes or hazardous waste constituents.* *3. If hazardous or mixed wastes or hazardous waste constituents were inadvertently released into the local exhaust systems during treatment activities, they would be present in the system up to the first filter unless there were evidence or records to indicate the filter had failed.* *4. Enclosed waste management areas (e.g. hot cell and floor silos) are considered independently of other waste management areas when evaluating the potential presence of*		

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					hazardous or mixed wastes or hazardous waste constituents. *5. Steel plates over floor trenches were moved only as needed for maintenance. Hazardous or mixed wastes or hazardous waste constituents are not present in any section of floor trench that has been covered with steel plates unless there has been a release of hazardous or mixed wastes into that section of trench.* *6. Covers to each silo have been opened only as needed for storage operations. Hazardous or mixed wastes or hazardous waste constituents are not present in each silo unless there has been a release of hazardous or mixed waste into that silo.* *8. Hazardous or mixed wastes or hazardous waste constituents could not be present except in areas where wastes were managed.*		
592.	DOE 592	388	Permit Attachment 15, 15.16.4	DOE	Please see Comment Nos. 567 and 569 regarding Unit operations and the areas where contamination is most likely. Such areas at the AHCU are further reduced by storage practices: secondary containment is provided by portable spill pallets and pans that would be removed with any remaining containers of waste prior to closure. Accordingly, please revise as follows: Please revise to read: *The closure approach and general activities described in Condition 15.5 of this Permit Attachment shall be applied to closure of the AHCU. With respect to the individual waste management areas, the Permittees shall use the following approach.* *1. The floor of the hot cell shall be visually examined for evidence of deterioration and releases. The floor shall be decontaminated by washing, as described in Condition 15.5 of this Permit Attachment.* *2. Equipment within the work area shall be evaluated to determine whether it is more effective to remove and dispose of it or decontaminate it. Items that are most likely to be removed include local exhaust systems (up to the first filter), filters, and portable equipment. Items that are most likely to be decontaminated include the interior of the fume hood. The floor of the work area shall be decontaminated by sweeping and washing, as described in Condition 15.5 of this Permit Attachment.* *3. The liners of the silos shall be visually examined for evidence of deterioration and releases. The silos are isolated from the rest of the AHCF waste management areas. If there is visual evidence of deterioration or a release, or there is documentation indicating a release occurred, the affected*		

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					areas of the silos will be washed. *4. The container storage area shall be decontaminated by sweeping and washing the floor, as described in Condition 15.5 of this Permit Attachment.*		
593.	DOE 593	390	Permit Attachment 15, Table 15-6	DOE	Please see Comment Nos. 10 and 570 regarding indicator parameters and rationale. Please revise as follows: *Summary of Pre-Wash Sampling* *Media to be Sampled: Floor sweepings* *Indicator Parameters[a]: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver* *Summary of Post-Wash Sampling: Used Wash Water and Used Rinse Water* *Area to be Decontaminated: Hot Cell* *Indicator Parameters[a]: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver* *c One sample from each pair of used wash water and rinse water samples will be filtered when collected to remove particulates. Secondary containment structures (bottom and sides up to the containment level) within the gridded area are considered part of the grid.*		
594.	DOE 594	393	Permit Attachment 15, 15.17.2	DOE	Please see Comment No. 6 regarding capacities. Please revise to read: *The maximum total inventory of hazardous or mixed waste in storage at any time in the MSB is approximately 115,720 gallons of liquids and/or solids. The maximum total waste inventory is broken down as follows:* *Type B Bunker (37034): 25,080 gallons* *Type C Bunker (37118): 35,200 gallons* *Type D Bunkers (37045, 37055, and 37057): 55,440 gallons (18,480 gallons each)*		
595.	DOE 595	393	Permit Attachment 15, 15.17.3	DOE	Please see Comment Nos. 567 and 569 regarding Unit operations and the areas where contamination is most likely. DOE/Sandia note the bunker floors are not coated, as the requirement in 40 CFR 264.175(b)(1) for a base underlying the containers that is free of cracks or gaps and is sufficiently impervious to contain leaks and spills until the collected material is detected and removed is fully satisfied through use of spill pallets and pans. Furthermore, the spill pallets and pans will be removed with any remaining containers of waste prior to the start of closure, further reducing areas of potential contamination. Please revise to read:		

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					In addition to the assumptions of Section 15.3 of this Permit Attachment, closure activities specified in this Section assume the following conditions were met during the operational life of the MSB: *1. Hazardous and mixed waste handling activities did not involve opening waste containers at the MSB, and large self-contained items were managed in a manner to prevent releases of hazardous or mixed wastes or hazardous waste constituents. If a container breach or a release occurred, it would have been addressed in a timely manner and would be documented in the Operating Record, and* *2. The floors in each hazardous and mixed waste management area were maintained to retain their integrity by following established maintenance and inspection procedures, and the small amount of soil present on the floors is due to normal traffic and operations.*		
596.	DOE 596	395	Permit Attachment 15, Table 15-7	DOE	Please see Comment Nos. 10 and 570 regarding indicator parameters and rationale. Please revise as follows: *Summary of Pre-Wash Sampling* *Media: Floor sweepings* *Indicator Parameters[a]: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver* *Summary of Post-Wash Sampling: Used Wash Water and Used Rinse Water* *Area to be Decontaminated: Bunker 37034* *Indicator Parameters[a]: Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver* *Closure Criteria[d] (mg/L): Evaluate with respect to concentrations in unused wash and rinse waters* *c One sample from each pair of floor wash water and rinse water samples will be filtered when collected to remove particulates: drainage structures, sumps, and secondary containment structures (bottom and sides up to the containment level) within the gridded area are considered part of the grid.*		
597.	DOE 597	363	Permit Attachment 15, 15.3.1	DOE	Section 15.8 is Closure Schedule; Section 15.7 addresses sampling and analysis. Please revise accordingly.		
598.	DOE 598	365	Permit Attachment 15, 15.4	DOE	DOE/Sandia note the closure process is described in Section 15.3; decontamination steps that are part of closure are described in Section 15.5. Additionally, wastes are treated at the RMWMU. Please revise to read:		

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					The closure processes described in Condition 15.3 of this Permit Attachment are for indoor storage areas and for indoor areas at Permitted Units where treatment in containers occurs (i.e., the AHCU and RMWMU).		
599.	DOE 599	366	Permit Attachment 15, 15.7	DOE	Table 15-1 lists off-site TSDFs; Table 15-2 summarizes closure activities and associated sampling methods, parameters of interest, and sample numbers/frequencies. Please revise accordingly.		
600.	DOE 600	377	Permit Attachment 15, 15.13.6.8	DOE	There is no Section 15.5.3; decontamination procedures are outlined in Section 15.5. Please revise accordingly.		
601.	DOE 601	377	Permit Attachment 15, 15.13.6.10	DOE	Section 15.8 is Closure Schedule, Section 15.7 addresses sampling and analysis, including data management and reporting. Please revise accordingly.		
602.	DOE 602	378	Permit Attachment 15, 15.14.4	DOE	The closure approach and general activities are described in Sections 15.2 through 15.12. Please revise accordingly.		
603.	DOE 603	386	Permit Attachment 15, 15.15.8.7	DOE	Section 15.8 is Closure Schedule, Section 15.7 addresses sampling and analysis, including data management and reporting. Please revise accordingly.		
604.	DOE 604	392	Permit Attachment 15, 15.16.6.9	DOE	Section 15.8 is Closure Schedule, Section 15.7 addresses sampling and analysis, including data management and reporting. Please revise accordingly.		
605.	DOE 605	393 - 396	Permit Attachment 15, 15.18	DOE	These sections appear to be a continuation of Section 15.17. Please revise the numbers as follows: *15.18 should be 15.17.6* *15.18.1.1 through 15.18.1.7 should be 15.17.6.1 through 15.17.6.7* *15.18.2 through 15.18.2.2 should be 15.17.6.8 through 15.17.6.10* *References to these sections in the text of Permit Attachment 15 should also be revised as needed.*		
606.	DOE 606	396	Permit Attachment 15, 15.18.2.1	DOE	Please see Comment No. 605 regarding Section numbers. This should be Section 15.17.6.9. Additionally, there is no Section 15.75; the correct reference is Section 15.7.5. Please revise accordingly.		
607.	DOE 607	After 396	Permit Attachment 15	DOE	The figures do not reflect the most current information provided in the Application. DOE/Sandia will provide updated figures under separate cover.		
608.	DOE 608	397	Permit Attachment 16	DOE	DOE/Sandia note 40 C.F.R. § 264.117(a)(2)(i) includes the option for a shorter post-closure care period if NMED finds that a shorter period is sufficient to protect human health and the environment. The waste in the CAMU containment cell has been pretreated to significantly reduce the levels of contamination, and natural, biologically mediated processes will further reduce the concentrations over time. Once leachate flow has ceased, no migration of contaminated liquid from the cell is possible. Thus, the reduced risk to human health and the environment may indicate a reduction in		

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					monitoring or termination of the post-closure care period. Please revise to read: *Post-closure care of the CAMU began on October 15, 2003, and shall continue for 30 years after that date unless the New Mexico Environment Department (Department) determines that the post-closure care period may be terminated earlier than 30 years or extended beyond 30 years pursuant to 40 C.F.R. § 264.117(a)(2).*		
609.	DOE 609	401	Permit Attachment 16, 16.3.2	DOE	DOE/Sandia note the percolating water will be retained in the fine layer rather than the coarse layer because the capillary tension associated with the smaller pores exceeds the force of gravity and whatever tension is imposed by the coarse layer. As the fine layer becomes saturated the capillary tension decreases until a level of saturation is achieved where the moisture in the fine layer will drain into the coarser layer. Please revise to read: *Filter Sand/Pea Gravel Layers - A capillary barrier, comprised of a 4-inch-thick filter sand layer and a 6-inch-thick pea gravel layer, lies beneath the native soil blend. Because capillary pressure in a soil matrix is inversely proportionate to the effective pore size (i.e., the smaller the pore size, the higher the capillary pressure), the downward migration of percolating water is suspended when it arrives at the fine/coarse-grained soil interface, provided that the field capacity of the fine-grained soil is not exceeded.*		
610.	DOE 610	402	Permit Attachment 16, 16.3.3.3	DOE	DOE/Sandia note any leakage from the sanitary sewer line or migration of volatile compounds from the CWL is potential, not existing. Please revise to read: *The CSS Monitoring Subsystem is designed to detect and identify leakage of hazardous constituents from the sanitary sewer line that could potentially occur, as well as volatile organic compounds that could potentially migrate from the CWL toward the containment cell.*		
611.	DOE 611	402	Permit Attachment 16, 16.3.4	DOE	As discussed in Comment No. 2, DOE/Sandia are responsible for characterizing the collected leachate in accordance with the requirements of 40 CFR 261. DOE/Sandia are responsible for managing hazardous wastes in accordance with the requirements of 40 CFR 262, and are responsible for arranging further off-site management that is compliant with all applicable requirements of 40 CFR 260-270. Please revise to: *Leachate that collects in the LCRS sump shall be pumped into 55-gallon drums or other appropriate containers.*		
612.	DOE 612	402	Permit Attachment 16, 16.5	DOE	DOE/Sandia note authorized personnel are responsible for controlling access and may choose to do so by means other than control of keys. Please revise to read:		

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					The gates shall be locked when authorized personnel are not present at the CAMU; only authorized personnel shall control access.		
613.	DOE 613	403	Permit Attachment 16, 16.6	DOE	DOE/Sandia note it is not possible to prevent all instances of erosion of the final cover; engineering controls are in place to minimize erosion damage from surface water run-on and run-off, and damage will be repaired in accordance with this Permit Attachment. DOE/Sandia already submit an annual report to the NMED. The items specified in 6 are not required in 40 CFR 270, 40 CFR 264 Subpart G, or 40 CFR 264.552. Furthermore, as discussed in Comment No. 3, Permit requirements must be identical to the regulatory requirements. Results of inspections and sampling, and information regarding repairs, are maintained in the CAMU Operating Record; they are available for review, in accordance with 40 CFR 270.30(i) and Part 1 of the draft Permit. DOE/Sandia note that information regarding the effectiveness of repairs will be included in the Operating Record as it becomes apparent through subsequent inspection, maintenance, and monitoring activities. Please revise items 3 and 6 as follows: *3. Use engineering controls to minimize erosion damage to the final cover from run-on and run-off of surface water;* *6. Include in the annual report to the Department a summary of required inspections and maintenance/repair activities.*		
614.	DOE 614	403	Permit Attachment 16, 16.6.1	DOE	For purposes of implementing the Permit, use of position/title is more efficient and is consistent with the NMED contact information provided in Section 1.32.1 of the draft Permit. In accordance with 40 CFR 270.11, the names of responsible corporate officers and their delegated representatives will be provided to NMED by letter transmittal. Such a transmittal does not meet the criteria for a Class I modification to this Permit; please delete the last paragraph. Please revise to: *The DOE contact person is:* *Site Office Manager* *U.S. Department of Energy* *P.O. Box 5400, M/S 0184* *Albuquerque, NM 87185-0184* *(505) 845-6036*		

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					The Sandia contact person is: *Vice President* *Waste Management Operations* *Sandia National Laboratories* *P.O. Box 5800* *Albuquerque, NM 87185-5800*		
615.	DOE 615	404	Permit Attachment 16, 16.6.2	DOE	DOE/Sandia note that CAMU behavior is expected to change over time, particularly with respect to the quantity of leachate generated. The maintenance and monitoring schedule in the draft Permit may not be appropriate for the entire term of the Permit; changes in the schedule may require permit modifications in accordance with 40 CFR 270.42. Please revise to read: *The Permittees shall submit a written request for a Permit modification to authorize a change in the approved post-closure care requirements whenever changes are needed because of one or more of the following: 1) changes in regulatory requirements 2) changes in the CAMU operations (e.g., lack of leachate), or 3) ensuring protection of human health or the environment.*		
616.	DOE 616	404	Permit Attachment 16, 16.6.4	DOE	This requirement is not consistent with the capabilities of the VZMS, which is not suitable for obtaining analytical results. DOE/Sandia also note that total VOC concentration in the VZMS is not indicative of containment cell integrity and performance. In addition, DOE/Sandia note that it will not be possible to complete a secondary assessment within 15 days. Please revise to read: *As part of each monitoring event, soil moisture content results obtained from the VZMS shall be evaluated to determine if there has been leakage from the containment cell and, if so, the character and magnitude of the leak. An unexplained soil moisture increase greater than 4 percent (expressed as gravimetric percent moisture content) at any monitoring location(s) shall trigger a secondary assessment in 45 days.*		
617.	DOE 617	405	Permit Attachment 16, Table 16-1	DOE	DOE/Sandia note the specifications for Year 1 are not necessary since closure was completed over 3 years ago. Also, the footnote should acknowledge that EPA methods are periodically revised and updated, thus the most recent requirements would be incorporated into the Permit. Please revise as follows: *Time Frame: Year 1 after closure* *Time Frame: Years 2-30 after closure* *TO-14 = EPA Method TO-14, as revised and updated*		
618.	DOE 618	406	Permit Attachment 16, 16.6.5.1	DOE	DOE/Sandia note that it may not be possible to find each animal. Any animals that are found will be relocated to minimize further damage to the cover. Please revise as follows:		

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					The Permittees shall make reasonable attempts to relocate animals prior to backfilling their burrows.		
619.	DOE 619	406	Permit Attachment 16, 16.6.5.2	DOE	The natural grasses that make up the cover vegetation do not tolerate mowing; it affects their ability to survive during periods of limited precipitation. Some of the seed stalks for natural grasses exceed 12 inches in height; mowing will interfere with the annual reseeding that is necessary to sustain the vegetation. Taller grasses also enhance vegetative growth by protecting the soil from the direct impact of raindrops, and they provide shade that preserves soil moisture. Additionally, mowing is not necessary to prevent deep-rooted plants from becoming established; DOE/Sandia have successfully managed such plants by identifying them during the quarterly inspection and physically removing the plants while they are still small and without any significant root structure. Please delete the requirement for mowing the vegetation, and revise to read: *Maintenance/Repair - The Permittees shall prevent the establishment of deep-rooted plants, such as shrubs and trees by identifying such species during quarterly inspection and physically removing them before they become established.*		
620.	DOE 620	406	Permit Attachment 16, 16.6.5.3	DOE	Other containers may be more suitable, depending on the volume of leachate. Please revise to: *As described in Condition 16.3.4 of this Permit Attachment, leachate that collects in the LCRS sump shall be pumped directly into 55-gallon drums or other compatible containers.*		
621.	DOE 621	407	Permit Attachment 16, 16.6.5.5	DOE	Not all the listed activities are needed all the time; please revise to read: *Activities shall include, but are not limited to, the following as needed: removing excessive accumulations of wind-blown plants and debris, repairing broken wire sections and posts, repairing and oiling gates, cleaning or replacing locks, and repairing or replacing warning signs.*		
622.	DOE 622	407	Permit Attachment 16, 16.6.6	DOE	Consistent with Section 11.1 of the draft Permit governing use of inspection forms, please revise to: *Inspection results for each of the CAMU systems shall be recorded on a post-closure inspection form. A representative Post-Closure Inspection Form (PCIF) is included in Appendix 2 of this Permit Attachment. This PCIF is provided for informational purposes only and is subject to change. Any PCIF used shall be functionally equivalent to the PCIF shown in Appendix 2.*		
623.	DOE 623	408	Permit Attachment 16, 16.7	DOE	DOE/Sandia note the training requirements in the Appendix apply to the personnel performing the job descriptions in the Appendix. Please revise to read:		

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					The personnel training program for inspection, monitoring, and maintenance of the CAMU is included in this Permit Attachment as Appendix 9. The Project Lead and Field Technicians working at the CAMU shall be trained, at a minimum, in accordance with the requirements of this Permit Attachment.		
624.	DOE 624	408	Permit Attachment 16, 16.8	DOE	This section is not consistent with the recordkeeping requirements in Permit Attachment 13 or 40 CFR 264.73 regarding the type of records that are required, the length of time they must be maintained, and the name and location of the Facility Records Center. For example, training records for past personnel need only be kept for three years from the date they last worked at the Unit, in accordance with 40 CFR 264.16(e). Written standard operating procedures and a site-specific health and safety plan are not required by 40 CFR 264, and are not necessary for successful post-closure care; items 4 and 9 should be deleted. DOE/Sandia are responsible for characterizing the collected leachate in accordance with the CAMU WAP and the requirements of 40 CFR 261. As discussed in Comment No. 2, DOE/Sandia are also responsible for managing the leachate in accordance with the applicable requirements of 40 CFR 262, and for arranging further off-site management that is compliant with all applicable requirements of 40 CFR 260-270. There are many options for off-site management in compliance with the regulations, and the records associated with characterization and management of the leachate will be maintained in accordance with regulatory requirements; however, neither the options nor the records necessitate coverage under the Permit. Accordingly, item 8 should be deleted. Please revise as follows: *The following records shall be maintained at the Facility's Records Center:* *1–3 (not included in comment)* *4. Training records as specified in 40 CFR 264.16(e);* *5. (formerly 6, not included in comment)* *6. All leachate generation records;* *7. Summary reports and details of any incidents at the CAMU that require activation of the Contingency Plan; and* *8–9 (formerly 10-11, not included in comment)*		

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625.	DOE 625	409	Permit Attachment 16, 16.8	DOE	Some or all of the annual reports may be consolidated: Also, DOE/Sandia note the requirement for a certified activity report is not consistent with 40 CFR 264 Subpart S. Please see Comment No. 3 for further discussion of consistency between regulations and requirements in the draft Permit. Please revise to read: *During the post-closure care period, the Permittees shall submit a CAMU activity summary report to the Department on an annual basis. The activity summary report may be combined with other annual deliverables that address post-closure or remediation activities.*		
626.	DOE 626	409	Permit Attachment 16, 16.9	DOE	DOE/Sandia note that information regarding monitoring, maintenance, and repair is provided annually in the CAMU report. Individual PCIFs are maintained in the Facility Operating Record and are available for NMED inspection and review. Providing hundreds of PCIFs in an appendix to the post-closure care final report is not necessary. Please revise to read: *In addition, the Permittees shall prepare a final post-closure care report summarizing pertinent information regarding post-closure monitoring, maintenance, and repair activities and any variances from this Permit Attachment and the reasons for the variances.*		
627.	DOE 627	413 - 414	Permit Attachment 16, Appendix 1	DOE	Please revise this table to recognize that the most effective means of ensuring a viable plant community consistent with cover integrity is to forgo mowing and remove plants with the potential to form deep roots. Please see Comment No. 619 for additional discussion of mowing. Footnote a should be deleted, and footnotes c and e should be revised to reflect current site conditions and the correct VZMS monitoring frequency. CAMU System to be Inspected; Final Cover System Inspection Parameters: Existence of plants with the potential for forming deep roots. Maintenance/Repair Implementation: Physically remove the plant Maintenance/Repair Frequency: Quarterly, as the plants are identified and tagged as part of the cover inspection CAMU System to be Inspected; Final Cover System Inspection Parameters: Settlement of cover surface in excess of 6 inches Maintenance/Repair Frequency: Within 60 days of discovery of needed repairs or as soon as possible if seasonal conditions are not appropriate within 60 days CAMU System to be Inspected; Final Cover System Inspection Parameters: Animal intrusion burrows in excess of		

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					4 inches in diameter Maintenance/Repair Frequency: Within 60 days of discovery of needed repairs or as soon as possible if seasonal conditions are not appropriate within 60 days CAMU System to be Inspected; Final Cover System Inspection Parameters: Erosion of cover soil in excess of 6 inches deep Maintenance/Repair Frequency: Within 60 days of discovery of needed repairs or as soon as possible if seasonal conditions are not appropriate within 60 days CAMU System to be Inspected; Final Cover System Inspection Parameters: Contiguous areas of no vegetation >100 ft^2 Maintenance/Repair Frequency: Within 60 days of discovery of needed repairs or as soon as possible if seasonal conditions are not appropriate within 60 days c The LCRS pump shall be manually activated on monthly basis for 12 consecutive months after closure, then on a quarterly basis thereafter. e The VZMS components shall be inspected during regularly scheduled monitoring events (see Table 16-1 for VZMS post-closure monitoring frequency).		
628.	DOE 628	416	Permit Attachment 16, Appendix 2	DOE	Please revise as shown to be consistent with other sections with respect to mowing and deep-rooted vegetation. Please see Comment Nos. 619 and 627 for additional discussion. CONTAINMENT CELL COVER SYSTEM Inspection Parameters: A. Existence of deep-rooted plants or shrubs. Copy to: Records Center		
629.	DOE 629	422	Permit Attachment 16; Appendix 3, 3.0	DOE	As discussed in Comment Nos. 2 and 611, DOE/Sandia are responsible for characterizing the hazardous wastes generated during post-closure care at the CAMU in accordance with the requirements of 40 CFR 261. Also, the waste identification and characterization approach defined in Permit Attachment 9 (see Comment Nos. 442 and 443) is applicable to wastes managed at the CAMU. Thus, the wastes are characterized as needed to determine whether they are hazardous, to assign the appropriate waste codes, and to determine management requirements at the Permitted Unit. Accordingly, please revise to read: *This WAP specifically applies to characterization of hazardous wastes that will be generated and managed at the CAMU during the post-closure care period. The Permittees shall obtain sufficient information about such wastes through acceptable knowledge, supplemented as needed by sampling and analysis, to determine whether the wastes are*		

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					hazardous, assign the appropriate waste codes, and determine management requirements at the CAMU. Additionally, the Permittees shall periodically obtain additional information regarding the composition of the leachate to evaluate the post-closure performance of the containment cell. *This WAP describes the characterization frequency and parameters, their rationale, and methods to be used for sampling and laboratory analysis.*		
630.	DOE 630	422	Permit Attachment 16, Appendix 3, 3.1	DOE	As discussed in Comment Nos. 2 and 611, DOE/Sandia are responsible for characterizing the hazardous wastes generated during post-closure care at the CAMU in accordance with the requirements of 40 CFR 261. Thus, the WAP should be limited to characterization of wastes as needed for operation of the Permitted Unit, and should not include specifications for off-site waste management. Tritium should be deleted from the analytical parameters, because it is a radionuclide not subject to this Permit, as discussed in Comment No. 1. Additionally, DOE/Sandia may collect the wastes in other appropriate containers and may manage it at other accumulation areas or Permitted Units. Accordingly, please revise to read: *The post-closure configuration of the CAMU consists of a capped containment cell that incorporates the LCRS. Leachate shall be pumped to the surface and stored in 55-gallon drums or other compatible containers. The containers shall be managed in accordance with applicable regulatory requirements.* *Based upon analytical data collected from leachate previously pumped from the LCRS, the leachate consists of wastewater containing low levels of hazardous constituents and polychlorinated biphenyls (PCBs); it meets the listing description of hazardous waste F039 in 40 CFR 261.31(a). Used personal protective equipment and sampling equipment from leachate collection and management operations also meets the F039 listing description.*		
631.	DOE 631	422-423	Permit Attachment 16, Appendix 3	DOE	Please see Comment No. 2 and the preceding comment regarding duties of the Permittees and waste management activities at the CAMU that require a permit. DOE/Sandia note that no analyses are needed for hazardous waste determination with respect to the leachate, the PPE, and any sampling equipment, as they meet the meet the listing description of hazardous waste F039 in 40 CFR 261.31. Tritium should be deleted from the analytical parameters, because it is a radionuclide not subject to this Permit, as discussed in Comment No. 1.		

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					Furthermore, extensive analytical data are available from past sampling activities. The soils placed in the containment cell were characterized, and the leachate has been repeatedly sampled and analyzed for the hazardous constituents under waste code F039 found in 40 CFR 268.40. The analytical data indicate the following are not present: dioxins/furans, herbicides, nitroaromatics/nitramines (explosives), and pesticides. Therefore, they should be deleted from the list of analytes in this table. Additional analysis is not necessary for determining on-site management requirements in the CAMU less-than-90-day area or one of the SNL/NM Permitted storage Units. Periodic analysis of the leachate is appropriate for monitoring the performance of the containment cell and its contents. Please delete footnote a and revise to: *Hazardous waste management activities at the CAMU during the post-closure care period shall involve at a minimum the management of leachate and associated PPE.* *Table 3-1 of this Permit Appendix provides information on the parameters and rationale for identifying appropriate handling and storage requirements. The Permittees shall characterize these waste streams based upon the parameters listed in Table 3-1.* *Waste Stream: PPE and Sampling Equipment* *Waste Analysis Parameter(s) As needed for disposal* *Rationale for Selection: 1, 2, 3 (F039)* *Waste Stream: Leachate* *Waste Analysis Parameter(s): As needed for disposal* *Rationale for Selection: 1, 2, 3 (F039)* *Waste Stream: Leachate* *Waste Analysis Parameter(s): All hazardous constituents for wastewaters under waste code F039 found in 40 C.F.R. 268.40, Treatment Standards for Hazardous Wastes except dioxins/furans, herbicides, nitroaromatics/nitramines (explosives), and pesticides* *Rationale for Selection: Monitor performance of containment cell and contents* *1 No analysis is required for determining applicable EPA Hazardous Waste Numbers (shown in parentheses) if the waste meets a listing description in 40 CFR 261 Subpart D; analysis for verification purposes is described in Section 3.5.3.*		
632.	DOE 632	424	Permit Attachment 16	DOE	DOE/Sandia note setting accuracy and precision requirements for inorganic analyses is a generally accepted		

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			Appendix 3, 3.4		practice, but setting rigid criteria for organic compounds is generally not an accepted practice. The analytical performance for the measurement of organic compounds varies significantly between compounds and for different methods. This variation is widely accepted and can be seen in the performance tables published in the methods and in the performance requirements for accreditation in programs such as the National Environmental Laboratory Accreditation Conference (NELAC). Accordingly, it is appropriate to require that analytical performance criteria be established using industry standard practices, be compared to generally accepted criteria, and not include specific requirements. Current Sandia procedures and practices adequately address analytical performance criteria. For example, the acceptance range for Percent Recovered (%R) and Relative Percent Difference (RPD) are defined in the SNL/NM Statement of Work for Analytical Laboratories for each individual compound and analytical method. In addition, compliance with the acceptable range for %R and RPD is a required element of the SNL data review and validation procedures (SMO-05-03 and AOP 00-03). Please replace Table 3-3 with the following table: TABLE 3-3 Reference Documentation[a] Document Number: AOP 00-03 Document Title: Data Validation Procedure for Chemical and Radiochemical Data Document Number: AOP 95-16 Document Title: Sample Management and Custody Document Number: LOP 94-03 Document Title: Sample Handling, Packaging, and Shipping Document Number: SMO 05-03 Document Title: Procedure for Completing the Contract Verification Review Document Number: not applicable Document Title: SNL/NM Statement of Work for Analytical Laboratories Document Number: not applicable Document Title: Quality Assurance Project Plan for the Sample Management Office AOP – Administrative Operating Procedure LOP – Laboratory Operating Procedure SMO – Sample Management Office		

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					[a] – All documents in this table will be used as revised and updated		
633.	DOE 633	425	Permit Attachment 16, Appendix 3, Table 3-4	DOE	DOE/Sandia note the following: • The container requirements for sulfide are incorrect. • The following should be deleted from the analyte list, as discussed in Comment No. 631: tritium, dioxins/furans; herbicides; nitroaromatics/nitramines (explosives); and pesticides. Please revise as follows: *Analytes: Sulfide* *Sample Container Volume, Type and Materials: One – 1 L glass* *Chemical Preservatives: NaOH/Zinc Acetate* *Temperature: Cool to 4 C* *Holding Times: 7 days* *[a] – Additional sample sets shall be prepared as trip and field blanks, which shall accompany the sample shipment to the laboratory.* *[b] – Total metals include antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium and vanadium.* *C = Degrees Celsius* *HCl = Hydrochloric acid* *HNO_3 - Nitric acid* *L = Liter* *Ml = Milliliter* *NaOH = Sodium hydroxide* *PCB = Polychlorinated biphenyl* *SVOC = Semivolatile organic compound* *VOC = Volatile organic compound*		
634.	DOE 634	427	Permit Attachment 16, Appendix 3, 3.5.2	DOE	This should be consistent with the analogous requirement in Section 15.7.9 of Permit Attachment 15 regarding methods other than those in SW-846. Accordingly, please revise to: *Laboratory analytical procedures shall conform to the EPA's SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," (EPA, 1986 and all approved updates) or other appropriate established methods approved by the Department.*		
635.	DOE 635	427	Permit Attachment 16 Appendix 3, 3.5.2	DOE	Please see Comment No. 631 regarding analytical parameters for monitoring performance of the containment cell and contents. Also, DOE/Sandia note Method 6020 is appropriate for analyzing metals, as a combination of Methods 6010 and 6020 are best for achieving the required detection limits and DQOs for all metal suites of analysis. Please revise as follows:		

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					Analytical Parameter: Total Metals[b] *Analytical Test Method*[e]*: SW 6010/6020*		
636.	DOE 636	427	Permit Attachment 16, Appendix 3, 3.5.3	DOE	As discussed in Comment No. 631, no analysis is needed for characterizing the waste leachate. Characterization for monitoring the performance of the containment cell is needed no more often than annually, because the existing data indicate very little change. Annual characterization of the hazardous constituents in the leachate will also allow the Permittees to check that on-site management methods are appropriate. Accordingly, please revise to: *Leachate shall be sampled and analyzed annually (or every two years if there is not enough generated in a year) to verify that* *• Hazardous constituent concentrations are consistent with historical levels, indicating adequate performance of the containment cell and contents, and* *• On-site management methods are appropriate for the hazards presented by the waste.*		
637.	DOE 637	434	Permit Attachment 16, Appendix 5, 5.1.5	DOE	DOE/Sandia measure soil moisture to identify increases that may indicate leakage from the CAMU or the nearby sanitary sewer line. It will be more effective to identify increases in soil moisture by determining relative soil moisture content rather than absolute moisture content. The current process requires determination of the absolute moisture content of the soil beneath the containment cell through a complex calibration procedure using a drum of soil that approximates the in-situ conditions under the cell to correlate the direct neutron counts from the probe. This information is superfluous to the objective of determining whether the soil moisture has increased. DOE/Sandia note the relative moisture content obtained from a direct neutron count provides all the information needed for determining changes in moisture content. Determining the relative moisture in this manner provides more timely information and maximizes use of reliable equipment. Please delete Section 5.1.5 and Figure 5-1.		
638.	DOE 638	451	Permit Attachment 16, Appendix 7	DOE	Please delete Section 7.1.5.2 and Figure 7-1 as discussed in the preceding comment.		
639.	DOE 639	457	Permit Attachment 16, Appendix 8, 8.0	DOE	Please revise to read: *The leachate is placed directly into 55-gallon drums or other compatible containers.*		

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640.	DOE 640	458	Permit Attachment 16, Appendix 8, 8.2	DOE	Please revise to read: *Containerized leachate shall be stored in 55-gallon drums or other compatible containers on spill containment pallets to prevent the accidental discharge of leachate to the ground surface.*		
641.	DOE 641	458	Permit Attachment 16, Appendix 8, 8.3	DOE	As discussed in Comment No. 2 the Permittees have a duty to manage the leachate in accordance with all applicable regulations. Leachate management is discussed in Section 16.3.4 of Permit Attachment 16. Additionally, DOE/Sandia note this Appendix (8) addresses CAMU-specific emergency response information. Please delete this section, as it is not relevant to emergency response.		
642.	DOE 642	458	Permit Attachment 16, Appendix 8	DOE	KAFB security patrols do not control TA-III. Please revise to read: *The CAMU is located inside TA-III, which is controlled by fences, security patrols, and limited access through security gates.*		
643.	DOE 643	458	Permit Attachment 16, Appendix 8, 8.5	DOE	In accordance with previous comments regarding containers, please revise to read: *Typical containers managed within the CAMU include 55-gallon drums or other compatible containers of leachate that are managed in accordance with applicable regulations in 20 NMAC 4.1.300, incorporating 40 C.F.R. Part 262.*		
644.	DOE 644	461	Permit Attachment 16, Appendix 8, Table 8-2	DOE	The table is not consistent with the information provided for other Unit-specific emergency coordinators in Permit Attachment 12. Additionally, Donald Schofield will serve as the primary coordinator. Please revise to read: *CAMU Emergency Coordinators[B]* *Primary:* *Donald P. Schofield* *Sandia National Laboratories* *PO Box 5800* *Albuquerque, NM 87185* *Office Phone:* *(505)844-4088 (office)* *(505)259-7098 (cell)* *Home Phone: (505)268-6888* *First Alternate:* *Bruce Reavis* *Sandia National Laboratories* *PO Box 5800* *Albuquerque, NM 87185* *Office Phone:* *(505)845-8403 (office)* *(505)250-6388 (cell)*		

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					(505)530-7538 (pager) *Home Phone: (505)296-0007* *Second Alternate:* *Robert Ziock* *Sandia National Laboratories* *PO Box 5800* *Albuquerque, NM 87185* *Office Phone:* *(505)845-0845 (office)* *Home Phone: (505)255-4714* *[a]At least one Emergency Coordinator must be at the CAMU or on call during CAMU operations.*		
645.	DOE 645	464	Permit Attachment 16, Appendix 9, 9.1.2	DOE	Please clarify by revising as follows: *The training director must review the CAMU Operating Procedures and Refresher Training outlined in Table 9-3 of this Permit Appendix.*		
646.	DOE 646	397	Permit Attachment 16, 16.0	DOE	The closed CAMU containment cell is the Unit subject to post-closure care; it is a 3.75-acre site. Please revise accordingly.		
647.	DOE 647	399	Permit Attachment 16, 16.3.1.1	DOE	Please revise the cross-reference as follows: *Additional details of the leachate collection process and system inspection/maintenance/repair are presented in Conditions 16.3.4 and 16.6.5.3 of this Permit Attachment.*		
648.	DOE 648	401	Permit Attachment 16, 16.3.3.1	DOE	Please revise to correct a typographic error: *It consists of five parallel-trending, horizontal, vitrified clay pipes (VCPs) located 5 feet below the containment cell bottom liner, with horizontal spacing of 17 to 27 feet (see Figures 16-7 and 16-8 of this Permit Attachment).*		
649.	DOE 649	402	Permit Attachment 16, 16.3.3.3	DOE	DOE/Sandia note there is no Figure 16-16-11. Figure 16-11 is related to the Chemical Waste Landfill. Please provide the figure and revise the reference as follows: *Figure 16-11 of this Permit Attachment presents a cross-sectional view of the CSS monitoring subsystem components.*		
650.	DOE 650	408	Permit Attachment 16, 16.6.6	DOE	Emergencies are defined in Condition 16.12 of this Permit Attachment, and the Contingency Plan is Permit Attachment 12. Please revise accordingly.		
651.	DOE 651	410	Permit Attachment 16, 16.12	DOE	The Contingency Plan is Permit Attachment 12 rather than Permit Attachment 7, and the Unit-specific information is in Appendix 8 to Permit Attachment 16. Please revise accordingly.		
652.	DOE 652	410	Permit Attachment 16, 16.13	DOE	Please delete the following references that do not appear in the text of Attachment 16: New Mexico Environment Department (NMED), December 2003. U.S. Environmental Protection Agency (EPA), 1993.		

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					U.S. Environmental Protection Agency (EPA), 1990.		
653.	DOE 653	410	Permit Attachment 16, 16.13, Appendix 3 - 7	DOE	Please make a global change throughout Attachment 16 and associated appendices to indicate that all references to SW-846 are to "EPA, 1986 and all updates."		
654.	DOE 654	434	Permit Attachment 16, Appendix 5	DOE	These internal operating procedures are updated periodically as needed. Please delete footnotes a, b, and c, and add a new footnote to the title to indicate these procedures/documents will be used "as revised and updated."		
655.	DOE 655	442	Permit Attachment 16, Appendix 6	DOE	These internal operating procedures are updated periodically as needed. Please delete footnotes a, b, and c, and add a new footnote to the title to indicate these procedures/documents will be used "as revised and updated."		
656.	DOE 656	450	Permit Attachment 16, Appendix 7	DOE	These internal operating procedures are updated periodically as needed. Please delete footnotes a, b, and c, and add a new footnote to the title to indicate these procedures/documents will be used "as revised and updated."		
657.	DOE 657	457	Permit Attachment 16, Appendix 8, 8.0	DOE	The Contingency Plan is included in Permit Attachment 12; please revise accordingly.		
658.	DOE 658	After 468	Permit Attachment 16	DOE	DOE/Sandia have provided photographs showing the CAMU in the Application; these should be included as Appendix 9 to Permit Attachment 16. DOE/Sandia will provide the photographs under separate cover.		
659.	DOE 659	397	Permit Attachment 16	DOE	The following acronyms appear in the text of this Permit Attachment but are not defined in the list of acronyms at the beginning of Permit Attachment 16 or in the list at the beginning of the draft Permit. Please include them in the Acronym List: AWG - American Wire Gauge COLIWASA - composite liquid waste sampler NELAC - National Environmental Laboratory Accreditation Conference		
660.	CPC 001		General	CARD and Peace Center	Due to the danger of real time and potential contamination to the large Albuquerque population, Sandia National Laboratories owes to its neighbors, a very comprehensive RCRA permit. However, the current permit on which we are asked to comment is incomplete.		
661.	CPC 002		General	CARD and Peace Center	Our organizations, Citizens for Alternatives to Radioactive Dumping, and the Albuquerque Center for Peace and Justice have not received documents necessary to evaluate contamination to our drinking water in regard to the draft permit, specifically, the tech-law documents, which are the basis for the current policy for leaving transuranic wastes perched above the aquifer used for drinking water in our community. It is our position that not all the supporting documents upon the RCRA permit relies are available for public perusal.		

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662.	CPC 003		General	CARD and Peace Center	It is our position that some facilities at SNL are not properly permitted.		
663.	CPC 004		General	CARD and Peace Center	It is impossible for our two groups to simultaneously review the SNL Draft RCRA permit and the long term maintenance permit for the mixed waste landfill, both of which impact a large part of our constituencies – we do not have the resources. This is an environmental justice issue of which the New Mexico Environment Department should be aware.		
664.	CPC 005		General	CARD and Peace Center	Also, there are permits within permits that are required to be reviewed by the public as part of the review of the RCRA permit for SNL with no guideline for review. This unfriendly and nearly impossible maze of reports is also, we believe, an ej issue.		
665.	CPC 006		General	CARD and Peace Center	We believe that our groups should have been notified of a public meeting regarding the permit so that we could clarify some of the above and below stated issues with NMED, however we were not invited to such a meeting.		
666.	CPC 007		General	CARD and Peace Center	Both of our organizations have been very involved in air monitoring of SNL; we do not see the kind of analysis for VOCs that would allow us to evaluate what air emissions are currently occurring. SNL has only four ambient air monitors. The combination of these two factors leave us with a lack of information to make the more complete comments we would like to submit.		
667.	CPC 008		General	CARD and Peace Center	Post closure care is inadequately dealt with in the permit.		
668.	CPC 009		General	CARD and Peace Center	Definitions in the permit are confusing, conflicting and incomplete.		
669.	CPC 010		General	CARD and Peace Center	We are at a loss to know why the consent order is not included in the permit. If there is an explanation for this omission, why is that explanation not included in the permit?		
670.	CPC 011		General	CARD and Peace Center	All waste units are not included in the permit.		
671.	CPC 012		General	CARD and Peace Center	The permit states that SNL will be receiving off-site wastes but the facilities from which these wastes are to come are not listed in the permit. The amount of the waste is not mentioned, nor a risk assessment for the transportation and storage of these wastes.		
672.	CPC 013		General	CARD and Peace Center	We object to the continuance of open air burning of hazardous wastes at SNL without public notice or proper pollution control and monitoring. We find no risk assessment for the impact of this burning on the surrounding populations in the permit. If it was done, it should be provided as part of the permit. We do find the location of the site for open air burning in the permit. Again, SNL only has four ambient air monitors, an inadequate system for providing reassurance to the public that they are not being contaminated. Also, the readings for these monitors through 2004 show high rates of gross alpha emissions that might be in violation of the Clean Air Act.		

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673.	CPC 014		General	CARD and Peace Center	The tank system at SNL is not adequately characterized. A number of these tanks seem to be beyond the age for which they were designed. These tanks could be leaking and be a danger to ground water, yet no monitoring system is mentioned concerning them.		
674.	CPC 015		General	CARD and Peace Center	An inadequate amount of information is available concerning the auxiliary hot cell. We do not see any records of the kind or amounts of materials which are used nor of the waste that is generated. We are concerned about the tent-like structure which is apparently holding waste from the cell. We do not see any mention of monitoring systems for this tent or of other storage areas surrounding the hot cell.		
675.	CPC 016		General	CARD and Peace Center	We are concerned that there is no mention of monitoring systems for the storage silos.		
676.	CPC 017		General	CARD and Peace Center	The Monzano Storage Bunkers have no attendant air monitors, even though we know that nuclear bombs are tritium emitters. There is no tritium monitoring at SNL even though recent studies show that tritium is very dangerous to young children and the fetus. (IEER website)		
677.	CPC 018		General	CARD and Peace Center	As has been well documented by Bob Gilkeson and Citizen Action, the Mixed Waste Landfill is not being adequately monitored for ground water contamination.		
678.	CPC 019		General	CARD and Peace Center	The 'yard holes' are not dealt with in the permit, even though they could be a threat to ground water. For this reason alone, the contents and locations of these dump sites should be examined in the permit and a full analysis given.		
679.	CPC 020		General	CARD and Peace Center	Our comments on the Chemical Waste Landfill have not been answered leaving us unable to comment on that facility as part of the RCRA permit.		
680.	CPC 021		General	CARD and Peace Center	The LTMMP seems to contradict the Consent Order.		
681.	CPC 022 GEA 004		General	CARD and Peace Center/G. Amato	Citizens for Alternatives to Radioactive Dumping and the Albuquerque Center for Peace and Justice request a formal hearing on the RCRA Draft Permit for Sandia National Laboratories.		
682.	CNM 001		General	Citizen Action	This letter is to request that: 1) NMED deny and order withdrawal of the Draft Resource Conservation and Recovery Act (RCRA) RCRA Part B Permit for Sandia National Laboratories (SNL) (Draft Permit). 2) A Public Meeting must be provided under RCRA by SNL/DOE prior to reissuance of the Draft Permit. 3) During the pendency of public consideration of the Draft Permit, NMED should order withdrawal of the Level 3 Permit Modification for Module IV (Permit Modification) and the September 2007 SNL MWL Long-Term Monitoring and Maintenance Plan. 4) NMED should require SNL to provide the public with an informational presentation and negotiations period regarding the Draft Permit. 5) NMED should grant a further extension to the comment period, past January 17, 2008, for the Draft Permit.		

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683.	CNM 002		General	Citizen Action	Citizen Action, a public interest organization, is very interested in SNL because it is a key facility in the Department of Energy (DOE) nuclear weapons complex, and it generates and stores extremely large amounts of hazardous and radioactive wastes. Those wastes pose great threats to public health and the environment, and a stringent permit is essential to the safe operation of SNL and the protection of the public and the environment. Moreover, DOE plans for the future nuclear weapons complex provide for new and expanded SNL missions, including neutron tube production involving large amounts of tritium and releases of tritium gas. It is essential that the SNL permit has adequate safeguards for, and limitations on, the types and amounts of wastes that are generated and stored and that disposal units be prohibited. SNL has deposited large amounts of hazardous and mixed radioactive waste at various unit locations at SNL that need to be included in the Draft Permit. Water, air and soil are threatened by the lack of a comprehensive RCRA permit at SNL. The current SNL RCRA permit dates back to 1992 and is incomplete and many facilities at SNL are operating illegally without a permit.		
684.	CNM 003		General	Citizen Action	SNL operations have created a "substantial adverse environmental impact," as defined in HWA. Hazardous and toxic, as well as radioactive, contamination has been transported, both on-site and off-site, through air, surface water and to ground water. SNL poses an "imminent and substantial endangerment" to human health and the environment due to operations for which it has unidentified, uncharacterized RCRA generation storage, treatment and disposal waste operations, many of which are conducted without being on a RCRA Part B permit. Yet, the public has not had the opportunity to participate in negotiations between NMED and SNL. NMED and SNL have refused to provide public records to the Citizen Action and the public under both the Public Records Act, i.e., TechLaw Reports, and numerous Freedom of Information Act requests to SNL. Citizen Action finds that an "imminent and substantial endangerment" exists from SNL operations, from the fact that: Contaminants have been found in ground water, including PCBs, PCE, TCE, chromium and nickel at times exceeding state and federal drinking water standards; Sandia has failed to establish monitoring for groundwater, soil and air as required by DOE Orders, the Resource Conservation and Recovery Act (RCRA) and standard industry practice. Numerous issues exist regarding the permitting process that are denying the public procedural rights under RCRA and New Mexico state law.		
685.	CNM 004 GEA 002		General	Citizen Action/ G. Amato	The administrative record for the Draft Permit is not complete and has not been identified as to all documents within the Administrative Record upon which SNL relies. Upon inspection of the administrative record at NMED offices on		

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					January 15, 2008, documents listed in the nearly 200 page administrative record index were not obtainable. Some examples are: An April 3,1987 Notice of Violation from NMED; A 6/12/85 "generator" document for the TTF; the 2006 file for the SNL facility; SNL/DOE has not provided the SNL documents electronically as has been done for LANL's RCRA Draft Permit. SNL Draft Permit Figures 1-2 and 6-1 are not electronically provided, but could have been. SNL Draft Permit Figures 16-2, 3, 4, and 5 for the Corrective Action Management Unit are not in the electronic record. The documents in Administrative Record Index that SNL/DOE relies upon for each of the units proposed for the SNL Draft Permit have not been designated. Citizen Action is appreciative of the fine assistance of Pam Allen, NMED Librarian, under difficult circumstances of storage and retrieval (use of ladder and lifting heavy boxes) and believes that DOE/SNL must lessen the load by providing appropriate assembly of documents as is performed for the LANL administrative record.		
686.	CNM 005		General	Citizen Action	The public should not be subject to the multiple, simultaneous ongoing procedures of: a. the issuance of a SNL Draft RCRA Part B, b. a Class 3 Permit Modification for the earlier 1993 Module IV RCRA Part B permit to eliminate Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) currently contained in the Draft RCRA Part B, and c. the Long Term Monitoring and Maintenance Plan (LTMMP) for the Mixed Waste Landfill that would possibly be part of, or affected by, the Draft Permit and the Class 3 Permit Modification.		
687.	CNM 006		General	Citizen Action	Citizen Action objects to the public being put through this bizarre procedural labyrinth. These multiple processes create public confusion, defeat meaningful public participation for the various proposals and are procedurally improper. These multiple processes create inability for the public and Citizen Action to timely and fully review the various proposals. Additionally, a full review of the Draft Permit implicates and requires review of the interrelations of the Consent Order (April 29, 2004), the Permit Modification, the LTMMP, and pending items such as the Chemical Waste Landfill permit, the Notice of Disapproval for the MWL Soil Cover and various other orders of NMED for changes to the well monitoring network at the MWL that are not reflected in the LTMMP.		
688.	CNM 007		General	Citizen Action	Citizen Action received no notice of any public meeting that was convened by the DOE/SNL before the submission of the current Draft Permit to NMED as is required by RCRA regulations.		
689.	CNM 008		General	Citizen Action	The SNL RCRA Permit is an enormous document totaling 588 pages without the references attached and available for		

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					review on the internet as has been provided for the LANL RCRA permit. The Administrative Record Index alone is nearly 200 pages but does not separately identify the records upon which SNL/DOE rely for the Permit. In addition to the draft permit are the many hundreds of pages of the Fact Sheet/Statement of Basis for the Class 3 Permit Modification, the LTMMP, all of which need to be reviewed in relationship to the Draft Permit, in relation to each other and in relation to the Consent Order (April 2004). There is conflicting language with respect to the Consent Order contained in the other documents, as explained below. Tens of thousands of pages exist as part of the reference material related to the Draft Permit and the Class 3 Modification and the LTMMP.		
690.	CNM 009		General	Citizen Action	The administrative record for the Draft Permit is not complete for review by the public. The Draft Permit that is currently pending would modify the original, existing RCRA Part B permit that was issued in 1993. The 1993 RCRA permit has not been posted on the NMED or SNL websites to see the document as it currently exists and compare it to the subsequent modifications including the one that is now proposed. The public has no way of comparing the Draft Permit to the 1993 Module IV "permit." Citizen Action and the public are further prevented from review of the 1993 Permit Modification and revisions in relation to the LTMMP.		
691.	CNM 010		General	Citizen Action	Since our earlier request for a time extension of the Draft Permit, SNL issued a request for a Level 3 Permit Modification for Module IV (Permit Modification) to the SNL RCRA Part B permit (Draft Permit). The Draft Permit is not even in any finalized form at this point for consideration as a permit because changes will obviously be required if the 1993 Module IV is modified. The 1993 Module IV also needs to be posted on the website to consider for the Level 3 Permit Modification for Module IV. Public confusion is created by the question of how a permit can be modified when the permit is still in a draft form.		
692.	CNM 011		General	Citizen Action	The proposed Permit Modification would grant Corrective Action Complete ("CAC" or No Further Action, "NFA") status to 26 dangerous waste locations at SNL that have generated hazardous, radioactive, mixed waste and solid waste that would be left in place. None of the 26 locations should be granted NFA status because the monitoring required by RCRA provided for in 40 CFR 264.101 Subpart F (264.90-.100) for SWMUs where releases have occurred has not been performed. A total review of all the locations at SNL that comprise the Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) have not been provided as required by RCRA in the Draft Permit. Ongoing permit modification for the 26 SWMU and AOC locations prior while the Draft Permit currently under review is confusing and inappropriate.		
693.	CNM 012		General	Citizen Action	The Draft Permit has not received approval from the New Mexico Environment Department (NMED) and is currently		

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					pending public review, comment and public hearings. What is simultaneously being proposed is a Class 3 Permit Modification of the 1993 Module IV portion of the RCRA Part B permit that is not in reliable final form for review.		
694.	CNM 013		General	Citizen Action	Both the Draft Permit and the Class 3 Permit Modification fail to clarify for the public in the public notices or the Fact Sheet/Statement of Basis that the proposed modification of the 1993 permit also, at some unstated point in time, would require a modification of the Draft Permit to reflect the changes made to the 1993 Module IV. A modification would be necessary, for example, for Table 6-2 (No Further Action sites) or other sections in the Draft Permit. Then the public would have to review the issuance of a rewritten Draft Permit to reflect and incorporate the changes made from the modification of the 1993 Module IV. The 1993 RCRA Part B permit (also referred to as the RCRA Hazardous Waste Facility Permit (NM5890110518-1)) or any subsequent revisions that may exist are not, but should be posted on the NMED website so that the public can review the existing 1993 RCRA Part B Permit in relationship to what is now proposed for either the Draft Permit or the Modification to Module IV of the 1993 RCRA Part B Permit.		
695.	CNM 014		General	Citizen Action	The public currently reviewing the Draft Permit for some time now has been led to believe that the list of Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) in Table 6-2 (Draft Permit) would be subject to continuing corrective action under the Consent Order (Draft Permit 6.1.6.1) - as well they should be given the dangerous hazardous, radioactive and mixed wastes SNL intends to abandon without adequate groundwater monitoring and based on unreliable data that is often more than a decade old.		
696.	CNM 015		General	Citizen Action	The SNL Draft Permit should cite the regulatory permit requirements that are required to be included in the permit under RCRA. Comparing the Los Alamos National Laboratory Draft Hazardous Waste Permit with the SNL Draft Permit is instructive for demonstrating how few issues the SNL Draft Permit addresses that need to be addressed. An entire discussion, which is beyond Citizen Action's current capabilities without an extension of time, should be made for comparison of provisions and additions to the SNL Draft Permit.		
697.	CNM 016		General	Citizen Action	Post-Closure provisions need to be provided for all units, including not only permitted units, at SNL in the event clean closure cannot be achieved. A clear prohibition on land disposal should be provided. Waste characterization for compliance with RCRA air provisions should be provided especially for characterization of hazardous wastes managed in containers and tanks for volatile organic compound concentrations. Provisions for receiving hazardous wastes from Off-facility locations do not seem to limit where the hazardous wastes can be received and stored at SNL.		

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698.	CNM 017		General	Citizen Action	The Permit should identify any interim status units at SNL and the effect of the permit on such units.		
699.	CNM 018		General	Citizen Action	The duration of the permit for ten years needs to be set forward.		
700.	CNM 019		General	Citizen Action	Reporting of Planned Changes to the Facility needs to be required under 40 CFR 270.30(1)(1).		
701.	CNM 020		General	Citizen Action	New or modified permits must be provided for so that the Permittee may not treat or store hazardous wastes at a new permitted unit or in a modified portion of an existing permitted unit except as provided for in 40 CFR 270.42 and until there is compliance with 40 CFR 270.30(1)(2)(i)and (ii).		
702.	CNM 021		General	Citizen Action	Information Repository shall require the Permittee to post all existing and future documents for the SNL Facility into a searchable electronic reading room.		
703.	CNM 022		General	Citizen Action	SNL did not accomplish the requirements or the 1993 Module IV for Section R to evaluate hydrogeologic conditions, see R.b.1) sections a) through f). No detailed program is developed at the SNL facility for hydrogeologic conditions. SNL has not accomplished a detailed "program to characterize particulate and gaseous contaminants released into the atmosphere." (R.d.4). SNL has not accomplished a detailed "program to characterize the nature, rate and extent of releases of reactive gases from the units" for subsurface gas. (R.d.5).		
704.	CNM 023		General	Citizen Action	NMED and SNL are not referencing in the Permit Modification that changing the Table A.1 would also cause the later exclusion of units from the Draft Permit listed at Table 6-2. The Draft Permit provides no notice to the public of this. Additionally, it is not clearly stated in the Fact Sheet/Statement of Basis to a public reviewer if the modification is to be for the original 1993 Module IV to the RCRA operating Permit or whether the modification is to be for the Draft Permit when issued.		
705.	CNM 024		General	Citizen Action	The public should not have to simultaneously consider the Draft Permit, the Permit Modification and the LTMMP. Currently, the public is being offered an incomplete and conflicting picture for what is being proposed at SNL. The Draft Permit should be ordered withdrawn, and later go forward for review after public presentation and negotiations to revamp the Draft Permit. Both the LTMMP and the Permit Modification should be withdrawn. At a later time, the Draft Permit can then be modified for NFAs.		
706.	CNM 025		General	Citizen Action	The LTMMP is by its own admission out of sequence. The LTMMP should not be reissued until the timeline for its issuance has been met according to the procedures established in the Final Order (Secretary Curry 2005). Citizen Action would favor this course of action. Otherwise, the Draft Permit should be held in abeyance until there is public opportunity for review and comment and hearings on the modification to the 1993 Module IV. Then AFTER it is clear as to how the modified Module IV permit reads, the Draft Permit should reissue. The Draft Permit would then include the No		

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					Further Action sites, any other modifications and then be put out for review.		
707.	CNM 026		General	Citizen Action	The public has an inadequate Draft Permit before it. The public will once again be subject to an additional review of an additional modification request. The Draft Permit is clearly not a document ready for full presentation for public review. Section 2.20.2 of the Draft Permit regarding Closure states, "The Closure Plan in Permit Attachment 15 as written is inadequate and must be revised. The Permittees shall submit a detailed closure plan for each Permitted Unit, incorporating all the requirements identified in this Permit Part, within 90 days after the effective date of this Permit; the submittal shall be in the form of a Class 3 Permit modification request." The public is entitled to review a closure plan for the units in the Draft Permit as well as review the closure plan for all SWMUs that can be identified at SNL.		
708.	CNM 027		General	Citizen Action	Closure Performance Standards must include 40 CFR 264.10 through 40 CFR 264.16, 264.178, 264.197, 264.228, 264.310, 40 CFR Part 264 Subparts F (264.90-.100), G, I, J, K, N and X and 40 CFR 270.32(b). If the Facility cannot achieve clean closure standards under those parts, the Facility shall submit a Post-Closure Plan according to 40 CFR 264.117. An entire section needs to be added into the Draft Permit providing for Post-Closure Care, Post-Closure Care Plan of the Facility with provisions for amendment by means of permit modification.		
709.	CNM 028		General	Citizen Action	Conflict Language (1.5) section is unacceptable because it allows the provisions of the Draft Permit to differ from the provisions in the Permit Attachments. The Draft Permit and the Attachments must all be presented as true and correct especially since the bulk of the details lie in the Attachments. The document issued for public review should not have internal conflict and should not require the public to ferret out such conflict. The Draft Permit admits possible conflict between the parts of the Draft Permit and attachments. That is an additional reason for denial. If there is existing conflict between the Draft Permit and the attachments, the duty of NMED is to set forth the nature of those conflicts and resolve them before issuance of the Draft Permit. The effect of inaccuracies in the permit application and attachments should be that "Any inaccuracies found in the Draft Permit Application and its Attachments may be grounds for the termination, revocation and re-issuance, or modification of the permit in accordance with 40 CFR 270.41-.43 to be incorporated by reference and for enforcement action."		
710.	CNM 029		General	Citizen Action	The Draft Permit adds a provision to the Draft Permit in Section 6 that is not present in the Consent Order, Section III.W.1. That provision would effectively remove the application of the Consent Order from the Permit: "5) For the purpose of complying with the requirements of this Permit for the Mixed Waste Landfill." This constitutes a modification of the Consent Order without any notice to the public that such a		

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					modification is being made to the Consent Order. This violates the Consent Order Section III.W.5 Preservation of Procedural Rights for the public that provides for public participation, including public notice and comment, administrative hearings, and judicial appeals, when a modification is being made. (See, Consent Order 3.J.1). The permit must incorporate the Consent Order as a part of the Permit and the provision 5) above must be removed from the Draft Permit. In any event, the requirements of 40 CFR 264.90-.100 must be required for closure of the MWL and all SWMUs at SNL.		
711.	CNM 030		General	Citizen Action	Under the definition for "Permit," the acronym "HWMR" is not listed in the definitions or in the list of Acronyms. The Draft Permit definitions are incomplete, in contradiction with other definitions contained within the Consent Order and the definitions contained within RCRA. For example, "groundwater" is missing from the definitions in the Draft Permit. "Groundwater" is defined in the Consent Order appropriately. "Uppermost aquifer" and "aquifer" are important within the RCRA groundwater monitoring requirements but are missing from the Draft Permit and need to be included. Needed definitions for the Draft Permit would also include at a minimum, "corrective action," "regulated unit," "release," "point of compliance," "action level," and others. The definition for "hazardous waste" must be the statutory definition set forth by RCRA section 1004(5). The definitions (1.6) allow the introduction of ambiguity by allowing dictionary definitions for terms not defined in HWA, RCRA, pursuant regulations, or the Draft Permit. All definitions should be set forth now upon which the Permit will rely. Section 1.7 should provide the full names of the various units instead of acronyms.		
712.	CNM 031		General	Citizen Action	Definitions contained in the Draft Permit are not in keeping with the requirements for a RCRA permit. For example, neither the definitions of the terms "Permit," "Permitted Unit" refer to RCRA requirements. These definitions constitute modifications of definitions contained in the 1993 Module IV of the RCRA permit. Under that document, "Permit means the conditions embodied in these special conditions pursuant to the 1984 Hazardous and Solid Waste Amendments to RCRA." Citizen Action objects to the use of SNL's non-RCRA definition for "permitted unit" that excludes the numerous other locations at SNL that must be identified and included in the RCRA Draft Permit as a generator, treatment, storage or disposal unit at SNL. SNL cannot define their way out of the applicability of RCRA requirements to avoid the necessary of inclusion of units that are regulated units, operable units, interim status units, or SWMUs.		
713.	CNM 032		General	Citizen Action	Under RCRA Section 3004(u), "corrective action is required for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage or disposal facility seeking a permit under this subchapter, regardless of the time at which waste was placed in such		

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					unit." (See, USEPA Reissued Module IV of RCRA Permit (1993), DOE/EH-413-044r (revised September 2002, p.2, and citing RCRA Section 3004 (u), p.4). Regulatory uncertainty exists for the full inventory of hazardous waste sites at SNL. All waste areas at SNL including all SWMUs and regulated units need to be set forth and addressed by the Draft Permit. All SWMUs need to be set forth for Corrective Action under 40 CFR 264.101. SWMUs at SNL have failed to provide the required characterization and monitoring required by 40 CFR 264.101 that include 264.90-.100. Such SWMUs would include, but not be limited to the Mixed Waste Landfill. The Draft Permit should be denied because it does not identify all the areas at SNL that have released RCRA hazardous and mixed radioactive/hazardous wastes as a result of generation, treatment, storage and disposal.		
714.	CNM 033		General	Citizen Action	The maps required under 40 CFR 270.14 are not provided with sufficient detail to locate all tanks, bunkers, solid waste management units, known past solid or hazardous waste treatment, storage and disposal areas or units regardless of whether they were active on November 19, 1980; surrounding land uses (residential, commercial, agricultural, recreational; and the location of all production and groundwater monitoring wells.		
715.	CNM 034		General	Citizen Action	In the Consent Order at Section III.W.1., it is stated that "operating units" at the Facility must be addressed for new releases of hazardous wastes, closure and post-closure requirements of Subpart G, including long-term monitoring. The Draft Permit, at 6.0, now contrives to limit the Consent Order requirements to only "permitted units."		
716.	CNM 035		General	Citizen Action	The Draft Permit ignores many waste units that have hazardous wastes by limiting the Draft Permit to include only "permitted units" that are limited to the Hazardous Waste Management Unit (HWMU), the Thermal Treatment Unit (TTU), the Auxiliary Hot Cell Unit (AHCU), the Radioactive and Mixed Waste Management Unit (RMWMU), the Manzano Storage Bunkers (MSB – comprising five storage units), and the Corrective Management Unit (CAMU). The status of numerous other Solid Waste Management Units (SWMUs), the Yardholes, and Areas of Concern (AOC) are ignored and would allow SNL to abandon and leave discarded wastes in place for these numerous facilities without requiring closure plans, post-closure care, post-closure permits or long term monitoring plans for the wastes buried at these locations. The standards for closure and post-closure care of numerous hazardous waste units at SNL are not met as required by the Hazardous Waste Management Act. Additional facilities that may be producing RCRA waste would include at a minimum all facilities that are shown as operating in the SNL SWEIS (1999) and the Final Supplement Analysis for the SWEIS (2006). SNL has approximately 670 buildings in the 5 technical areas and the structures in the Coyote Test		

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					Field. The status of all facilities at SNL must be set forward as to which of these facilities generate, transport, store or dispose of RCRA hazardous or mixed hazardous wastes for inclusion on the draft permit. It is not credible that only 11 locations out of approximately 670 buildings located at SNL are the only areas involving RCRA wastes. All SNL facilities described in Table 2.2-1 of Final Supplement Analysis for the SWEIS (2006) must be included in the RCRA permit. To mention a few: the Advanced Manufacturing Processes Lab (AMPL) (TA-1), Explosive Components Facility (ECF) (TA-II), Integrated Materials Research Laboratory (IMRL) (TA-II), Microelectronics Development Laboratory (MDL) TA-II), Neutron Generator Production Facility (NGPF) (TA-I), Centrifuge Complex (TA-III), and all other facilities that produce, store or treat RCRA wastes. Section 1.7 must include language that includes closure and post-closure care at these numerous other areas.		
717.	CNM 036		1.5.3	Citizen Action	Section 1.5.3 fails to address the effects of airplane crashes or terrorist attacks at SNL for numerous facilities, including, but not limited to Bldg. 6715 that contains explosive, reactive and incompatible wastes.		
718.	CNM 037		1.5.4	Citizen Action	Section 1.5.4 (Drainage Control Features) claims that figures for drainage features exist for each unit-specific attachment. None of the figures contain information related to the direction of the flow of surface groundwater for the specific units.		
719.	CNM 038		1.21	Citizen Action	Section 1.21 for Corrective Action required pursuant to 40 CFR 264.101 Subpart F is inadequate as it stands. It must set forth language that would include the provisions of 40 CFR 264.90-.100 for all the areas that can be brought under corrective action.		
720.	CNM 039		General	Citizen Action	SNL has no competent RCRA well monitoring network for the SNL facility for SWMUs at many units and has not characterized the hydrology beneath the facility or the individuals SWMUs. A review of the history of characterization of SWMUs at SNL reveals that SWMUs that had releases at SNL have not had to meet RCRA requirements for corrective action and remain as a threat to public health and the environment without the current ability to detect the movement of contaminants from the waste sites.		
721.	CNM 040		General	Citizen Action	Numerous SWMUs that are currently proposed for No Further Action (NFA) status pose danger to the groundwater from solvents, metals and radionuclides and lack detection monitoring programs required under RCRA 40 CFR 264 Subpart F that are required because SNL is seeking a RCRA facility permit. Examples: a. SWMU 4 -- LWDS Surface Impoundments/Liquid Disposal System consisted of 3 SWMUs that operated from 1963 to 1992 receiving 12,000,000 gallons of radioactive effluent that also contained 17 RCRA listed metals and PCBs, and 9 Volatile Organic Compounds (VOCs) and 7 Semi-volatile Organic Compounds (SVOCs). This disposal site operated		

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					illegally without obtaining a RCRA permit. A single monitoring well LWDS-MW2 was installed in 1992, but no well construction, development information or monitoring data for SWMU 4 is provided in the December 2007 Fact Sheet/Statement of Basis (SNL March 2006 Request for Corrective Action Complete (No Further Action) Status. A monitoring network compliant with the requirements of 40 CFR 264.90-.100 is required to be installed at SWMU 4 with at least one upgradient and three down gradient wells. Cancer risks are too high to allow residential usage. Human and ecological risks are not acceptable to release this SWMU for NFA status. b. SWMU 46, Old Acid Waste Line Outfall was an outfall discharge point that connected to several buildings that dumped wastewater into three 700 ft long ditches. The contaminants contained mercury compounds, 17 VOCs including high levels of Trichlorethene (TCE) in soil gas 115 ft below ground surface, SVOCs, PCBs, RCRA metals, and radionuclides. No groundwater wells are in place as required. A monitoring network compliant with the requirements of 40 CFR 264.90-.100 is required to be installed at SWMU 46 with at least one upgradient and three down gradient wells. Cancer risks for residential land-use are unacceptable. Human and ecological risks are not acceptable to release this SWMU for NFA status. c. SWMU 52, LWDS Holding Tanks consists of holding tanks, piping (SWMU 52), a drainfield (SWMU 5) and two surface impoundments (SWMU 4). The age and ASME qualifications of the tanks is not provided. The tanks and drainfield received radioactive and RCRA wastes including mercury, VOCs and SVOCs, without logs to record amounts, frequency and activity measurements. The assertions that the site has been characterized and remediated are ridiculous. No groundwater wells are in place as required. A monitoring network compliant with the requirements of 40 CFR 264.90-.100 is required to be installed at SWMU 52 with at least one upgradient and three down gradient wells. Cancer risks for residential land-use are unacceptable. Human and ecological risks are not acceptable to release this SWMU for NFA status. d. SWMU 101, Building 9926 Explosive Contaminated Sumps and Drains in the Coyote Test Field area had 3 seepage pits and a dry well that operated from 1967-1991. The dump discharged RCRA contaminants illegally without a RCRA permit. VOCs, SVOCs, cyanide, chromium are present. No groundwater wells are in place as required. A monitoring network compliant with the requirements of 40 CFR 264.90-.100 is required to be installed at SWMU 101 with at least one upgradient and three down gradient wells. Estimates of the		

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					risks at SWMU 101 cannot be properly estimated given the lack of RCRA required well monitoring. Human and ecological risks are not acceptable to release this SWMU for NFA status. e. SWMU 116, Nonradiological COCs has a groundwater monitoring well CTF-MW1 that is 500 ft from SWMU 116. However, the monitoring well is 500 ft from the SWMU to the south and shows selenium above background levels. No flow direction is indicated on the Fig. 13 and no RCRA well monitoring network is in place despite the significant evidence of contamination, especially given that selenium could be entering the groundwater beneath the SWMU. The claim that risk is acceptable is unsupportable given the lack of a RCRA well monitoring network. Human and ecological risks are not acceptable to release this SWMU for NFA status.		
722.	CNM 041		General	Citizen Action	The levels proposed for cleanup of facility sites are inadequate and taken in a piecemeal fashion and a full risk assessment should be performed to present and assess overall risks to the public, workers and environment from cumulative operations for hazardous waste and mixed waste at SNL for air, soil and groundwater pathways.		
723.	CNM 042		9.8	Citizen Action	The Draft Permit (Section 9.8) proposes to accept hazardous wastes from Off-Site facilities. Citizen Action is concerned that the Draft Permit would allow large amounts of off-site waste to come to SNL from numerous facilities. A list of off-site facilities from which hazardous waste will be accepted should be provided. No amounts are set forth for the types, amounts or disposal pathways of the wastes that will be accepted from other facilities. No risk assessment is made for potential releases of these offsite wastes during transport to and from SNL or for the potential releases of the wastes during storage at SNL.		
724.	CNM 043		General	Citizen Action	Citizen Action objects to the continued use of the Thermal Treatment Unit (TTU) for open air burning of explosives and explosives contaminated waste without pollution controls near the major metropolis of Albuquerque, the lack of any reliable air monitoring systems at that location, and the lack of notification to the public as to when the wastes will be burned. The facility threatens human health and the environment by its emissions during burn operations thus fails to meet the applicable requirements of 40 CFR 264 Subpart X. (See,40 CFR 264.600 et seq.). For the reasons cited in these TTU comments, we oppose the open burning and lack of identification characterization of the RCRA wastes present at the Sled Track Complex (TA-III) which must receive corrective action and monitoring. An April 9, 1987 Memorandum to Tom Clark (USEAP) from AT Kearney states "There are a number of outdoor test sites at the facility where explosive and impact testing is conducted. Residue from these experiments typically includes schrapnel,		

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					lead, beryllium, and depleted uranium; other metals and radioactive materials may also be present."		
725.	CNM 044		General	Citizen Action	The regulatory history of the TTU is unclear and not set forward in the Draft Permit. There is some question that the TTU cannot properly be included as part of the Draft Permit because it was not part of earlier Part B applications that required modification to include it. The 1985 Part B Application for a RCRA permit at p.1-1 section 1.2 states: "The waste explosives 'thermal treatment facility' listed in the Part A Application is not addressed in the Part B Application because final regulations have not been promulgated for facilities of this nature. (Focht, 1984). An amendment to the Part B Application will be submitted to EID for this facility when regulations are in place." There is no indication we could identify in the administrative record that such a modification was later submitted for the TTU. An August 16, 1986 EPA Transmittal of Preliminary Assessment Summary, p.2 states that the TTF is not regulated by RCRA. An August 1986 DOE CEARP Phase 3 Technological Assessment Plan, p. 23-24 for SWMU 7 TTF states that DOE intends to put the TTF on the Part B. However, there is an April 9, 1987 Interim Status Closure Plan for the TTF at SNL.		
726.	CNM 045		General	Citizen Action	Investigation of groundwater must be performed at the TTU site under 40 CFR 264.90-.100 for corrective action under 264.101 that provides where the "Owner or operator of a facility seeking a permit for the treatment, storage or disposal of hazardous waste to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit." The corrective action provisions of 40 CFR 264.90-.100 must be included in the Draft Permit for TTU as well as the other units to be permitted at SNL.		
727.	CNM 046		General	Citizen Action	The TTU should be denied a permit and should undergo closure. The current Closure scheme of Attachment 15 is not appropriate for the TTU. The closure methods for the TTU are based on the assumptions set forth in section 15.3. Assumption 5 states: "Releases of hazardous or mixed waste and/or hazardous waste constituents to the environment did not occur." This condition can not be met for the TTU which emits RCRA hazardous wastes to the open air either through burning or evaporation. Section 4.7.3 describes eight situations that present the potential for release of hazardous waste or constituents from the TTU. Among those are included: run-off from precipitation, evaporation of liquid wastes, emission of particulates and gaseous combustion products during treatment and particulate emission following treatment. There is also potential for the deposition and migration of the wastes to air, soil and groundwater and uptake through the food chain and air pathway for incidental ingestion, dermal contact and inhalation. Routine environmental monitoring at the TTU is not conducted. There		

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					is potential for explosions from the reactive wastes treated in the TTU.		
728.	CNM 047		General	Citizen Action	"The burn pad lid shall remain closed as much as possible except during loading and combustion to minimize evaporation of volatile waste." The closure of the burn pad does nothing apparently to prevent the release of contaminants during loading and burning.		
729.	CNM 048		General	Citizen Action	SWMU 111 was used for disposal to the subsurface for liquid wastes from operations involving explosives wastes that contained RCRA contaminants from Bldg. 6715 and the TTU. Although boreholes were drilled, no monitoring for the groundwater was established for the silver contamination that was present as significant evidence of contamination. (See, section 4.3.6 WMWU and Evidence for Migration of Silver into the Subsurface.) The sump at SWMU 111 was not properly addressed by the NMED and should not have been allowed to be in the category of No Further Action. The TTU and Bldg. 6715 site must be characterized again because of past and possibly ongoing releases and the request to be permitted. (See, 40 CFR 264.101 above).		
730.	CNM 049		General	Citizen Action	The characterization of the types of explosives for combustion, "explosives contaminated wastes" are not described as to whether other RCRA wastes are present and being burned. Acetone, and other solvents that are known RCRA hazardous waste are intended for the TTU but not described by types and quantities. Mercury and barium are commonly used in high explosives. Depleted uranium and other toxic metals may be present may be present in fragments, powders and residues that are burned and enter the atmosphere. Combustion byproducts are not described although Dioxin-furans may be present in the air emissions or ash released from the TTU.		
731.	CNM 050		8.2	Citizen Action	The TTU is a system that will be burning explosives and contaminated wastes. The language of Section 8.2 for treatment of reactive wastes is unclear, appearing to both deny and approve treatment of the same reactive wastes. Providing a list of EPA Hazardous Waste numbers without associating those numbers with the actual named constituents is of little value to the public. The number of burn events that will be conducted on an annual basis are not presented. The duration of burn events up to 3 days does not identify the potential release of contaminants for up to a 3-day period.		
732.	CNM 051		General	Citizen Action	No environmental or human health risk assessment is provided in the 1999 SNL Site-Wide Environmental Impact Statement for the burning of these wastes. The direct air pathway for transport is not adequately characterized. Re-suspension of contaminants is not the only pathway. No evaluation is made for off-site contamination. The habitat at the site is already damaged by emissions from operations that will continue to limit food chain uptake. The operations		

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					have created a dead zone. No characterization of the wastes that are being released to the environment by the TTU and Bldg. 6715 are set forth in any meaningful manner. The Draft Permit states a risk assessment was performed but gives no document citation and that study is not provided as a web posting making the administrative record incomplete. The human population and especially children that may be sensitive to the uptake of waste burning and the by products is not analyzed. "Above ground tissues" are the term used to apparently describe everything living.		
733.	CNM 052		General	Citizen Action	The SNL SWEIS Table 5.4.2-1 indicates the Facility Capacity Annual is 7,300 lb rather than 1,200 gallons in Draft Permit Table 4-1. The amounts of liquid wastes and solid wastes being burned should be fully characterized as to types and amounts. Controls for reactive wastes are poorly described. Quantities of incinerator ashes and other wastes and their method to be disposed of are not described. Recovery systems for vapors and compliance with RCRA air regulations are not described. Air emissions from the TTU and Bldg. 6715 are not described.		
734.	CNM 053		General	Citizen Action	As an owner/operator of the TTU that treats, stores and disposes of hazardous waste, the TTU is required to, but fails to satisfy the requirements of 40 CFR 264 Subpart X specifically requirements for 40 CFR 264.601. No RCRA monitoring wells have been installed at the TTU for releases and detection of contaminants that may be in the soil or groundwater. No data has been collected from boreholes, groundwater monitoring wells or measurements made for the saturated and unsaturated zone at the TTU. The hydrologic setting beneath the TTU and Bldg. 6715 is not characterized. No monitoring, analysis, inspection, response, reporting and corrective action in compliance with 264.101 has been performed at the TTU and Bldg. 6715 as required by 264.602. TTU does not meet the environmental performance standards to protect human health and the environment of 40 CFR 264.601(a)-(c) and 264.602 that also requires application of 264.101 for groundwater, soil surface or air. The TTU has released quantities of silver and other contaminants that constitute significant evidence of contamination for which detection monitoring is required under 264.90-.100. Routine environmental monitoring of the TTU and Bldg. 6715 is not conducted.		
735.	CNM 054		General	Citizen Action	Draft Permit Figure 1-2 regarding groundwater and other pertinent details for the TTU is not available for review in the permit, so that the Administrative Record is not complete for review. The public should not have to make a special trip to review Figure 1-2. Figure 4-4 for TTU Layout and Drainage Control Features fails to indicate the direction of the flow for groundwater at the TTU.		

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736.	CNM 055		General	Citizen Action	Figure 1-8 does not identify the location of the TTU within Tech Area III nor does it fully identify surrounding land uses such as Isleta Pueblo and the Mesa del Sol residential development. Figure 4-3 fails to identify road access and public roads in relation to the TTU. Figure 4-5 fails to identify TTU Evacuation Route and Emergency Access Information in relation to public roads and facilities.		
737.	CNM 056		General	Citizen Action	Building 6715 is a generator of hazardous wastes that are ignitable, reactive and incompatible and creates solid and liquid wastes that are transferred to the TTU. Bldg. 6715 is required to have a RCRA permit as a generator of hazardous wastes and must be included in the Draft Permit. As an owner/operator of the Building 6715 that is a generator of hazardous waste, the Building 6715 is required to, but fails to satisfy the requirements of 40 CFR 264.90 (2) that include the requirements of 40 CFR 264.90-.100. No complete inventory and characterization of the RCRA wastes present at Bldg. 6715 is given. In addition, mixed hazardous wastes may be present in both solid and liquid wastes but are not described. A collection tank to the south of Bldg. 6715 is not adequately described as to the treatment or disposal for its wastewater. The transport of RCRA hazardous wastes and the manifest system for the storage and transport of RCRA wastes to and from Bldg.6715 are not adequately described. The potential for accidents, risk assessment and necessary emergency planning procedures for Bldg 6715 are not present. There is no plan to minimize the possibility of, and the hazards from a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. The plan must explain specifically how to treat, store and dispose of the hazardous remediation waste in question, and must be implemented immediately whenever a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.		
738.	CNM 057		General	Citizen Action	The number of tank systems that contain RCRA waste at SNL must be set forth by the RCRA permit. SNL plans to continue using RCRA non-compliant tanks and ancillary service lines and equipment. The Draft Permit must provide information about each tank. Apparently, all of the functioning tanks are not listed in the Draft Permit. DOE must stipulate the ASME design life and age for each of the tanks at SNL along with the anticipated years of future operational use. Many of the tanks date back many decades, long beyond their design life. Additional tanks may lack "certification stamps." Compliance or non-compliance with RCRA secondary containment requirement in tank vaults must be set forward. Tanks that have corroded in the ground with releases must be described as landfills and are subject to corrective action.		

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739.	CNM 058		General	Citizen Action	The Auxiliary Hot Cell Unit (AHCU) does not have Figure 1-2 available for the location of the unit as stated in section 6.0. The administrative record is incomplete and the permit should be denied. The length of time that the facility has been in operation and the characterization and volume of the mixed hazardous wastes that are managed must be described. The period of storage for containers must be described. Whether the facility is handling off-site waste should be described. Whether the AHCU is a generator of hazardous and mixed hazardous waste should be described. The destination for where the AHCU mixed and hazardous waste is to be treated or disposed of should be described.		
740.	CNM 059		General	Citizen Action	Mixed waste items or containers that are handled remotely are from time to time being put under a "temporary tent like room" in Bldg 6597 erected north of the hot cell to accommodate the containerized mixed waste items. The frequency of the erection and the duration of the temporary tent-like room are not sufficiently set forth. Real time air pathway located at the vents from Bldg. 6597 should be provided for monitoring. The controls for air emissions venting out of the Bldg. 6597 are insufficient to determine if filter systems are functioning properly. Gases that are not trapped by filtration should be described. The activities conducted in the temporary structure should be conducted in a dedicated engineered structure that is fully permitted for air emissions. The potential for leakage or existing spills present from containers in the temporary area is not sufficiently described nor are operations for cleanup or emergency situations. The storage silos are not accurately described. There are total of 8 of these "silos" that are actually 15 ft deep subsurface wells or sumps that are for storage of liquid wastes. There is no provision for a real time RCRA leak detection system to monitor for releases from the storage sumps. There is no indication as to whether leaks have occurred in the past and whether monitoring for the movement of contaminants beneath the ACHU has taken place. Container storage in the High Bay south and west of the hot cell appear to have no leak detection. The length of time for the storage of the containers is not set forth. The floor should provide for double containment and real time leak detection. Provisions must be set forth to describe venting for the emissions. Provisions for handling damaged containers should be provided. The procedures for detecting liquid wastes should be provided. Risk assessment for explosive hazards that can occur at the AHCU and the potential for the release of hazardous wastes should be described.		
741.	CNM 060		General	Citizen Action	The Manzano Storage Bunkers (MSB) does not have adequate leak detection or air monitoring for volatile liquids that are leaking from containers into the tubs. The regulatory history, the complete number of bunkers, length of time that the MSB has been in operation should be provided along with		

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					the types of wastes, releases, the volumes handled and the periods of storage of the various wastes and the manifest system for tracking the inventory of wastes. Air pathway monitoring should be provided at the MSB. Radioactive waste should be stored in bunkers that are separate from where mixed hazardous wastes are stored. The sparse scheduled inspections for discrete containers at MSB does not provide a reliable method for prevention of contamination of the environment. The bunkers are open to the air pathway. The existence of ignitable wastes and storage of water reactive wastes provides opportunity for fires and explosive reactions. The presence of different types of wastes within the same bunker does not provide for safe segregation of waste types that could be accomplished by the use of separate bunkers. Use of separate areas is not adequate to provide safe segregation because there are five separate bunkers. The potential for fires and explosions and releases to the atmosphere of hazardous wastes is not described. Automatic fire suppression systems should be, but are not provided for the bunkers containing the reactive, explosive wastes. Once daily inspection of liquid wastes that could cause fire or explosions is unacceptable where those wastes could be monitored by leak detection systems. The response time for the KAFB fire department is inadequate to provide protection of the public health and environment. The description for limitation of storage of the MSB RCRA wastes should be provided. The information for 7.6.3.2 Access to Communication or Alarm Systems is not provided as to what alarm systems exist at the MSB in Permit Attachment 2. The Alarm systems must be described for the 5 MSB bunkers as to what the alarms will provide alerts- explosions, fire, radiation, volatile chemicals releases, etc. Figure 1-2 for the MSB complex shows that no RCRA monitoring wells are present at the point of compliance for the MWB boundary. The nearest monitoring wells are over 1400 ft distant from the MSB. No RCRA upgradient monitoring well exists. A seismic fault, the Tijeras fault is shown on Figure 1-2 to run directly through the center of MSB Bunker number 37045 and along the edges of 37034 and 37118 within a 1000 ft of the Tijeras fault. The seismic risks associated with the storage of hazardous and mixed hazardous wastes at the MSB are not evaluated.		
742.	CNM 061		9.2.9.3	Citizen Action	Citizen Action objects to the treatment, management and storage of hazardous wastes at the HWMU, RMWMU, AHCU, and MSB and other SNL facilities without proper characterization and presentation of the types and amounts of the wastes to be present. Providing a list of EPA Hazardous Waste numbers without associating those numbers with the actual named constituents is of little value		

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					to the public. The types and quantities of wastes for each unit need to be described along with the controls that will be used to limit emissions. Section 9.2 9.3 containing information about "typical hazardous and mixed wastes" being generated, stored and treated is insufficient for characterization of the wastes. There is a lack of any reliable air monitoring systems at these locations. Recovery systems for vapors and compliance with RCRA air regulations are not described. Treatment systems for the wastes at each location are not adequately described. Whether on-site or off-site wastes from other facilities will be transported to, treated, managed or stored at or from these and other locations at SNL must be provided.		
743.	CNM 062		General	Citizen Action	Citizen Action believes that the Yardholes must be included in the Draft Permit. In or about November 2002, Citizen Action New Mexico learned about experiments simulating nuclear meltdowns that involved oxide nuclear reactor fuels that had been shipped in canisters to Sandia National Laboratories (SNL or Sandia) during the mid-1980s "from reactors around the world." (Citizen Action Press Release November 18, 2002). An unknown number of these canisters were disposed of in the Mixed Waste Landfill at SNL. Citizen Action requested the New Mexico Environment Department (NMED) to demand a full accounting of the oxide reactor fuels from Sandia to further characterize the contents of the landfill. http://www.radfreenm.org/pages/press.htm#3 Citizen Action obtained information from another FOIA request that the waste from numerous experiments with the reactor fuels had been disposed of in various areas known as "Yardholes"at SNL. http://www.radfreenm.org/pages/nr/041504.html The yardholes were over 30 primitive holes dug in the ground; some were lined and some were unlined. One of the yardholes was a water filled hole under the Hot Cell Facility monorail at SNL and contained a spent fuel element from the Savannah River Site. SNL has kept secret from the public the types and amounts of the contents of the various yardholes. The yardholes contain nuclear materials and/or hazardous wastes that should be disposed of or regulated under the Resources Conservation and Recovery Act (RCRA), the Atomic Energy Act, Nuclear Regulatory Commission (NRC) regulations, or Department of Energy (DOE) Orders. A "SNL Site Team Report on Spent Fuel," October 1993 ("Yardholes report"), assessed vulnerabilities of the DOE storage of irradiated reactor fuel and other irradiated nuclear materials (RINM). The 1993 Yardholes report stated: "The vulnerability identified was the lack of approved Safety Analysis Reports." The report identified the existence of the Yardholes at the location of the Sandia Pulse Reactors (19 yardholes) and the Hot Cell Facility (13 yardholes under the		

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					HCF Monorail) associated with the Annular Core Research Reactor (ACCR). The Yardholes report, Appendix 1 C. Sandia Pulsed Reactor Facility states: p.1 – "None of the reactor irradiated materials discussed below are classified." (Emphasis supplied). p. 3 – "… [A] status book is kept updated with the most current information including the date the storage activity took place, the name of the experiment, the dose rate along with the survey date and the hole involved. p. 4 - Contamination: It is assumed that small amounts of contamination are present inside some of the holes due to the process of irradiation with the ACRR central cavity. Every experiment package removed from s storage hole is treated as potentially contaminated upon removal until surveyed and released by the Health Physics Technician." p. 4 – "One item of concern is the issue of classifying the Yardholes and the NOVA [North Vault] as nuclear facilities." p. 7 - "The other concern is the ultimate recovery and disposition of these nuclear materials, All of the materials are currently stored on site since there is no approved method of disposal.....There are various concerns associated with the long term storage of any radioactive material, specifically leachability of material, decay rates and potential corrosion of the containment packages due to environmental conditions." The Yardholes report, Appendix 1 D. Hot Cell Facility, p. 2, identifies "hazardous materials such as cadmium, silver, lead, metallic sodium, etc." These materials may constitute hazardous or mixed hazardous waste under RCRA. The Yardholes report, Appendix 5 Tiger Team Findings, identified additional concerns: "1. A/CF-04: Need for an air monitoring program to meet 40 CFR 61, Subpart H. Hot Cell Facility and ACRR are mentioned." "2. RAD/CF-01: Need for a program to monitor continuous and batch discharges of liquid and radiological effluents. Tech Area V is mentioned." "3. AX.02-01: Monitoring and disposal of hazardous and radioactive effluents. Hot Cell stack monitor is mentioned. Hot Cell, ACRR and SPR are mentioned." Other Tiger Team concerns involved: storage of fissile material, safety analyses for fissile material storage, posting of fissile material storage limits, emergency response procedures, criticality alarms, need for a review process responsive to safety needs and need for effective procedures for radiation protection.		

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					On the basis of information about the yardholes that Citizen Action provided to the New Mexico Environment Department (NMED), in or about March 2006, NMED began an inquiry into the yardholes at Sandia National Laboratories. http://www.radfreenm.org/pages/nr/121305.html NMED must now take action with respect to the yardholes and include them in the Draft Permit. The concerns of NMED documented the storage of metal-bearing materials potentially regulated as hazardous or mixed waste under the Resources Conservation and Recovery Act (RCRA). The 1993 Yardholes report, according to NMED, listed "Metals that include cadmium, lithium, silver and sodium; other potentially reactive materials in storage in the below grade storage facilities were also documented." Rather than provide any information to the NMED, SNL sent a June 9, 2006 letter of reply that asserted that the materials were excluded from review under RCRA as source, special nuclear or by-product material as defined by the Atomic Energy Act. As discussed below, the assertion that the wastes do not contain RCRA wastes are contradicted by Sandia documents. Without information about the yardhole wastes the public remains as vulnerable as it was in 1993. The public does not know: • what types of wastes are present in over 30 yardholes; • the volume of those wastes; • the containers for the wastes; • the pathways for disposition of the wastes; • how much of the wastes remain; • whether the wastes are being added on an ongoing basis to the yardholes; • whether new yardholes are being created; • what releases of yardhole wastes there may have been to the environment. Sandia's continued secrecy about the yardholes' wastes only serves Sandia to prevent public action for protection of the public health and safety interest and the environment. SNL must furnish the public and regulatory agencies full information in the Draft Permit regarding protection of the public health and environment from the dangerous nature of the wastes, the lack of monitoring for releases from the wastes, the potential for catastrophic criticality releases of fission materials, the leakage of the wastes to the groundwater, soil and air. The Tiger Team assessment found no air monitoring program or liquid effluent monitoring for the wastes at the HCF, ACRR and SPR.		

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744.	CNM 063		General	Citizen Action	Issues related to the MWL and Chemical Waste Landfill (CWL) must be resolved prior to the consideration of the Draft Permit. a. Citizen comments for the CWL post-closure permit have not received response. The well monitoring network for the CWL has problems of corroded well screens that prevent detection of contaminants beneath the CWL. b. Citizen Comments for the Soil Vapor Sampling and Analysis Plan for the MWL have not received response. c. Issues related to the 11/2006 Notice of Disapproval for the MWL soil cover have not been resolved.		
745.	CNM 064		General	Citizen Action	The Draft Permit references inclusion of the Long Term Monitoring and Maintenance Plan (LTMMP) for the Mixed Waste Landfill (MWL) that is a required part of the Draft Permit. The Draft Permit is being issued before issues surrounding the LTMMP are resolved. a. The LTMMP states that its issuance is "accelerated." The LTMMP is improperly out of sequence with the 2005 Final Order of the NMED Secretary and the Corrective Measures Implementation Plan that requires approval prior to the issuance of the LTMMP. A permit modification must first be obtained by Sandia because the submission sequence is out of order. (See, Consent Order, section III.J.1 Procedures for Modifying any Provision of the Consent Order; III.M.1 "All workplans and schedules ...become enforceable requirements of this Consent Order..."; III.W.5. Preservation of Procedural Rights – "including but not limited to, opportunities for public participation, including public notice and comment, administrative hearings, and judicial appeals..."). The public has not received its right to review and comment and receive a public hearing for the LTMMP which should come previously to any issuance of the Draft Permit. b. The LTMMP is being presented out of sequence with the requirements of the Resource Conservation and Recovery Act (RCRA), the NMED Final Order (2005) and the Corrective Measures Implementation Plan and Corrective Measures Implementation Report. The LTMMP is required to be submitted within 180 days after the NMED approval of the CMI Report. The CMI Report cannot issue until after the Corrective Measures Implementation Plan is approved. The CMI Plan cannot issue until after the soil cover construction is complete. The soil cover construction cannot be completed until after the Notice of Disapproval for the soil cover due to inadequate soil gas monitoring is no longer in place. The issuance of the Sandia LTMMP prior to the completion of the soil cover also requires a public hearing as a modification of		

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					the Module IV of HSWA Permit. c. The LTMMP is incomplete. The public is being asked to review the Draft Permit and sign off on a blank check for monitoring when it has no idea other than an incomplete and conflicted draft for what the LTMMP well monitoring network will be.		
746.	CNM 065		General	Citizen Action	The LTMMP admits that it is an incomplete document and lacks significant details about the well monitoring network for the MWL. In fact, the LTMMP does not, but must provide for the RCRA well monitoring network required by 40 CFR 264.101 and 40 CFR 264.90-.100 at the MWL. Orders currently issued by the NMED for changes to the well monitoring network at the MWL are not included in the LTMMP or identified in the Draft Permit. The public should not have the burden of reviewing partial plans that are not representative of what SNL will finally present as a Draft Part B Permit. Additionally, the LTMMP states conflicting positions with respect to the authority of the Consent Order for applicability to long term maintenance and monitoring.		
747.	CNM 066		General	Citizen Action	The LTMMP is incomplete and issued on an out of sequence "accelerated basis" that will requires a modification of either the Draft Permit, the 1993 Module IV, the Class 3 Modification to Module IV (2005) and/or the Corrective Measures Implementation Plan and the NMED 2005 Final Order. The LTMMP is being submitted before the NMED has approved construction of the soil cover (now subject to a Notice of Disapproval), final approval of the Corrective Measures Implementation Plan, and Corrective Measures Implementation Report.		
748.	CNM 067		General	Citizen Action	The LTMMP states (1.3): "Although the Consent order (NMED April 2004) governs the remedy selection process for the MWL, it does not contain any requirements related to long-term monitoring, other than requirements for monitoring well replacement." ... "The Class 3 Permit Modification provides the framework for the LTMMP..." This is incorrect inasmuch as it pretends to be the only framework applicable to long-term monitoring requirements. As per 63 FR 56710 et seq., the well monitoring requirements of RCRA in 40 CFR 264 Subpart F are also applicable to the LTMMP. Those requirements need to be reflected in both the legal and regulatory requirements of section 1.3 of the LTMMP and in the Draft Permit. That is not the situation and appropriate language recognizing RCRA long term monitoring and maintenance network requirements need to be in place for the LTMMP and the Draft Permit. The full requirements of 40 CFR 264 Subparts F and G should be expressly stated as being applicable to all units at SNL that received hazardous waste regardless as to the time when such wastes were received whether the areas were permitted or not. (See, 40 CFR 270.1 and 40 CFR 264.90)		

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749.	CNM 068		General	Citizen Action	The LTMMP leaves a regulatory vacuum for long-term monitoring at the MWL and instead should address and add the specific long-term monitoring requirements of RCRA as provided for in 40 CFR 264 Subparts F and G. The LTMMP (1.3) states the Consent Order lacks long-term groundwater monitoring requirements. But then, the LTMMP at D-5 claims that the Consent Order "transferred regulatory authority for groundwater sampling at the MWL from the HSWA module to the Consent Order." No citation to the Consent Order is provided to support this statement. No citation is made to the HSWA Module to show what specific groundwater monitoring requirements for SWMUs were removed from the HSWA module to the Consent Order. Nor is it mentioned whether public notice was given for that transfer that constituted a modification to the HSWA permit. The LTMMP states (1.3): "Although the Consent order (NMED April 2004) governs the remedy selection process for the MWL, it does not contain any requirements related to long-term monitoring, other than requirements for monitoring well replacement." ... In fact, The Consent Order addresses the "implementation of the controls, including long-term monitoring, for any SWMU [that would include the MWL] on the Permit's Corrective Action Complete with Controls list, which is described in Section III.W.3.b." That section (III.W.3.b) states that "...where controls are identified for a SWMU, only those controls (e.g., institutional controls, engineered barriers, long-term monitoring and operation and maintenance) are enforceable under the Permit." The Consent Order (Section III.A) states that it "fulfills the requirements for corrective action ... and their implementing regulations at 40 CFR Part 264, Subpart F." Subpart F applies to long term monitoring requirements.		
750.	CNM 069		General	Citizen Action	The LTMMP at section 3.5 – Groundwater Monitoring – purports to have a groundwater monitoring network "proposed" to be in place for long term monitoring that includes six wells (existing wells MWL-MW5, MWL-MW6 and proposed wells MWL-BW2, MWL-MW7, MWL-MW8, and MWL-MW9). In fact, none of the "proposed" wells are capable of monitoring the strata required to be monitored by either the Consent Order or RCRA requirements as set forth in 40 CFR 264 Subpart F. The replacement wells MWL-BW2, MWL-MW7, MWL-MW8, and MWL-MW9 were ordered under the Consent Order. None of these replacement wells monitor the "groundwater" as defined by the Consent Order. "Groundwater means interstitial water which occurs in saturated earth material and which is capable of entering a well in sufficient amounts to be utilized as a water supply." The groundwater monitoring requirement is not met by the current proposal to only monitor the fine grained sediments at the MWL with the replacement wells. While Citizen Action agrees that monitoring needs to be conducted at the water table for early detection of contamination, the Ancestral Rio Grande (ARG) strata needs to be monitored to comply with		

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					the Consent Order and Subpart F. The MW6, although it is at the ARG strata, is too far away from the MWL fence line to meet the RCRA Point of Compliance requirement. Provisions for monitoring the "uppermost most aquifer" and "aquifer" as defined by 40 CFR 260.10 need to be conducted for the 40 CFR 264.92 "underlying waste management area," at the point of compliance (264.95), and a 264.98 detection monitoring program must monitor for indicator parameters Tritium and PCE at the hot spots beneath the MWL. Mobility, persistence, and stability for indicator parameters must be monitored in the unsaturated zone beneath the waste management area. Instead the monitoring conducted is far away from these areas at the MWL.		
751.	CNM 070		General	Citizen Action	The Mixed Waste Landfill is being inserted into the Draft Permit which is a RCRA Part B application under Corrective Action. The MWL is a SWMU and a regulated unit under 40 CFR 270.1, and lost interim status. The closure and long-term monitoring of the MWL must address Subpart F and G and the provisions of 40 CFR 264.101 that include 40 CFR 264.90-.100 because the MWL is a SWMU at SNL facility seeking a RCRA permit.		
752.	CNM 071	56	6.0	Citizen Action	RCRA requires the Sandia facility permit to perform corrective action as follows in pertinent part from 40 CFR §264.101: §264.101 (a) The owner or operator of a facility seeking a permit for the treatment, storage or disposal of hazardous waste must institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit. Therefore, §264.101 requires the following changes (in bold italics) to the statements in Section 6.0 1) through 5) on page 56 of the draft permit to identify that the facility permit shall implement the Corrective Action Program of §264.100 and the monitoring requirements of §§264.90 through 264.101: 1) New releases of hazardous waste or hazardous waste constituents from Permitted Units, ***Regulated Units and any SWMU*** at the Facility ***require compliance with §§264.90 through 264.101 for the Permitted Units, Regulated Units, and any SWMU at the Facility.*** 2) The closure and post closure care requirements of 40 C.F.R. Part 264, Subpart G, as they ***require compliance with §§264.90 through 264.101 for the Permitted Units, Regulated Units, and any SWMU at the Facility;*** 3) Implementation of the controls, including long-term monitoring ***in accord with the requirements of §§264.90 through 264.101***, for any Solid Waste Management Unit (SWMU) on this Permit's list of SWMUs for which the		

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					Department has issued a determination of "Corrective Action Complete With Controls"; 4) Releases of hazardous wastes or hazardous constituents ***at any SWMU, Permitted Unit or Regulated Unit*** that occur after the date on which the Consent Order terminates; ***and require compliance with §§264.90 through 264.101 for the Permitted Units, Regulated Units, and any SWMU at the Facility;*** 5) For the purpose of complying with the requirements of this Permit for the Mixed Waste Landfill (MWL) ***which is recognized by RCRA as a Regulated Unit and therefore, must comply with the requirements of §§264.91 through 264.100 in lieu of §264.101 for purposes of detecting, characterizing and responding to releases to the uppermost aquifer" (§264.90).***		
753.	CNM 072		6.7	Citizen Action	Mistakes in "Permit Part 6.7. CORRECTIVE MEASURES FOR THE MWL (SWMU 76)" The draft permit fails to recognize that the MWL is a "regulated unit" under RCRA because of the disposal of hazardous wastes after July 26, 1982, and therefore, the MWL "must comply with the requirements of §§264.91 through 264.100 in lieu of §264.101 for purposes of detecting, characterizing and responding to releases to the uppermost aquifer" (§264.90). In addition, the claim of NMED that the MWL is a SWMU still requires compliance with the requirements of §§264.91 through 264.101. Unfortunately, the requirements of §§264.91 through 264.101 have never been met at any time with the monitoring well network installed at the MWL for purposes of detecting, characterizing and responding to releases to the uppermost aquifer or to releases to the water table of the regional zone of saturation below the MWL. This failure is documented in historical documents that are summarized in the following comments.		
754.	CNM 073		6.7	Citizen Action	Earlier Reports by EPA, DOE and NMED recognized that monitoring wells were not at the correct locations. - DOE/SNL and NMED knew in May 1991 from the DOE Tiger Team Assessment of SNL ((p. 3-59) that "The number and placement of wells at the mixed waste landfill is not sufficient to characterize the effect of the mixed waste landfill on groundwater." - In June 1991, the DOE Technical Review: Compliance Activities Workplan for the Mixed Waste Landfill, Sandia National Laboratory (Kenneth Rea, Environmental Restoration Technical Support Office) stated under		

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					Comments: "19/1/1 It is stated that 'three additional wells were installed, two downgradient and one upgradient…' It would be appropriate to mention here that data from these wells indicated that this network has in fact only one downgradient well and no wells that are definitely upgradient.". (Emphasis supplied). - The SNL Annual Ground-Water Monitoring Report (March 1992 for Calendar Year 1991) states: p.7- "The ground-water surface elevation data were evaluated to determine whether the monitoring well network meets the requirements of being comprised of at least one upgradient and three downgradient wells, as specified in 40 CFR 265-93 (f). This requirement cannot be demonstrated at this time" [emphasis supplied]. - The SNL March 1993 Mixed Waste Landfill Phase 2 RCRA Facility Investigation Work Plan, states, (p. 2-31, para 2.2.5.2) (AR005409): "Although regional potentiometric maps indicate that the hydraulic gradient at the MWL is toward the west and northwest (Figure 2-16), current water level data for the four MWL monitor wells suggest that the hydraulic gradient is toward the southwest, approximately 40 degrees counterclockwise to the regional gradient" [emphasis supplied]. - EPA Comment 11 contained in The Final Mixed Waste Landfill RFI Work Plan Summary Report (September 6, 1994) stated, "Based on the southwest gradient flow of groundwater, the MWL monitoring wells are located crossgradient instead of downgradient from the MWL; therefore, contaminants emanating from the MWL may not be detected in the monitoring wells." - September 14, 1998, 1:12 Santa Fe MWL (AR 010980-82) handwritten notes of Will [Moats] and Benito [Garcia] discussing an NOD and closure standards (AR 010981): "Will- Detection system is inadequate. "Benito- Why? Write that in there "Will- they only have 1 well down gradient… " These above statements were a matter of public record and these above statements address the monitoring well network through year 1998 that consisted of wells BW1, MW1, MW2,		

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					MW3 and MW4. • What is the proof of NMED now that none of the above statements were correct and remain accurate to the present time for the existing monitoring well network?		
755.	CNM 074		6.7	Citizen Action	The water level data are proof that the direction of groundwater flow at the water table has always been to the southwest and that wells BW1, MW1, and MW2 were installed at locations that are crossgradient to the direction of flow. The crossgradient locations do not meet the requirements of RCRA for monitoring background water quality (§264.97), for detection monitoring (§264.98), and for detection monitoring wells immediately along the western and southern boundaries of the MWL at the point of compliance (§264.95).		
756.	CNM 075		6.7	Citizen Action	The mud-rotary drilling method invaded the screened intervals of wells BW1, MW1, and MW3 with a combination of bentonite clay and organic additives that have well known properties to establish a new mineralogy in the screened intervals that prevent the collection of reliable and representative water samples for many of the contaminants that are known releases from the hazardous wastes buried in the MWL. The NMED released a report on November 6, 2006 entitled "Evaluation of the Representativeness and Reliability of Ground Water Monitoring Well Data" (the Moats Evaluation) that makes the unsubstantiated claim that the three mud-rotary wells produce reliable and representative water samples.		
757.	CNM 076		6.7	Citizen Action	In March 2007 Citizen Action and the Albuquerque-Bernalillo County Groundwater Protection Advisory Board (GPAB) made a request to EPA Region 6 for the EPA Kerr Lab to review the Moats Evaluation. This request was appropriate because the Kerr Lab reviewed a similar report to assess the monitoring wells at the Los Alamos National Laboratory (LANL). The Moats Evaluation was modeled after the LANL Well Screen Analysis Report (WSAR) and NMED claimed the Moats Evaluation was superior to the WSAR, but the subsequent revisions of the WSAR that are approved by NMED do not recognize or incorporate the Moats Evaluation. • If the Moats Evaluation is superior, then why hasn't NMED required the superior evaluation scheme to be used in the revisions of the LANL WSAR? Registered Geologist Robert Gilkeson disagrees and finds that neither the LANL WSAR nor the Moats Evaluation identify if any well produces reliable and representative water samples. This was also the finding of the EPA Kerr Lab for the LANL WSAR. The National Academy of Sciences (NAS) also found that the WSAR showed a lack of basic scientific knowledge and the evidence relied upon was not statistically valid (Groundwater Protection Practices at LANL-- NAS 2007		

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					Final Report, p.60). The NMED is on record at a meeting of the GPAB on 12/14/2006 that it did not oppose the request for the Moats Evaluation to be reviewed by the EPA Kerr Lab. Furthermore, in a July 17, 2007 letter to Citizen Action NMED, Mr. Bearzi, Chief of the NMED Hazardous Waste Bureau, welcomes the review by EPA of the Moats Evaluation. Nevertheless, this review has not occurred because NMED has not asked EPA Region 6 to authorize the EPA Kerr Lab to perform the review. • Why has NMED failed to honor the request of Citizen Action and the GPAB for the needed review of the Moats Evaluation by the EPA Kerr Lab?		
758.	CNM 077		6.7	Citizen Action	RCRA (40 CFR 264.98(a)(2) requires the installation of monitoring wells across the water table in the fine-grained sediments for early detection of contamination "beneath the waste management areas" and also in the deeper productive Ancestral Rio Grande (ARG) strata that are the fast pathway for horizontal travel of contaminated groundwater to the supply wells. RCRA §260.10 defines the ARG strata as the "uppermost aquifer". The monitoring wells installed at the MWL dump have failed over all time to meet the requirements of RCRA for monitoring contamination in either flow system. The only monitoring well with a screen installed only in the ARG strata is well MWL-MW6. NMED approved for DOE/SNL to install well MWL-MW6 in the ARG strata at the distant location 500 feet west of the western boundary of the MWL dump. However, this location does not meet the compliance requirements of 40 CFR §264.95 as stated in pertinent part: "The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units." The "hydraulically downgradient limit of the waste management area" is immediately along the western and southern side of the MWL dump. In §264.95 the "uppermost aquifer" is referring to the productive ARG strata monitored only by well MW6 and not to the fine-grained alluvial sediments that are poorly productive of groundwater. • Does NMED recognize that well MWL-MW6 does not meet the point of compliance requirements of 40 CFR §264.95 because of the 500-ft distance of MW6 away from the western side of the MWL? • Does NMED recognize the requirement of RCRA 40 CFR §264.95 for monitoring wells to be located in the ARG strata		

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					at the point of compliance immediately along the western and southern side of the MWL dump?		
759.	CNM 078		6.7	Citizen Action	RCRA 40 CFR §264.98 requires a detection monitoring program at the MWL dump that meets the following requirement: §264.98(e). The owner or operator must determine the ground-water flow rate and direction in the uppermost aquifer at least annually. DOE/SNL has never installed the network of monitoring wells at the MWL dump to meet the requirement of 40 CFR §264.98(e). DOE/SNL does not have accurate knowledge of the ground-water flow rate and direction in the uppermost aquifer i.e., the ARG strata because only one monitoring well MW6 exists in the uppermost aquifer. The averaging of different wells in different strata further misrepresents the flow properties at the MWL. Similarly, DOE/SNL does not have accurate knowledge of the direction or rate of flow at the water table in the fine-grained alluvial sediments. • Does NMED recognize the need for the installation of a network of monitoring wells at the MWL dump to meet the requirement of 40 CFR §264.98(e)?		
760.	CNM 079		6.7	Citizen Action	Well MW4 is a multiple-screen well with two well screens. The well was installed at an angle beneath Trench D to investigate contamination by the 271,000 gallons of reactor coolant water that was dumped into the unlined trench. The upper screen is installed in the fine-grained sediments deep below the water table and the lower screen is installed across the contact of the fine-grained sediments with the ARG strata. The well was installed to investigate contamination at the water table but fails to meet this purpose because the top of the upper screen was installed too deep below the water table. There is the ubiquitous presence of nitrate at high levels in the water samples collected from the water table below the MWL dump, but the water produced from the upper screen in well MW4 is low in nitrate. The water samples produced from monitoring well MW-6 show that water in the ARG strata are also low in nitrate. The water level measured in the upper screen in well MW4 is much deeper than the water levels measured in the wells that are installed across the water table. In fact, the deep water levels measured in the upper screen in well MW4 is nearly identical to the level measured in the deeper ARG strata at well MW6. The anomalously deep water level measured in the upper screen in well MW4 is evidence of leakage between the upper and lower screen.		

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					The water level information, the quick refilling of the upper screen in well MW4 after it is pumped dry, and the low levels of nitrate are all evidence that there is leakage between the upper and lower screens in well MW4. At a minimum this leakage has been present since 2001 to the present. The placement of the upper screen at too great a distance below the water table and the ongoing leakage have prevented well MW4 from producing reliable and representative water samples for knowledge that releases from the MWL dump are contaminating the groundwater. There is an immediate need to plug and abandon well MW4 and replace the well with a new well installed to investigate groundwater contamination at the water table beneath Trench D. • Does NMED recognize the mistakes in the installation of well MW4 that have prevented the well from ever producing reliable and representative water samples for detection of groundwater contamination at the water table below the MWL dump? • Does NMED recognize that leakage is occurring between the two screens in well MW4 and there is an immediate need to plug and abandon the well and install a new well to investigate groundwater contamination at the water table below Trench D at the MWL dump? • If NMED does not recognize the leakage, then what proof does NMED have that leakage is not occurring? Keep in mind that proper inflation pressure in the packer that is installed between the two screens is not proof that leakage is not occurring.		
761.	CNM 080		6.7	Citizen Action	Well MW5 is at a location too distant (175 ft) from the western boundary of the MWL dump to meet the point of compliance requirements of RCRA §264.95. In addition, the screen in well MW5 is installed too deep below the water table to detect contamination at the water table. Furthermore, an important mistake in the installation of well MW5 is that the well screen is installed across the contact of the alluvial fan sediments with the deeper ARG strata. The well produces a mixture of water from both geologic formations and is not reliable for the detection of contamination in either formation. The NMED SNL Consent Order (section VIII.A.6) requires wells to be installed in only one zone of saturation in terms of aquifer properties as follows:		

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					"In constructing a well or piezometer, Respondents shall ensure that the well or piezometer will not serve as a conduit for contaminants to migrate between different zones of saturation." An October 30, 2001 position paper of the NMED Hazardous Waste Bureau provides additional caution on cross-cutting screens as follows: "Wells with screened intervals connecting intervals of different head and/or hydraulic conductivity may act as conduits for vertical flow within the screened interval." The construction record and the water level data are proof that the screen in well MW5 is connecting intervals of different head and hydraulic conductivity and is a conduit for vertical flow within the screened interval between the fine-grained alluvial sediments and the ARG strata. An additional serious mistake at well MW5 is that the record of well construction shows that bentonite clay/cement grout was mistakenly poured inside the well and that the well development activities were not successful to clean the grout from the screened interval. The clay and the cement have strong properties to mask the detection of contamination in the water samples produced from the well. Monitoring well MW5 has never produced reliable and representative water samples for the detection of groundwater contamination from releases from the MWL dump. There is an immediate need to plug and abandon well MW5 and install two new monitoring wells east of well MW5 immediately at the western boundary of the MWL dump. One of the new wells should be screened across the water table. The second well should be screened only in the ARG strata. • Does NMED recognize that well MWL-MW5 has never produced reliable and representative water samples for detection of groundwater contamination at the water table in the alluvial fan sediments? • Does NMED recognize that well MWL-MW5 has never produced reliable and representative water samples for detection of groundwater contamination in the ARG strata? • Does NMED recognize that the ARG strata are the "uppermost aquifer" as defined in RCRA SS 264.90 through 264.100? • Does NMED recognize the need to plug and abandon well MWL-MW5 and replace the well with two new monitoring wells installed at the point of compliance; one well installed		

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					across the water table and the other well installed only in the ARG strata?		
762.	CNM 081		6.7	Citizen Action	Monitoring wells MWL-BW1, -MW1, -MW2 and -MW3 have stainless steel screens. For more than the past ten years, corrosion of the screens was claimed as responsible for the measurement of high levels of nickel and chromium in the water samples produced from the wells. However, as shown in Table 1, the levels of nickel contamination in MW1 are an order of magnitude higher than the nickel levels in BW1. Both well screens are stainless steel and corroded. The markedly higher levels of nickel measured in MW1 exceed the level that can be assigned to corrosion and represent direct evidence of a release from the dump. In fact, on July 2, 2007 DOE/SNL sent a letter to notify NMED that chromium levels measured in water samples produced from wells MWL-MW1 and -MW3 for the April 2007 sampling event exceeded the EPA MCL for chromium. In the letter, DOE/SNL made the unsubstantiated claim that corrosion of the stainless steel well screens was responsible for the high concentrations. Over the years, NMED made the mistake to accept the unsubstantiated claim by DOE/SNL that corrosion of the stainless steel screens was the only source for the high levels of chromium and nickel. There is a record of disposal of a large volume of chromium liquid wastes in the MWL dump. There is also a record of the release of nickel wastes to the geologic formations below the dump. The buried wastes in the dump may be responsible for the high levels of nickel and chromium contamination measured in the groundwater below the dump. It was a mistake for NMED to order DOE/SNL to plug and abandon wells MW1 and MW3 without first collecting water samples for special analytical techniques that would possibly identify if there was a release from the MWL dump. For example, water samples should be analyzed for low-levels of tritium and with chromium isotopic analyses to identify if the wastes in the dump were a contributor to the chromium contamination measured in groundwater. NMED should order DOE/SNL to collect water samples from the two wells for these analyses if the wells have not already been plugged and abandoned. In addition, NMED should have ordered DOE/SNL to replace the wells with wells that have PVC screens when the anomalously high levels of nickel and chromium were first known to be present. High levels of chromium were first measured in well MW1 in 1997 and in MW3 in 2001. Table 1 presents the nickel concentrations measured in wells MW1, BW1, and MW2. There is a history of measurement of		

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					anomalously high levels of nickel in water samples from well MW1 beginning with the first water sample collected in 1990 with total and dissolved levels of 46 and 43 ug/L, respectively. For comparison, the NMED approved background for total and dissolved nickel in groundwater is 28 ug/L. Over the years, the waters produced from well MW1 show exceptionally high levels of nickel with levels above 400 ug/L since 2004. The high levels of dissolved nickel measured in well MW1 are anomalously high for the levels expected from corrosion of stainless steel well screens. Recent research has established that corrosion produces the highest levels of nickel in the early years of onset of corrosion, and in later years the dissolved nickel levels show a large decline. The decline is because of the exceptional properties of the corrosion products encrusted on the well screens to lower the concentration of nickel in water samples produced from the corroded screens. The corrosion products have an iron oxide mineralogy with strong properties for adsorption of many trace metals including nickel and chromium. Table 1 shows that this phenomenon of increase in nickel levels to a plateau followed by a great decline in measured values is recorded for the history of nickel values measured in the water samples produced from wells BW1 and MW2. (Page 30) - The NMED approved background for total and dissolved nickel in groundwater is 28 ug/L. - The groundwater quality standard of the New Mexico Water Quality Bureau for nickel is 200 ug/L. - In 1974, EPA set the drinking water standard for nickel at 100 ug/L. EPA remanded the drinking water standard for nickel on February 9, 1995 and has not set a new standard. - The 2004 World Health Organization Guideline Value is that drinking water shall not contain nickel at concentrations greater than 20 ug/L. - For well BW1, the highest level of nickel @ 191 ug/L was measured in 2001. Since 2001, the measured nickel levels declined to a value of 35.5 ug/L in 2005. - For well MW2, the highest level of nickel @ 124 ug/L was measured in 2000. Since 2000, the measured nickel levels declined to a value of 6.8 ug/L in 2006. However, the nickel contamination measured in well MWL-MW1 does not show the pattern expected from corrosion. Instead, the consistent and continuing high levels are evidence of nickel contamination in groundwater because of a release from the MWL dump. Very high levels of 538 and 467 ug/L dissolved nickel were measured for two sampling dates in 1998. The measured values remained high and above 400 ug/L for samples collected in years 2004 to 2006. There is a need to investigate the groundwater contamination at the location of well MW1 by installation of a new monitoring well		

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					with a nonmetallic PVC screen immediately between the location of well MW1 and the northern side of the MWL dump. NMED fails to address the nickel contamination that is present in the groundwater because of a release from the dump. The nickel contamination is required under RCRA to be investigated. Instead, the current plan is to plug and abandon MW1 without further investigation. The corrosion that is present in MW1 may be hiding contamination additional to the nickel. The improper sampling at MW1 further masks the contamination at MW1. See Table 1 for the MWL-MW1 data on nickel. In 1974, EPA set the drinking water standard for nickel at 100 ug/L. However, EPA remanded the drinking water standard for nickel on February 9, 1995 and has not set a new standard. The New Mexico groundwater quality standard for nickel is 200 ug/L. The 2004 World Health Organization Guideline Value is that drinking water shall not contain nickel at concentrations greater than 20 ug/L. The nickel values of greater than 400 ug/L that are consistently measured in the groundwater produced from well MW1 are far above the water quality standard of the state of New Mexico of 200 ug/L. NMED has a history of arbitrary and inconsistent practice at the Los Alamos National Laboratory (LANL) and Sandia. When LANL made a claim to NMED that the high levels of chromium and nickel measured in two screened intervals of a LANL monitoring well were because of corrosion, NMED immediately responded with an order in a letter dated April 5, 2007 to install new wells stating that "The required actions stem from speculation by the Permittees that nickel and chromium detections represent leaching of stainless steel well casing in screens #1 and #2" [emphasis added]. It is well known in the technical literature including the RCRA guidance documents that corrosion causes stainless steel screens to be encrusted with corrosion products that have properties to prevent the detection of many contaminants of concern for releases from the MWL dump. From the pertinent section of RCRA Ground-Water Monitoring: Draft Technical Guidance, November 1992: "Monitoring well casing and screen materials should not chemically alter ground-water samples, especially with respect to the analytes of concern, as a result of their sorbing, desorbing, or leaching analytes. For example, if a metal such as chromium is an analyte of interest, the well casing or screen should not increase or decrease the amount of		

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					chromium in the ground water. Any material leaching from the casing or screen should not be an analyte of interest, or interfere in the analysis of an analyte of interest" (p.6-16 to 6-18). "The presence of corrosion products represents a high potential for the alteration of ground-water sample chemical quality. The surfaces where corrosion occurs also present potential sites for a variety of chemical reactions and adsorption. These surface interactions can cause significant changes in dissolved metal or organic compounds in ground-water samples" (p. 6-30). "Disadvantages of stainless steel well casing and screen materials: · May corrode under some geochemical and microbiological conditions; · May sorb cations and anions; · May contribute metal ions (iron, chromium, nickel, manganese) to groundwater samples; · High weight per unit length; and · Type 304 and Type 316 stainless steel are unsuitable for use when monitoring for inorganic constituents" (p. 6-32). (Emphasis supplied). [Note: The well screens at the MWL dump are Type 304 stainless steel. Many of the contaminants of concern at the MWL dump are inorganic constituents. In 2007, NMED has ordered for the replacement monitoring wells at the MWL dump to be installed only with screens made of nonmetallic PVC.] • Does NMED recognize that corrosion of the stainless steel screens has prevented monitoring wells MWL-BW1, -MW1, -MW2 and -MW3 from producing reliable and representative water samples from at least 1997 to the present?		
763.	CNM 082		6.7	Citizen Action	RCRA identifies the high levels of nickel contamination measured in the water samples produced from monitoring well MWL-MW1 as "Statistically Significant Evidence of Contamination." The discussion of "statistically significant evidence of contamination" is in 40 CFR 40 CFR §264.98 Detection Monitoring Program with the following pertinent parts: "(2) The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well as the compliance point within a reasonable period of time after completion of sampling. The Regional Administrator will specify in the facility permit what period of time is reasonable, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground-water samples."		

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					"(g) If the owner or operator determines pursuant to paragraph (f) of this section that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to paragraph (a) of this section at any monitoring well at the compliance point, he or she must: (1) Notify the Regional Administrator of this finding in writing within seven days. The notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination;" "(4) Within 90 days, submit to the Regional Administrator an application for a permit modification to establish a compliance monitoring program meeting the requirements of §264.99. The application must include the following information: (i) An identification of the concentration of any appendix IX constituent detected in the ground water at each monitoring well at the compliance point; (ii) Any proposed changes to the ground-water monitoring system at the facility necessary to meet the requirements of §264.99;" DOE/SNL did not inform NMED that the high levels of nickel measured in monitoring well MWL-MW1 represent "statistically significant evidence of contamination" and that DOE/SNL was required to establish a compliance monitoring program meeting the requirements of 40 CFR §264.99. The monitoring wells installed at the MWL dump never met the compliance monitoring program requirements of §264.99. A minimum requirement was to replace monitoring well MWL-MW1 with a well that had a nonmetallic PVC screen to make a determination of the source of the nickel contamination that was consistently and continuously measured to the present time at high levels in the water samples produced from the well. • Does NMED recognize that the high nickel values consistently and continuously measured in the water samples produced from monitoring well MWL-MW1 represent evidence of groundwater contamination due to a release from the MWL dump? • Does NMED recognize that there is a requirement to install a new monitoring well with a nonmetallic screen immediately near the location of well MW1 to accurately measure the nickel contamination and to investigate if additional contamination is present given the properties of the corroded well screen to mask the detection of many inorganic		

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					contaminants of concern for the buried wastes in the MWL dump? • What proof does NMED have that the high nickel values measured in well MWL-MW1 do not represent a release from the hazardous wastes buried in the MWL?		
764.	CNM 083		6.7	Citizen Action	Improper sampling methods have prevented wells MWL-BW1, -MW1, -MW2, -MW3, and -MW4 from producing reliable and representative water samples. NMED approved of the improper high-flow pumping methods that were used for purging the five wells to dryness with the collection of water samples days later from the highly aerated water that refilled the wells. The improper purging and sampling methods have prevented the wells from being reliable for the detection of the volatile solvent contaminants that are known to be buried in the MWL dump. There are many EPA reports published over the past 20 years that describe the need to use low-flow purging and sampling techniques in order to collect reliable and representative water samples from monitoring wells installed in the alluvial sediments that are present at the water table below the MWL dump. Despite these reports, NMED requested for DOE/SNL to use high-flow sampling methods that masked the detection of the volatile solvent contaminants that may be present in the groundwater beneath the MWL dump. In fact, DOE/SNL propose the use of low-flow purging and sampling techniques in the Long Term Monitoring and Maintenance Plan (LTMMP) that NMED released for public comment on October 31, 2007: "In order to obtain the most representative samples possible, the DOE/Sandia will use dedicated low-flow pumps and sampling techniques in MWL wells during long-term monitoring. Low-flow purging and sampling techniques are recommended for all MWL wells because the hydrogeologic environment is well suited for this type of groundwater sampling. In the past, low-flow sampling techniques have been successful at other sites across SNL/NM. However, on October 23, 2003, the NMED requested that all DOE/Sandia low-flow sampling (which the NMED termed "micropurging") be ceased for all RCRA-compliant groundwater monitoring at SNL/NM (NMED October 2003). The low-flow purging method has been approved by the EPA (Puls and Barcelona 1996) and offers the following advantages over conventional sampling methods currently used at the MWL: • Low-flow sampling causes less well disturbance, minimizing		

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					the disturbance of the fine-grained sediments that have collected in the wells. As a result, samples collected using low-flow purging and sampling methods typically have lower sample turbidity and variability of sampling results. • Low-flow sampling minimizes the required purge volume by up to 95 percent, reducing the time and labor required for purging and sampling and minimizing waste. • Low-flow purging reduces problems related to excessive drawdown and pumped volumes. • Dedicated equipment for low-flow sampling saves field time and eliminates contamination from other wells and equipment handling" (p. 3-27). • Does NMED recognize that the improper high-flow purging and sampling methods have prevented the collection of reliable and representative water samples from five of the seven monitoring wells at the MWL dump? • Does NMED recognize that the improper high-flow purging and sampling methods may have masked the detection of solvent contaminants in the water samples produced from the monitoring wells at the MWL dump?		
765.	CNM 084		6.7	Citizen Action	Failure to install the required network of detection monitoring wells immediately along the western and southern boundary of the MWL. The only monitoring well that was ever installed at a location close to the western boundary of the MWL is well MW3. However, even this well has never produced reliable and representative water samples because of 1). the mud-rotary drilling method that invaded the screened interval with a combination of bentonite clay and organic additives, 2). the improper sampling method that pumped the well to dryness with collection days later of the water that refilled the well and 3). corrosion of the stainless steel well screen.		
766.	CNM 085			Citizen Action	In 2007 NMED and DOE/SNL recognized some of the deficiencies in the existing network of monitoring wells at the MWL dump. The fact that NMED now recognizes the requirement of RCRA to locate monitoring wells immediately along the western side of the MWL dump is shown by the instruction for the installation of two new monitoring wells in an order issued by NMED to DOE/SNL in a letter sent on 10-30-07: "The new wells need to be placed as close to the old landfill boundary as possible to ensure the detection of any contaminants in the groundwater. Thus, NMED approves the work plan with the following conditions. • Both new wells shall be positioned as close as possible to the former west fence that originally surrounded the Mixed		

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					Waste Landfill. NMED is aware that, once installed, the new wells will fall within the footprint of the new cover." The DOE/SNL Long-Term Monitoring and Maintenance Plan (LTMMP) that was released by NMED for public comment on October 31, 2007 proposes to install three new monitoring wells at locations within 70-ft of the western fence line. The new wells are proposed to be installed across the water table. The LTMMP still fails to meet the requirements of RCRA for the necessary network of monitoring wells because the flow of groundwater at the water table is to the southwest and the LTMMP does not install any monitoring wells along the southern side of the MWL dump. The LTMMP also does not identify the need in RCRA §264.95 to install monitoring wells in the ARG strata at locations immediately along the western and southern sides of the MWL. • Does NMED recognize the requirement of RCRA to locate monitoring wells immediately along the southern side of the MWL dump with screens installed across the water table for "early detection of contamination" and with screens installed in the deeper ARG strata; the strata recognized by RCRA as the uppermost aquifer?"		
767.	CNM 086		Part 6.7	Citizen Action	The MWL monitoring wells are not at crucial locations for knowledge of groundwater contamination from the highly mobile contamination in the buried wastes. The sampling investigations performed in the 1980's and early 1990's identified discrete regions inside the MWL where large quantities of tritium and solvent wastes including PCE were buried. There are no monitoring wells at appropriate locations to identify if these wastes have contaminated the groundwater. This is an important issue because the fate and transport model uses the highly mobile tritium and PCE as "indicator parameters" that the groundwater below the MWL dump is not contaminated. The assertion by DOE/SNL and NMED of "no contamination in groundwater" from releases at the MWL is disingenuous and not proven because there are no monitoring wells at the locations where this groundwater contamination would be expected to be present. The NMED Notice of Disapproval (NOD) issued on November 24, 2006 ordered DOE/SNL to install monitoring wells inside the MWL where high levels of contaminants were discovered in the earlier RCRA facility investigations (RFI). The order from NMED Comment No. 19 and the response from DOE/SNL is as follows in pertinent part from the DOE/SNL response on January 15, 2007: Comment 19 in the NMED Order: Propose some additional monitoring to be conducted at locations within the landfill where contaminants were detected at their highest levels		

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					during the RFI. DOE/SNL Response to Comment 19: Additional monitoring at locations within the landfill using intrusive techniques is not recommended, and could compromise the integrity of the cover. The refusal of DOE/SNL to install monitoring wells inside the MWL dump to investigate groundwater contamination by tritium and solvents including PCE is unacceptable. The existing monitoring well MWL-MW4 is installed through the cover. In addition, NMED issued an letter on October 30, 2007 that ordered DOE/SNL to install monitoring wells through the cover: Both new wells shall be positioned as close as possible to the former west fence that originally surrounded the Mixed Waste Landfill. NMED is aware that, once installed, the new wells will fall within the footprint of the new cover. It is essential to install monitoring wells at locations inside the MWL dump where large quantities of the highly mobile tritium and solvent wastes are known to be buried. The monitoring wells should be a design for measuring contamination in the soil gas throughout the thick vadose zone and also measuring contamination in water samples collected at the water table. • Will NMED order DOE/SNL to install monitoring wells inside the MWL dump as required by the NMED Notice of Disapproval (NOD) issued on November 24, 2006?		
768.	CNM 087		6.7	Citizen Action	There is an essential need to monitor the release of contaminants to the vadose zone for early detection and remediation of the release. However, the DOE/SNL LTMMP does not propose to monitor the vadose zone beneath the unlined pits and trenches. Instead, DOE/SNL propose to monitor the vadose zone at only three locations that are located outside the perimeter of the proposed dirt cover and are too distant from the unlined pits and trenches for the detection of releases that may contaminate the groundwater below the MWL dump. Indeed, the groundwater at the water table below the MWL dump may already be contaminated with tritium and solvents including PCE, but this contamination has not been detected because of the deficiencies in the existing network of monitoring wells and will not be investigated by the monitoring scheme in the DOE/SNL LTMMP. RCRA §264.98 requires continuous monitoring of the vadose zone beneath each of the unlined pits and trenches at the MWL for early detection of releases. This required monitoring has never been performed and is not included in the LTMMP.		

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					• Will NMED require the installation of a large network of multiple-port monitoring wells for sampling the soil gas from immediately below the unlined pits and trenches to a depth of up to 100 feet below the bottom of the disposal units for early detection of releases? • Will NMED require the installation at appropriate locations inside the MWL of multiple-port wells to sample soil gas at appropriate depths throughout the thickness of the vadose zone to the top of the region zone of saturation?		
769.	CNM 088		6.7	Citizen Action	DOE/SNL annual groundwater monitoring reports have misrepresented the monitoring well network at the MWL dump. The annual DOE/SNL groundwater monitoring reports up to 2006 always presented the monitoring wells at the MWL dump to be at appropriate locations and to produce reliable and representative water samples. From the 2006 report prepared for SNL Department 6765 by Shaw Environmental, Inc. "Annual groundwater sampling was conducted at the MWL located in Technical Area 3 at SNL/NM. Sampling was conducted from April 3 through April 18, 2006. All seven monitoring wells at the MWL were sampled, including background monitoring well MWL-BW1, on-site monitoring well MWL-MW4, and downgradient monitoring wells MWL-MW1, MWL-MW2, MWL-MW3, MWL-MW5, and MWL-MW6" [emphasis supplied](p. 3). The Executive Summary from the 2006 report – "Annual groundwater sampling was conducted at the Sandia National Laboratories Mixed Waste Landfill (MWL) in April 2006. Seven monitoring wells were sampled using a Bennett™ pump in accordance with the April 2006 Mini-Sampling and Analysis Plan for the MWL (SNL/NM 2006). The samples were analyzed off site at General Engineering Laboratories, Inc. for a broad suite of radiochemical and chemical parameters, and the results are presented in this report. The results show constituent concentrations within historical ranges for the site and indicate no evidence of groundwater contamination from the landfill" [emphasis supplied]. • Does NMED support the claim made in the DOE/SNL 2006 annual groundwater monitoring report that the well monitoring network consists of five downgradient monitoring wells and one background well? If so, then state the basis for the support of the statement. • Does EPA support the position in the DOE/SNL 2006		

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					annual groundwater monitoring report that the well monitoring network produced water quality data that was reliable and representative to "indicate no evidence of groundwater contamination from the landfill?" If so, then state the basis for the support of the statement.		
770.	CNM 089		General	Citizen Action	The above described problems at the SNL Mixed Waste Landfill are typical of problems throughout the SNL facility for lack of appropriate groundwater monitoring requirements being in place. Further, numerous well screens throughout the SNL facility are corroded and in need of replacement. SNL and NMED should provide the current listing of the many wells that require replacement due to corrosion.		
771.	CNM 090		General	Citizen Action	The Los Alamos National Laboratory (LANL) provided an informational meeting for the LANL RCRA permit to the Northern New Mexico Citizen Advisory Board. A similar meeting is hereby requested for interested organizations, including Citizen Action, to be held in the Albuquerque area by Sandia National Laboratories previous to close of any comment period. NMED should ensure that the DOE apply equivalent treatment for public participation for the review of the Sandia RCRA permit.		
772.	CNM 091		General	Citizen Action	The Draft Permit should further be denied due to the refusal of DOE/SNL for over a year to provide answers to the following questions relevant to air emissions submitted on a Freedom of Information Request to DOE/SNL that should be answered by the Draft Permit: a. Provide documents that show the types and amounts of potential chemical emissions for each facility at SNL. (SA, p. 3-17, para 3.8.1). b. Provide documents showing any State of New Mexico or EPA air permit for the Thermal Treatment Facility. (SA, p. 2-43). c. Provide documents showing the types of solvents burned at the Thermal Treatment Facility. d. Provide documents that describe the "existing SNL/NM program" for decontamination, decommissioning and demolition of the MDL under the MESA project. (SA, p. 2-45). e. Provide documents that describe whether the "existing SNL/NM program" for decontamination, decommissioning and demolition of the MDL under the MESA project is a RCRA regulated activity. f. Identify all facilities using High Particulate Efficiency Filters (HEPA) and for each facility using HEPA filters provide the RCRA waste codes for any hazardous wastes contained in the HEPA filters. g. Provide documents showing disposal of HEPA filters for the question above. h. Provide documents that show the total inventory of radionuclides at SNL. i. Provide documents providing the factual data for the conformity analysis performed for SNL.		

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					j. Provide USEPA air permit for hazardous air pollutants. k. Provide documents showing the types and quantities of radiological air emissions for each facility at SNL. l. Provide the documents for any independent analyses that have been performed for radiological air emissions at SNL. m. Provide documents showing the methods used for monitoring the chemical and radiological air emissions for each facility at SNL. n. Provide documents which show the programs in place at SNL for monitoring and controlling hazardous air pollutants for each facility at SNL. o. Provide documents that analyze for any disproportionate adverse health or environmental effects on minority or low income populations within the ROI (Region of Interest) 15 mile radius about the SNL Steam Plant. (SA, p. 3-38, para 3.15 and SA, p. 4-8, para 4.2.8). p. Provide documents showing the potential environmental releases/effects for a terrorist attack on facilities at SNL. q. Provide documentation as to whether SNL constitutes a "major source" as defined by 40 CFR 63.2. r. Provide documents that show the facilities for which SNL is required to comply with the Maximum Achievable Control Technology (MACT) requirements of 40 CFR 63. s. Provide the location for all process vents at SNL including but not limited to, process vents for the processes of distillation, fractionation, thin-film evaporation process, solvent extraction process, steam stripping process and gas stripping process. A process vent means an open-ended pipe, stack, or duct through which a gas stream containing hazardous air pollutants (HAP) is continuously or intermittently discharged to the atmosphere by any of the processes listed in 40 CFR 63.680(c)(2)(i) through (c)(2)(vi). t. Provide documents that demonstrate compliance for SNL with 40 CFR 63.683 (b) that provides general standards for control of air emissions, removal or destruction of hazardous air pollutants (HAP), and concentration limits for treatment. u. Provide documents that demonstrate compliance for SNL with 40 CFR 63.683 (c) that provides for controls for air emissions from process vents. v. Provide documents that demonstrate compliance for SNL with 40 CFR 63.683 (d) that provides for controlling equipment leaks by implementing leak detection and control measures specified in section 63.691. w. Provide documents that demonstrate compliance for SNL with 40 CFR 63.684 that provides standards for off-site material treatment to remove or destroy HAP at specified performance levels for different types of treatment processes. x. Provide documents that identify the use of any incineration or thermal destruction devices at SNL. y. Provide documents that demonstrate compliance for SNL with 40 CFR 63.685 that provides standards for control of air emissions from tanks.		

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					z. Provide documents that demonstrate compliance for SNL with 40 CFR 63.689 that provides standards for transfer systems. aa. Provide documents that demonstrate compliance for SNL with 40 CFR 63.690 that provides standards for process vents. bb. Provide documents that demonstrate compliance for SNL with 40 CFR 63.691 that provides standards for equipment leaks. cc. Provide documents that demonstrate compliance for SNL with 40 CFR 63.694 that covers testing methods and procedures for measurement of VOHAP concentration at point of delivery and point-of-treatment.		
773.	CNM 092		General	Citizen Action	Citizen Action supports inclusion in the Sandia permit of a Public E-Mail Notification List, as has been included in the WIPP Permit, Module I.H. That provision was agreed to by DOE, numerous organizations, and NMED, and should be included in the Sandia permit. Sandia should provide a link on its Home Page whereby members of the public may review the actions requiring e-mail notification. Specific provisions of the Sandia permit should include the notice requirement to inform those on the e-mail notification list.		
774.	CNM 093		General	Citizen Action	The issues listed above are not exhaustive of Citizen Action's concerns, and we are aware that several other organizations, may submit comments that identify numerous other issues which we also believe should be fully addressed in the permit.		
775.	CNM 094		General	Citizen Action	Citizen Action requests a public hearing on the draft permit. Further, and prior to any notice of public hearing, pursuant to 20.4.1.901. A.4 NMAC, Citizen Action requests that NMED, the Permittees, and other parties conduct negotiations to attempt to resolve issues related to the draft permit. Citizen Action believes that other parties and NMED would agree with some of the concerns and objections raised in our comments and that a revised draft permit could be developed prior to the public hearing, so that continuing and additional public comment is taken throughout the permitting process.		
776.	GEA 001		General	G. Amato	I object to this permit.		
777.	GEA 003		General	G. Amato	A public hearing would openly declare the pertinent issues.		