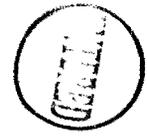


SNL 07



National Nuclear Security Administration  
Sandia Site Office  
P.O. Box 5400  
Albuquerque, New Mexico 87185-5400



MAR 22 2007

Mr. John E. Kieling  
Manager  
Permits Management Program  
New Mexico Environment Department  
Hazardous Waste Bureau  
2905 Rodeo Park Dr. East, Bldg 1  
Santa Fe, New Mexico 87505



Subject: Technical and Administrative Updates to Permit Request for RCRA-Regulated Waste Management at Sandia National Laboratories/New Mexico, EPA ID NM5890110518

Dear Mr. Kieling:

On behalf of the Department of Energy (DOE) and Sandia Corporation (Sandia), DOE is submitting the enclosed information to the New Mexico Environment Department (NMED). The enclosures consist of updates to the General Part A Permit Request and the Comprehensive Part B Permit Request for RCRA-regulated waste storage and treatment operations at Sandia National Laboratories/New Mexico (SNL/NM) and Certification Statement.

The Part A Permit Request has been updated to incorporate several changes in DOE/Sandia waste management operations at SNL/NM. The changes are summarized below.

- Closure of the High Bay Waste Storage Facility (HBWSF). NMED approved closure in a letter dated July 12, 2006. Information about the HBWSF has been deleted.
- Closure of Manzano Storage Bunkers (MSB) 37063 and 37078. NMED approved closure in a letter dated October 4, 2006. Information about these two bunkers has been deleted.
- Inclusion of the Corrective Action Management Unit (CAMU) containment cell in the Part A Permit Request. DOE and Sandia are performing post-closure care for the containment cell in accordance with the post-closure care plan in the "Class III Permit Modification Request for the Management of Hazardous Remediation Waste in the Corrective Action Management Unit, Technical Area III." The Class III modification was approved by the U.S. Environmental Protection Agency (EPA) on September 25, 1997. NMED approved closure of the CAMU in a letter dated May 10, 2004. Information about the CAMU containment cell is included for completeness, in response to a request from Mr. Cornelius Amindyas of the NMED.



The revised Permit Request incorporates the most current application forms available from the EPA. During preparation of the revisions, DOE and Sandia noted several typographic errors; these errors have been corrected in the revised Permit Request.

One of the typographic errors is the reported capacity of MSB 37118; it was incorrectly reported as 25,080 gallons. The correct capacity is 35,200 gallons. The incorrect capacity is also reported in three places in Part 2 of the Comprehensive Part B Permit Request. DOE and Sandia have revised the affected pages to correct the errors.

This enclosure includes four attachments. Each is discussed below:

Attachment A: Redline/Strikeout Copies of Revised Pages in the General Part A Permit Request. The revised pages are included in redline/strikeout format.

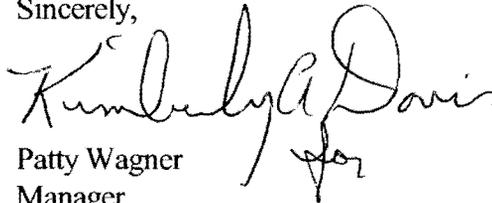
Attachment B: General Part A Permit Request. The entire General Part A Permit Request is included.

Attachment C: Redline/Strikeout Copies of Revised Pages in the Comprehensive Part B Permit Request. The revised pages are included in redline/strikeout format.

Attachment D: Clean Copy of Revised Pages. Please insert these revised pages into your copies of Comprehensive Part B Permit Request (instructions are included on the cover of Attachment D).

DOE and Sandia are available to provide additional information as needed. If you have any questions regarding this submittal, please contact David Rast, of my staff, at (505) 845-5349.

Sincerely,

  
Patty Wagner  
Manager

Enclosures (2)

cc w/enclosures:

J. Bearzi, NMED HWB

W. Moats, NMED HWB

C. Amindyas, NMED HWB

L. King, EPA, Region 6

T. Skibitski, NMED-OB-DOE

A. Blumberg, SNL/NM, Org. 11100, MS-0141

SNL ES&H and Security Record Center, SNL/NM, Org. 9612, MS-0651

SSO Legal File

MAR 28 2007

John E. Kieling

- 3 -

cc w/o enclosures:

F. Figueroa, SNL/NM, Org. 10000, MS-0112

P. Newman, SNL/NM, Org. 10300, MS-0342

R. Brandhuber, SNL/NM, Org. 10330, MS-1037

T. Cooper, SNL/NM, Org. 10333, MS-1042

F. Lauffer, SNL/NM, Org. 10333, MS-1042

A. Reiser, SNL/NM, Org. 10333, MS-1042

M. Davis, SNL/NM, Org. 6765, MS-1089

P. Freshour, SNL/NM, Org. 6765, MS-1089

J. Thompson, SNL/NM, Org. 10339, MS-1151

M. Reynolds, SSO

D. Rast, SSO

**Revision of Comprehensive Part B Permit Request  
EPA ID No. NM5890110518  
Technical and Administrative Updates**

**CERTIFICATION STATEMENT**

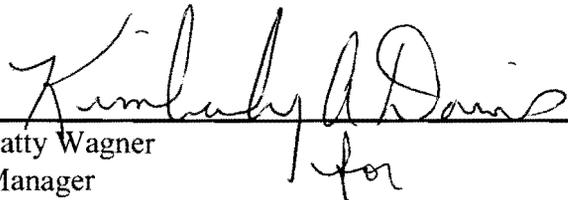
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system,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

  
\_\_\_\_\_

Francisco A. Figueroa  
Vice President, Infrastructure Operations and Business Management  
Chief Financial Officer  
Sandia Corporation  
Albuquerque, New Mexico  
Co-Operator

3/12/07  
\_\_\_\_\_

Date signed

  
\_\_\_\_\_

Patty Wagner  
Manager  
U.S. Department of Energy  
National Nuclear Security Administration  
Sandia Site Office  
Owner and Co-Operator

3/22/07  
\_\_\_\_\_

Date signed

**Attachment A**

**Sandia National Laboratories  
General Part A Permit Request  
NM5890110518**

**Technical and Administrative Updates**

**Revised Pages  
Redline / Strikeout Format**



# Sandia National Laboratories/New Mexico General Part A Permit Renewal Request/Application

| Revision 109.0

| ~~October~~February 20057

Prepared by  
Sandia National Laboratories/New Mexico  
Albuquerque, New Mexico 87185

Prepared for  
The U.S. Department of Energy

**This page left intentionally blank.**

## LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>
B-1	Topographic Map
B-2	Sandia National Laboratories/New Mexico, Technical Areas (TAs) and Resource Conservation and Recovery Act-Regulated Waste Management Units
B-3	Hazardous Waste Management Facility, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-4	Hazardous Waste Storage Building (Building 958), Floor Plan
B-5	Hazardous Waste Packaging Building (Building 959), Floor Plan
B-6	Thermal Treatment Facility, Resource Conservation and Recovery Act-Regulated Waste Management Area
B-7	Thermal Treatment Facility (TTF)-Plan View
B-8	Location of the Radioactive and Mixed Waste Management Facility in Technical Area III
B-9	Radioactive and Mixed Waste Management Facility, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-10	Radioactive and Mixed Waste Management Facility, Building 6920, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-11	Radioactive and Mixed Waste Management Facility, Building 6921, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-12	Radioactive and Mixed Waste Management Facility, Buildings 6925 and 6926, Resource Conservation and Recovery Act-Regulated Waste Management Areas
<del>B-13</del>	<del>Location of the High Bay Waste Storage Facility (HBWSF) in Technical Area (TA) V</del>
<del>B-14</del>	<del>High Bay Waste Storage Facility, Resource Conservation and Recovery Act-Regulated Waste Management Area</del>
B-1 <del>53</del>	Location of the Auxiliary Hot Cell Facility (AHCF) in Technical Area (TA) V
B-1 <del>64</del>	Auxiliary Hot Cell Facility, Resource Conservation and Recovery Act-Regulated Waste Management Areas

## LIST OF FIGURES (Concluded)

<u>Figure No.</u>	<u>Title</u>
B-1 <del>57</del>	Location of the Manzano Storage Bunkers at Manzano Base
B-1 <del>68</del>	Manzano Storage Bunkers, Type B, Bunkers <del>37034 and 37063</del>
B-1 <del>79</del>	Manzano Storage Bunkers, Type C, Bunkers <del>37078 and 37118</del>
B- <del>1820</del>	Manzano Storage Bunkers, Type D, Bunkers 37045, 37055, and 37057
<u>B-19</u>	<u>Location of the Corrective Action Management Unit Containment Cell in Technical Area III</u>
<u>B-20</u>	<u>Corrective Action Management Unit Resource Conservation and Recovery Act-Regulated Waste Management Area</u>
<u>B-21</u>	<u>Corrective Action Management Unit Containment Cell Schematic Cross-Section of Final Cover System</u>
<u>B-22</u>	<u>Block Diagram of Corrective Action Management Unit Containment Cell and Vadose Zone Monitoring System</u>

## LIST OF PHOTOGRAPHS

### Photograph Title

Hazardous Waste Management Facility, Buildings 958 and 959  
Hazardous Waste Management Facility, Flammable Waste Storage Bay in Building 958  
Hazardous Waste Management Facility, Waste Storage Bays in Building 959  
Hazardous Waste Management Facility, Modular Storage Buildings (958B and 958C) for Reactive and Ignitable Wastes  
Thermal Treatment Facility, Viewed from Roof of Building 6715  
Thermal Treatment Facility, Rear View of Burn Cage from Top of Earthen Berm  
Thermal Treatment Facility, Front View of Burn Pan (with Lid Down) Inside Burn Cage  
Radioactive and Mixed Waste Management Facility, East Side of Building 6920  
Radioactive and Mixed Waste Management Facility, West Side of Building 6920  
Radioactive and Mixed Waste Management Facility, Building 6920, South Bay  
Radioactive and Mixed Waste Management Facility, Building 6921  
Radioactive and Mixed Waste Management Facility, Building 6925  
Radioactive and Mixed Waste Management Facility, Building 6925, Interior  
Radioactive and Mixed Waste Management Facility, Building 6926  
Radioactive and Mixed Waste Management Facility, Modular Storage Buildings  
~~High Bay Waste Storage Facility, South Side of Building 6596~~  
~~High Bay Waste Storage Facility, West Side of Building 6596~~  
Auxiliary Hot Cell Facility, North Side of Building 6597  
Auxiliary Hot Cell Facility, Work Area North of Auxiliary Hot Cell  
Auxiliary Hot Cell Facility, Fume Hood and Work Area North of Auxiliary Hot Cell  
Auxiliary Hot Cell Facility, Operator Controls for Work Area and Hot Cell  
Manzano Storage Bunkers, Type B, Front View of Bunker 37034  
~~Manzano Storage Bunkers, Type B, Front View of Bunker 37063~~  
~~Manzano Storage Bunkers, Type C, Front View of Bunker 37078~~  
Manzano Storage Bunkers, Type C, Front View of Bunker 37118  
Manzano Storage Bunkers, Type D, Front View of Bunker 37045  
Manzano Storage Bunkers, Type D, Front View of Bunker 37055  
Manzano Storage Bunkers, Type D, Front View of Bunker 37057  
Corrective Action Management Unit, South End and Southeast Corner of Containment Cell  
Corrective Action Management Unit, East Side of Containment Cell  
Corrective Action Management Unit, North End and Northeast Corner of Containment Cell  
Corrective Action Management Unit, Containment Cell and Leachate Management

United States Environmental Protection Agency  
**HAZARDOUS WASTE PERMIT INFORMATION FORM**

1. Facility Permit Contact (See instructions on page 35)	First Name: <i>David</i>	MI:	Last Name: <i>Rast</i>
	Phone Number: <i>505-845-5349</i>		Phone Number Extension:
2. Facility Permit Contact Mailing Address (See instructions on page 35)	Street Address: <i>P.O. Box 5400, US Department of Energy, Sandia Site Office</i>		
	City, Town, or Village: <i>Albuquerque</i>		State: <i>NM</i>
	County Name: <i>USA</i>		Zip Code: <i>87185-5400</i>
3. Legal Owner Mailing Address and Telephone Number (See instructions on page 36)	Street or P.O. Box: <i>P.O. Box 5400</i>		
	City, Town, or Village: <i>Albuquerque</i>		
	State: <i>NM</i>		
	Country: <i>USA</i>	Zip Code: <i>87185-5400</i>	Phone Number: <i>505-845-40946036</i>
4. Operator Mailing Address and Telephone Number (See instructions on page 36)	Street or P.O. Box: <i>P.O. Box 5800, <del>Department 6300</del>Waste Management</i>		
	City, Town, or Village: <i>Albuquerque</i>		
	State: <i>NM</i>		
	Country: <i>USA</i>	Zip Code: <i>87185-5400</i>	Phone Number: <i>505-844-8516</i> <i>845-0011</i>
5. Facility Existence Date (See instructions on page 36)	Facility Existence Date (mm/dd/yyyy): <i>11/19/1980</i>		
6. Other Environmental Permits (See instructions on page 36) <i>See Appendix A</i>			
A. Permit Type	B. Permit Number		C. Description
7. Nature of Business (Provide a brief description; see instructions on page 37)			
<i>Sandia National Laboratories/New Mexico is a multi-program research and Development (R&amp;D) laboratory of the U.S. Department of Energy. Missions include R&amp;D related to nuclear weapons, energy, and other programs of national interest.</i>			

**8. Process Codes and Design Capacities (Continued) See Appendix B**

EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons

Line Number	A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	For Official Use Only			
				(1) Amount (Specify)	(2) Unit of Measure (Enter code)					
1	S	0	1	570,386.0409,786.0	G	012008				
2	T	0	4	945.0	U	006				
3	T	0	4	52.0	J	004				
4										
5	X	0	1	20.8	G	001				
	S	9	9	31,800.0	Y	001				

NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9.

**9. Other Processes (See instructions on page 37 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes)**

Line Number	A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	D. Description of Process
				(1) Amount (Specify)	(2) Unit of Measure (Enter code)		
2	T	0	4	120.0	U	002	Chemical Deactivation, gallons per day
2	T	0	4	895.0	U	002	Macroencapsulation, gallons per day (volume equivalent)
2	T	0	4	605.0	U	002	Stabilization, gallons per day
3	T	0	4	10.0	J	001	Thermal Deactivation, pounds per hour
3	T	0	4	40.0	J	002	Physical Treatment, pounds per hour
3	T	0	4	2.0	J	001	Amalgamation, pounds per hour
	S	9	9	31,800.0	Y	001	Closed Containment Cell, Corrective Action Management Unit, cubic yards

10. Description of Hazardous Wastes							
Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity Of Waste	C. Unit of Measure (Enter Code)	D. PROCESSES			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
403	D004	39,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
404	D005	48,000	K	S01	T04		thermal deactivation, chemical deactivation, stabilization, macroencapsulation, physical treatment
405	D006	105,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
406	D007	66,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
407	D008	125,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
408	D009	40,000	K	S01	T04		stabilization, macroencapsulation, amalgamation, physical treatment
409	D010	10,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
410	D011	45,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
411	D012	<del>25,050</del> 150	K	S01			
412	D013	150	K	S01			
413	D014	150	K	S01			
414	D015	150	K	S01			
415	D016	150	K	S01			
416	D017	150	K	S01			
417	D018	32,000	K	S01	T04		physical treatment
418	D019	25,200	K	S01	T04		physical treatment
419	D020	25,050	K	S01	T04		physical treatment
420	D021	25,100	K	S01	T04		physical treatment
421	D022	26,000	K	S01	T04		physical treatment
422	D023	25,050	K	S01	T04		physical treatment
423	D024	25,050	K	S01	T04		physical treatment
424	D025	25,050	K	S01	T04		physical treatment
425	D026	25,100	K	S01	T04		physical treatment
426	D027	25,100	K	S01	T04		physical treatment
427	D028	26,000	K	S01	T04		physical treatment
428	D029	25,100	K	S01	T04		physical treatment
429	D030	25,500	K	S01	T04		physical treatment
430	D031	25,050	K	S01	T04		physical treatment
431	D032	25,100	K	S01	T04		physical treatment
432	D033	25,100	K	S01	T04		physical treatment
433	D034	25,500	K	S01	T04		physical treatment
434	D035	40,000	K	S01	T04		physical treatment
435	D036	25,100	K	S01	T04		physical treatment
436	D037	25,100	K	S01	T04		physical treatment

10. Description of Hazardous Wastes							
Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity Of Waste	C. Unit of Measure (Enter Code)	D. PROCESSES			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
437	D038	25,100	K	S01	T04		physical treatment
438	D039	27,000	K	S01	T04		physical treatment
439	D040	30,000	K	S01	T04		physical treatment
440	D041	25,050	K	S01	T04		physical treatment
441	D042	25,050	K	S01	T04		physical treatment
<del>442</del>	<del>D038</del>	<del>25,100</del>	<del>K</del>	<del>S01</del>	<del>T04</del>		<del>physical treatment</del>
<del>443</del>	<del>D039</del>	<del>27,000</del>	<del>K</del>	<del>S01</del>	<del>T04</del>		<del>physical treatment</del>
<del>444</del>	<del>D040</del>	<del>30,000</del>	<del>K</del>	<del>S01</del>	<del>T04</del>		<del>physical treatment</del>
<del>445</del>	<del>D041</del>	<del>25,050</del>	<del>K</del>	<del>S01</del>	<del>T04</del>		<del>physical treatment</del>
<del>446</del>	<del>D042</del>	<del>25,050</del>	<del>K</del>	<del>S01</del>	<del>T04</del>		<del>physical treatment</del>
442	D043	25,050	K	S01	T04		physical treatment
<del>443</del>	<del>D004</del>	<del>31,080</del>	<del>Y</del>	<del>S99</del>			<del>corrective action containment cell</del>
	<del>D005</del>						<del>included with above</del>
	<del>D006</del>						<del>included with above</del>
	<del>D007</del>						<del>included with above</del>
	<del>D008</del>						<del>included with above</del>
	<del>D009</del>						<del>included with above</del>
	<del>D010</del>						<del>included with above</del>
	<del>D011</del>						<del>included with above</del>
	<del>D021</del>						<del>included with above</del>
	<del>D023</del>						<del>included with above</del>
	<del>D027</del>						<del>included with above</del>
	<del>D028</del>						<del>included with above</del>
	<del>D032</del>						<del>included with above</del>
	<del>D033</del>						<del>included with above</del>
	<del>D034</del>						<del>included with above</del>
	<del>D035</del>						<del>included with above</del>
	<del>D036</del>						<del>included with above</del>
	<del>D037</del>						<del>included with above</del>
	<del>D039</del>						<del>included with above</del>
	<del>D040</del>						<del>included with above</del>
	<del>D041</del>						<del>included with above</del>
	<del>D042</del>						<del>included with above</del>
	<del>F001</del>						<del>included with above</del>
	<del>F002</del>						<del>included with above</del>
	<del>F003</del>						<del>included with above</del>
	<del>F004</del>						<del>included with above</del>



**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 12/31/04<sup>7</sup>**

Permit Type and/or Facility Name	Permit Number	Issue Date	Expiration Date	Regulatory Agency
<b>SEWER WASTEWATER</b>				
General	2069 A-6	07/01/03	12/31/07	COA
General	2069 F-6	08/01/03	01/31/08	COA
Microelectronics Development Laboratory	2069 G-56 Renewal Submitted	06/01/02 10/12/05	05/31/05 8/31/09	COA
General	2069 I-5	02/01/04	07/31/08	COA
General	2069 K-5	11/17/04	12/31/08	COA
<u>Center for Integrated Nanotechnology</u>	<u>2238A</u>	<u>01/05/07</u>	<u>04/30/11</u>	<u>COA</u>
<b>SURFACE DISCHARGE</b>				
Pulsed Power Development Facilities (Discharge Plan)	DP-530	09/21/01	09/21/06 <sup>a</sup>	NMED
<b>STORM WATER</b>				
National Pollution Discharge Elimination System "Multi-Sector General" Permit	NMR05A961	02/01	109/30/05 <sup>a</sup>	EPA
<b>NPDES CONSTRUCTION PERMITS</b>				
<u>CINT CORE Facility Construction Project</u>	<u>NMR15DC23</u>	<u>10/21/03</u>	<u>06/30/06</u>	<u>EPA</u>
<u>Microsystems and Engineering Sciences Applications Facility</u>	<u>NM0002376</u>	<u>01/28/02</u>	<u>07/31/09</u>	<u>EPA</u>
<u>ECIM Exterior Communication Infrastructure Modernization Project 20<sup>th</sup> Street Stockpile Area</u>	<u>NMR15DC79</u> <u>15E764</u>	<u>03/01/04</u> <u>04/29/05</u>	<u>06/30/06</u> <u>03/30/07</u>	<u>EPA</u>
<u>Aerial Cable Facilities Renovations TA-1 Waterline Replacement Phase III</u>	<u>NMR15DD44</u> <u>15EQ38</u>	<u>03/12/04</u> <u>12/16/05</u>	<u>06/30/06</u> <u>03/28/07</u>	<u>EPA</u>
<u>Building 755 46kV Feeder #1 Replacement and Switching Station</u>	<u>NMR15DK40</u> <u>15EQ48</u>	<u>08/09/04</u> <u>12/21/05</u>	<u>04/15/06</u> <u>10/30/07</u>	<u>EPA</u>
<u>TA-I Waterline Rehabilitation Project New Master Substation Utility Sub 42</u>	<u>NMR15DR15</u> <u>15EQ73</u>	<u>09/09/04</u> <u>12/23/05</u>	<u>10/30/06</u> <u>05/30/07</u>	<u>EPA</u>
<u>Photovoltaics Parking Lot Infrastructure Upgrades TA-II</u>	<u>NMR15DV49</u> <u>15EW77</u>	<u>11/05/04</u> <u>04/11/06</u>	<u>06/30/06</u> <u>10/30/06<sup>b</sup></u>	<u>EPA</u>
<u>Building 956 - Lot A Water Line Rehabilitation - WSR Phase II</u>	<u>NMR15DW01</u> <u>15EY34</u>	<u>11/12/04</u> <u>05/04/06</u>	<u>06/30/06</u> <u>05/30/07</u>	<u>EPA</u>
<u>TA-II &amp; TA-IV Improvements Mixed Waste Landfill Cover</u>	<u>NMR15EZ15</u>	<u>12/08/04</u> <u>05/18/06</u>	<u>06/30/06</u> <u>06/19/07</u>	<u>EPA</u>
<u>Building 806 Demolition</u>	<u>NMR15EW63</u>	<u>04/10/06</u>	<u>10/30/06<sup>b</sup></u>	<u>EPA</u>
<u>TA-III Concrete Recycle/Borrow</u>	<u>NMR15F015</u>	<u>05/31/06</u>	<u>07/01/08</u>	<u>EPA</u>
<u>16" Chilled Water Line Installation</u>	<u>NMR15F083</u>	<u>06/11/06</u>	<u>12/30/06<sup>b</sup></u>	<u>EPA</u>
<u>TA-1 Limited Area Fence Expansion</u>	<u>NMR15F452</u>	<u>07/31/06</u>	<u>12/15/06<sup>b</sup></u>	<u>EPA</u>
<u>Hardin &amp; 20<sup>th</sup> Intersection</u>	<u>NMR15F829</u>	<u>09/27/06</u>	<u>03/30/07</u>	<u>EPA</u>
<b>NPDES CONSTRUCTION PERMIT WAIVERS</b>				
<u>Building 702 Construction Building 800 Parking Lot Renovation</u>	<u>NMLEW108</u> <u>0454</u>	<u>11/07/04</u> <u>11/15/06</u>	<u>06/15/05</u> <u>07/30/07</u>	<u>EPA</u>
<u>Building 758 Construction</u>	<u>NA</u>	<u>12/21/04</u>	<u>07/08/05</u>	<u>EPA</u>
<u>Building 1090 (pending) Eubank Gate Modifications</u>	<u>NMR15E170</u> <u>NMLEW0457</u>	<u>02/15/04</u> <u>01/16/06</u>	<u>09/30/06</u> <u>07/01/07</u>	<u>EPA</u>

**NOTE:**

<sup>a</sup> Applied for permit or permit renewal, not yet received. Existing permit continues.

<sup>b</sup> Existing permit remains active number not issued yet.

COA \_\_\_\_\_ = City of Albuquerque

NMED \_\_\_\_\_ = New Mexico Environment Department

EPA \_\_\_\_\_ = U.S. Environmental Protection Agency

UST Bur. \_\_\_\_\_ = Underground Storage Tank Bureau, NMED

**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 12/31/07 (Continued)**

Permit Type and/or Facility Name	Permit Number	Issue Date	Expiration Date	Regulatory Agency
<b>ECOLOGICAL</b>				
New Mexico Department of Game and Fish, for Scientific/Educational Purposes, Authorization for Taking of Protected Wildlife	<del>2934</del>	04/04/02 Pending <sup>a</sup>	12/31/04 <del>7</del>	New Mexico Department of Game and Fish
Fish and Wildlife Special Purpose Salvage Permit (for migratory birds)	<del>MB040780-0</del>	06/30/01 Pending <sup>a</sup>	12/31/04 <del>7</del>	U.S. Fish and Wildlife Service
<del>Fish and Wildlife Service Special Purpose Relocate Permit</del>	<del>MB090256-0</del>	<del>06/25/04</del>	<del>12/31/04</del>	<del>U.S. Fish and Wildlife Service</del>
<b>UNDERGROUND STORAGE TANKS</b>				
20,000 gal oil storage tank	<del>13681485</del>	08/23/04 07/01/06	06/30/05 <del>07</del>	NMED
20,000 gal oil storage tank	<del>13691486</del>	08/23/04 07/01/06	06/30/05 <del>07</del>	NMED
<b>ABOVEGROUND STORAGE TANKS</b>				
<del>50,000 gal storage tank</del>	<del>1370</del>	08/23/04	06/23/05	NMED
<del>50,000 gal storage tank</del>	<del>1370</del>	08/23/04	06/23/05	NMED
10,000 gal storage tank	<del>13701487</del>	08/23/04 07/01/06	06/30/05 <del>07</del>	NMED
10,000 gal storage tank	<del>13701487</del>	08/23/04 07/01/06	06/30/05 <del>07</del>	NMED
10,000 gal storage tank	<del>13701487</del>	08/23/04 07/01/06	06/30/05 <del>07</del>	NMED
1,500 gal storage tank	<del>13701487</del>	08/23/04 07/01/06	06/30/05 <del>07</del>	NMED
2,000 gal storage tank	<del>13701487</del>	08/23/04 07/01/06	06/30/05 <del>07</del>	NMED
<del>5,000 gal storage tank</del>	<del>1487</del>	07/01/06	06/30/07	NMED
<del>25,000</del> 5,500 gal storage tank	<del>13701487</del>	08/23/04 07/01/06	06/30/05 <del>07</del>	NMED

**NOTE:**

<sup>a</sup> Applied for permit or permit renewal; not yet received. Existing permit continues.

<sup>b</sup> Permit number not issued yet.

NMED = New Mexico Environment Department

**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 12/31/07<sup>a</sup> (Continued)**

Permit Type and/or Facility Name	Permit Number	Issue Date	Expiration Date	Regulatory Agency
<b>RCRA</b>				
RCRA Part B Operating Permit for the Hazardous Waste Management Facility Module I - General Permit Conditions Module II - General Facility Conditions Module III - Containers	NM5890110518-1	08/06/92	08/06/02 <sup>c</sup>	NMED
RCRA Part B Operating Permit Module IV - Hazardous and Solid Waste Amendments Portion for Solid Waste Management Units	NM5890110518-1	08/26/93	09/20/02 <sup>c</sup>	EPANMED
RCRA Part B Operating Permit for the Thermal Treatment Facility Module I - General Permit Conditions Module II - General Facility Conditions Module III - Containers	NM5890110518-2	12/04/94	12/04/04 <sup>c</sup>	NMED
General Part A Permit Request Storage and/or treatment of the hazardous component of mixed waste at ten waste management Units.	NM5890110518	First submitted 8/90 Rev. 9-5, <u>1004/25+6/053</u>	Pending Review (No expiration date)	NMED
Class III Permit Modification for the Management of Hazardous Remediation Waste in the Corrective Action Management Unit (CAMU), Technical Area III	NM5890110518	09/25/97	09/20/02 <sup>c</sup> <u>4/19/04</u> <u>07/03/03<sup>d</sup></u>	NMED
Comprehensive Part B Permit Request Storage and/or treatment of RCRA-regulated waste at nine waste management Units.	NM5890110518	02/06/02 <sup>c</sup>	<u>Pending Review (No expiration date)</u>	NMED
<u>Post-Closure Care Plan and Application for Part B Permit Chemical Waste Landfill, Technical Area III</u>	<u>NM5890110518</u>	<u>09/05</u>	<u>Pending Review (No expiration date)</u>	<u>NMED</u>
<b>TSCA</b>				
Risk-Based Approval Request under 40 CFR 761.61(c); Risk-Based Method for Management of PCB Materials; Chemical Waste Landfill and CAMU		06/26/02	No expiration date <sup>d</sup>	EPA

**NOTE:**

- <sup>a</sup> Applied for permit or permit renewal; not yet received. Existing permit continues.
  - <sup>c</sup> Submitted application for renewal on 02/06/2002, undergoing NMED review. Application has been revised in response to NMED comments.
  - <sup>d</sup> CAMU permit modification request for post-closure care report submitted on 07/03/03 in 4/19/04, undergoing NMEDagency review.
- EPA = U.S. Environmental Protection Agency  
NMED = New Mexico Environment Department  
RCRA = Resource Conservation and Recovery Act  
TSCA = Toxic Substances Control Act

**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 12/31/074 (Concludedtinued)**

Permit Type and/or Facility Name	Permit Number	Issue Date	Expiration Date	Regulatory Agency
<b>AIR (Open Burn Permits)</b>				
<del>Lurance Burn Site</del> gloo Building (9830)	<del>04-00407-0007</del>	01/015/047	12/31/047	COA
<del>9920 and Sled Track</del>	<del>04-002</del>	<del>01/05/04</del>	<del>12/31/04</del>	<del>COA</del>
Thermal Treatment Facility ( <u>copy of permit must be submitted to NMED within 30 days of receipt</u> )	<del>04-00307-0001</del>	01/015/074	12/31/047	COA
<del>Explosive testing (above ground)</del>	<del>04-004</del>	<del>01/05/04</del>	<del>12/31/04</del>	<del>COA</del>
<del>Explosive testing (D test)Applications</del>	<del>04-00806-0080</del>	01/4501/047	12/31/047	COA
Burn Site (Large Pool Fire Tests)	<del>04-00907-0003</del>	01/0145/047	12/31/047	COA
Burn Site/Sled Track ( <u>Wood Crib Fire Tests</u> )	<del>04-01007-0012</del>	01/4501/047	12/31/047	COA
<del>Fire Extinguisher (Fire Training)Propellant Applications</del>	<del>04-01206-0081</del>	061/01/047	12/31/047	COA
<del>Explosive Testing (9940)</del>	<del>04-02407-0010</del>	016/021/047	12/31/047	COA
<del>5000 foot Track BunkerThermite Applications</del>	<del>04-03406-0082</del>	081/17/047	12/31/047	COA
<del>Water Impact FacilityPanel Box Tests</del>	<del>04-03306-0084</del>	091/031/047	12/31/047	COA
<del>Burn SiteExplosives Testing (Thunder Range)</del>	<del>04-037<sup>2</sup></del>	<del>09/28/04</del> Pending	<del>12/31/04</del> Pending	COA
<b>AIR (Permits &amp; Registrations)</b>				
<del>Hammermill</del> Document Disintegrator Facility	144-M1	089/28/8506	Biennial update	COA
Fire Laboratory used for the Authentication of Modeling and Experiments	196	05/19/88	Registration <sup>†</sup>	COA
Neutron Generator Facility	374- M1	07/17/98	Biennial update	COA
<del>Neutron Generator Recertification</del>	<del>396</del>	<del>05/07/96</del>	<del>Biennial update</del>	<del>COA</del>
Standby diesel generators (four)	402	05/07/96	Biennial update	COA
Radioactive & Mixed Waste Management Facility	415- M1	05/10/97	Biennial update	COA
<del>Isotope Production</del> Explosive Component Facility	<del>428547</del>	<del>075/0821/967</del>	Biennial update	COA
Title V Operating PermitAir Quality Emission Sources	515 (pending)	Submitted <sup>a</sup> 03/4/96 Pending <sup>a</sup>	Pending (5-yr renewal)	COA
<del>Classified Waste Landfill</del> Thermal Test Complex	<del>5601712</del>	<del>1204/4709/0604</del>	Biennial update	COA
<del>Classified Waste Landfill</del> Center for Integrated Nanotechnology	NESHAP1725	10/0611/0604	Approval <sup>††</sup> Biennial update	EPACOA
<del>Advanced Manufacturing Processes Laboratory</del> Microsystems and Engineering Sciences Applications	1820	049/236/0706	Biennial update	COA
<del>Portable Burn Pools</del> Weapons Integration Facility	<del>6471828</del>	<del>059/0628/0706</del>	Biennial update	COA
<del>Chemical Waste Landfill (CWL) Excavation</del> Heating System Modernization	<del>5401830</del>	<del>5/40/99</del> Pending <sup>a</sup>	Registration <sup>†</sup> Biennial update	COA
<del>High Energy Radiation Megavolt Electron Source-III</del>	NESHAP	6/29/88	Approval <sup>††</sup>	EPA
Advanced Manufacturing Prototype Facility	1406	11/06/00	Registration <sup>†</sup>	COA
Microelectronics Development Laboratory	1678-M1	12/2314/024	Biennial update	COA
Emergency Generator	924	05/05/98	Biennial update	COA

**Sandia National Laboratories/New Mexico**  
**Active Environmental Permits as of 1/31/07 (Continued)**

<u>Permit Type and/or Facility Name</u>	<u>Permit Number</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Regulatory Agency</u>
Processing and Environmental Technology Laboratory	925-M1	03/05/01	Biennial update	COA
Processing and Environmental Technology Laboratory	936	05/05/04	Registration †	COA
Steam Plant	1705	11/10/04	Biennial update	COA
<u>Advanced Materials Laboratory Hazardous Air Pollutant (HAP)</u>	<u>b</u>	<u>Pending<sup>a</sup></u>	<u>Registration †</u>	<u>COA</u>
<u>Building 869 HAP</u>	<u>b</u>	<u>Pending<sup>a</sup></u>	<u>Registration †</u>	<u>COA</u>
<u>Sled Track HAP</u>	<u>b</u>	<u>Pending<sup>a</sup></u>	<u>Registration †</u>	<u>COA</u>
<u>Building 9940 HAP</u>	<u>b</u>	<u>Pending<sup>a</sup></u>	<u>Registration †</u>	<u>COA</u>
<u>Microsystems and Engineering Sciences Applications HAP</u>	<u>b</u>	<u>Pending<sup>a</sup></u>	<u>Registration †</u>	<u>COA</u>
<u>Advanced Manufacturing Processes Laboratory HAP</u>	<u>b</u>	<u>Pending<sup>a</sup></u>	<u>Registration †</u>	<u>COA</u>
<u>Miscellaneous HAP</u>	<u>b</u>	<u>Pending<sup>a</sup></u>	<u>Registration †</u>	<u>COA</u>
<u>Building 895 HAP</u>	<u>b</u>	<u>Pending<sup>a</sup></u>	<u>Registration †</u>	<u>COA</u>
<u>Sitewide Generator</u>	<u>b</u>	<u>Pending<sup>a</sup></u>	<u>Registration †</u>	<u>COA</u>

## NOTE:

<sup>a</sup> Applied for permit or permit renewal; not yet received. Existing permit continues.

<sup>b</sup> Permit number not issued yet.

<sup>c</sup> COA issues open burn permits annually. Sandia/DOE applied for this permit for calendar year 2004.

† Registration = Certificate, no permit required.

†† Approval = EPA does not issue a permit. COA = City of Albuquerque

EPA = U.S. Environmental Protection Agency

**Sandia National Laboratories/New Mexico**  
**Active Environmental Permits as of 1/31/07 (Concluded)**

<u>Permit Type and/or Facility Name</u>	<u>Permit Number</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Regulatory Agency</u>
<b><u>FUGITIVE DUST CONTROL AND DEMOLITION</u></b>				
<u>Borrow Site Cell No. 1</u>	<u>10-348-2925</u>	<u>08/18/04</u>	<u>08/18/09</u>	<u>COA</u>
<u>Moving Vehicle Test</u>	<u>10-348-3305</u>	<u>10/17/05</u>	<u>10/17/10</u>	<u>COA</u>
<u>Building 806 Demolition</u>	<u>10-210-3442</u>	<u>04/07/06</u>	<u>04/07/07</u>	<u>COA</u>
<u>Mixed Waste Landfill Cover</u>	<u>10-411-3440</u>	<u>04/05/06</u>	<u>04/05/07</u>	<u>COA</u>
<u>46 KV Feeder</u>	<u>10-555-3450</u>	<u>04/20/06</u>	<u>04/20/07</u>	<u>COA</u>
<u>20<sup>th</sup> Street Extension</u>	<u>10-10-3537</u>	<u>08/02/06</u>	<u>08/02/07</u>	<u>COA</u>
<u>16-inch Chilled Water</u>	<u>10-10-3538</u>	<u>08/02/06</u>	<u>08/02/07</u>	<u>COA</u>
<u>Waterline Replacement</u>	<u>10-149-3610</u>	<u>11/01/06</u>	<u>11/01/07</u>	<u>COA</u>
<u>Building 770</u>	<u>10-344-3390</u>	<u>02/02/06</u>	<u>03/15/07</u>	<u>COA</u>
<u>Building 9990 Comm. System</u>	<u>10-430-3426</u>	<u>03/23/06</u>	<u>03/23/07</u>	<u>COA</u>
<u>Building 880</u>	<u>10-564-3477</u>	<u>05/25/06</u>	<u>05/25/07</u>	<u>COA</u>
<u>Building 9940 Programmatic</u>	<u>P05-0057</u>	<u>11/10/05</u>	<u>11/10/10</u>	<u>COA</u>
<u>Thunder Range</u>	<u>P06-0004</u>	<u>05/02/06</u>	<u>05/02/11</u>	<u>COA</u>

**NOTE:**COA = City of Albuquerque

**Explanation of Process Code Listings, Design Capacities, and  
Annual Quantities at the Radioactive and Mixed Waste  
Management Facility (RMWMF)**

Description	Capacity	Associated Structure/Building
<b>Line 1 S01 Container Storage <sup>a</sup></b>		
Container storage area	13,420 gallons	Building 6920
Container storage area	7,810 gallons	Building 6921
Container storage area	83,160 gallons	Building 6925
Container storage area	83,160 gallons	Building 6926
Container storage area	1,100 gallons	Modular Storage Building TP150
Container storage area	1,100 gallons	Modular Storage Building TP153
Container storage area	19,800 gallons	Asphalt area N, E, and W of Building 6920
<b>Total S01</b>	<b>209,550 gallons</b>	

See footnotes at end of section

**Explanation of Process Code Listings, Design Capacities, and  
Annual Quantities at the Radioactive and Mixed Waste  
Management Facility (RMWMF) (Continued)**

Description	Capacity	Annual Quantity	Associated Structure/Building
<b>Line 3 T04 Other Treatment (in containers) <sup>c, d, e</sup></b>			
Chemical deactivation	65 gallons/day	3,000 gallons/year	Building 6920, Building 6921
Macroencapsulation	840 gallons/day	6,000 gallons/year	Building 6920, Building 6921, Building 6925
Stabilization	550 gallons/day	6,000 gallons/year	Building 6920, Building 6921
Thermal deactivation	10 pounds/hour	150 pounds/year	Building 6920, Building 6921
Amalgamation	2 pounds/hour	100 pounds/year	Building 6920, Building 6921
<b>Total T04</b>	<b>7801,455 gallons/day and 12 pounds/hour</b>	<b>15,000 gallons/year and 250 pounds/year</b>	

Description	Capacity	Annual Quantity	Associated Structure/Building
<b>Line 43 T04 Other Treatment (physical treatment) <sup>f</sup></b>			
Physical treatment	20 pounds/hour	4,000 pounds/year	Building 6920, Building 6921
<b>Total T04</b>	<b>20 pounds/hour</b>	<b>4,000 pounds/year</b>	

See footnotes at end of section

**Explanation of Process Code Listings and Design Capacities at the  
High Bay Waste Storage Facility**

<b>Description</b>	<b>Capacity</b>	<b>Associated Structure/Building</b>
<b><u>Line 1 S01 Container Storage<sup>a</sup></u></b>		
Container storage area	100,320 gallons	Building 6596
<b>Total S01</b>	<b>100,320 gallons</b>	

See footnotes at end of section

### Explanation of Process Code Listings, Design Capacities, and Annual Quantities at the Auxiliary Hot Cell Facility

Description	Capacity	Associated Structure/Building
<b>Line 1 S01 Container Storage<sup>a</sup></b>		
Container storage area	3,520 gallons	Building 6597
Storage silos	1,456 gallons	Building 6597
Hot cell	900 gallons	Building 6597
Fume hood	110 gallons (capacity included in work area)	Building 6597
Work area	2,200 gallons	Building 6597
<b>Total S01</b>	<b>6,976 gallons</b>	

Description	Capacity	Annual Quantity	Associated Structure/Building
<b>Line 2 T04 Other Treatment (in containers)<sup>c, d</sup></b>			
Chemical deactivation	55 gallons/day	2,000 gallons/ year	Building 6597
Macroencapsulation	55 gallons/day	6,000 gallons/year	Building 6597
Stabilization	55 gallons/day	2,000 gallons/year	Building 6597
<b>Total T04</b>	<b>165 gallons/day</b>	<b>10,000 gallons/year</b>	

Description	Capacity	Annual Quantity	Associated Structure/Building
<b>Line 34 T04 Other Treatment (physical treatment)<sup>f</sup></b>			
Physical treatment	20 pounds/hour	4,000 pounds/year	Building 6597
<b>Total T04</b>	<b>20 pounds/hour</b>	<b>4,000 pounds/year</b>	

See footnotes at end of section

## Explanation of Process Code Listings and Design Capacities at the Manzano Storage Bunkers

Description	Capacity	Associated Structure/Building
<b>Line 1 S01 Container Storage<sup>a</sup></b>		
Container storage area	<del>50,160</del> <u>25,080</u> gallons	Type B Bunkers Bunkers <del>37034 and 37063</del>
Container storage area	<del>50,160</del> <u>35,200</u> gallons	Type C Bunkers Bunkers <del>37078 and</del> 37118
Container storage area	55,440 gallons	Type D Bunkers Bunkers 37045, 37055, and 37057
<b>Total S01</b>	<del>155,760</del> <u>115,720</u> gallons	

See footnotes at end of section

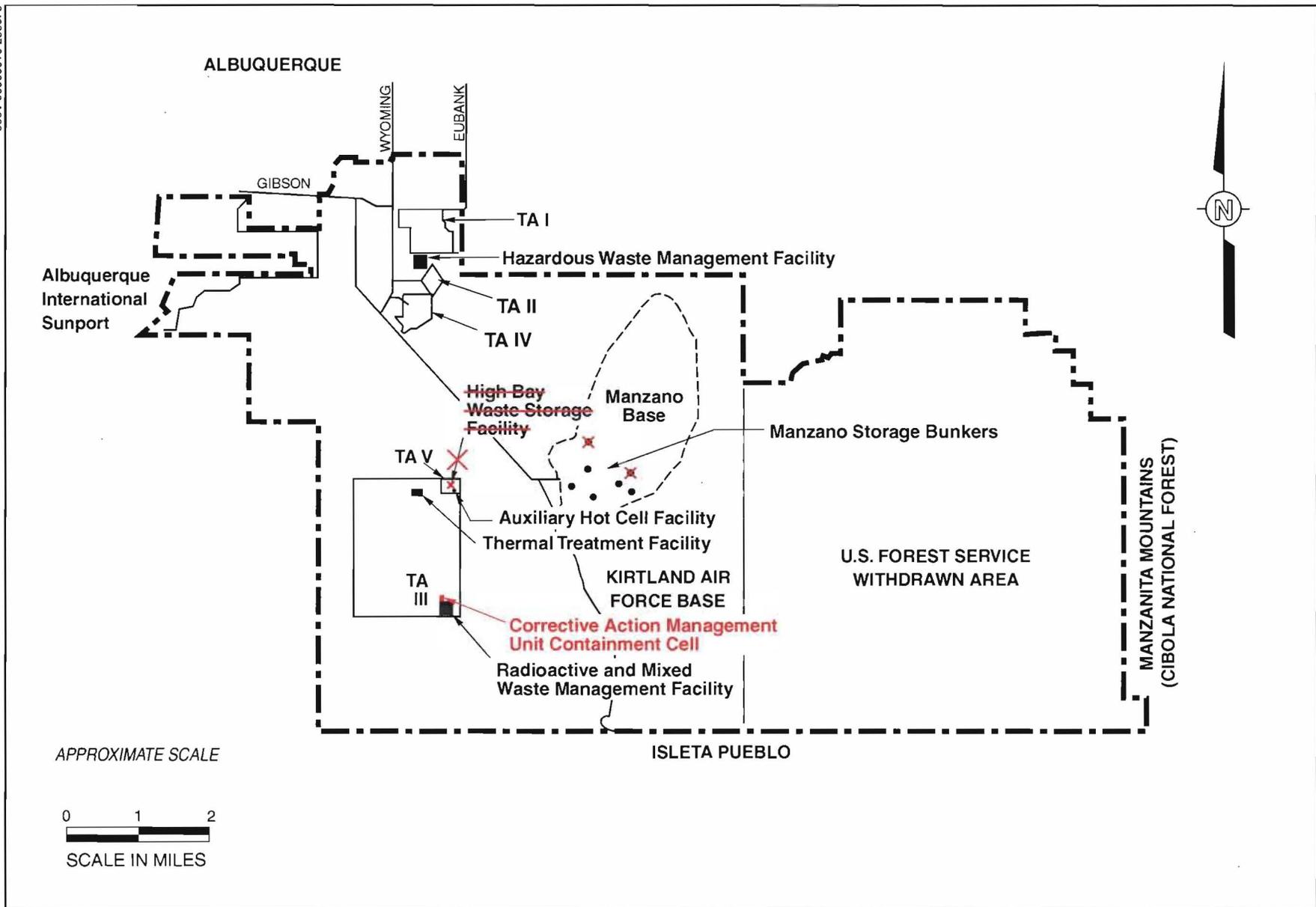
**Explanation of Process Code Listings and Design Capacities for the  
Corrective Action Management Unit**

<b><u>Description</u></b>	<b><u>Capacity</u></b>	<b><u>Associated Structure/Building</u></b>
<b><u>Line 6 S99 Containment</u></b> <sup>9</sup>		
<u>Closed Containment Cell</u>	<u>31,800 cubic yards</u>	<u>Corrective Action Management Unit Containment Cell</u>
<b><u>Total S99</u></b>	<b><u>31,800 cubic yards</u></b>	

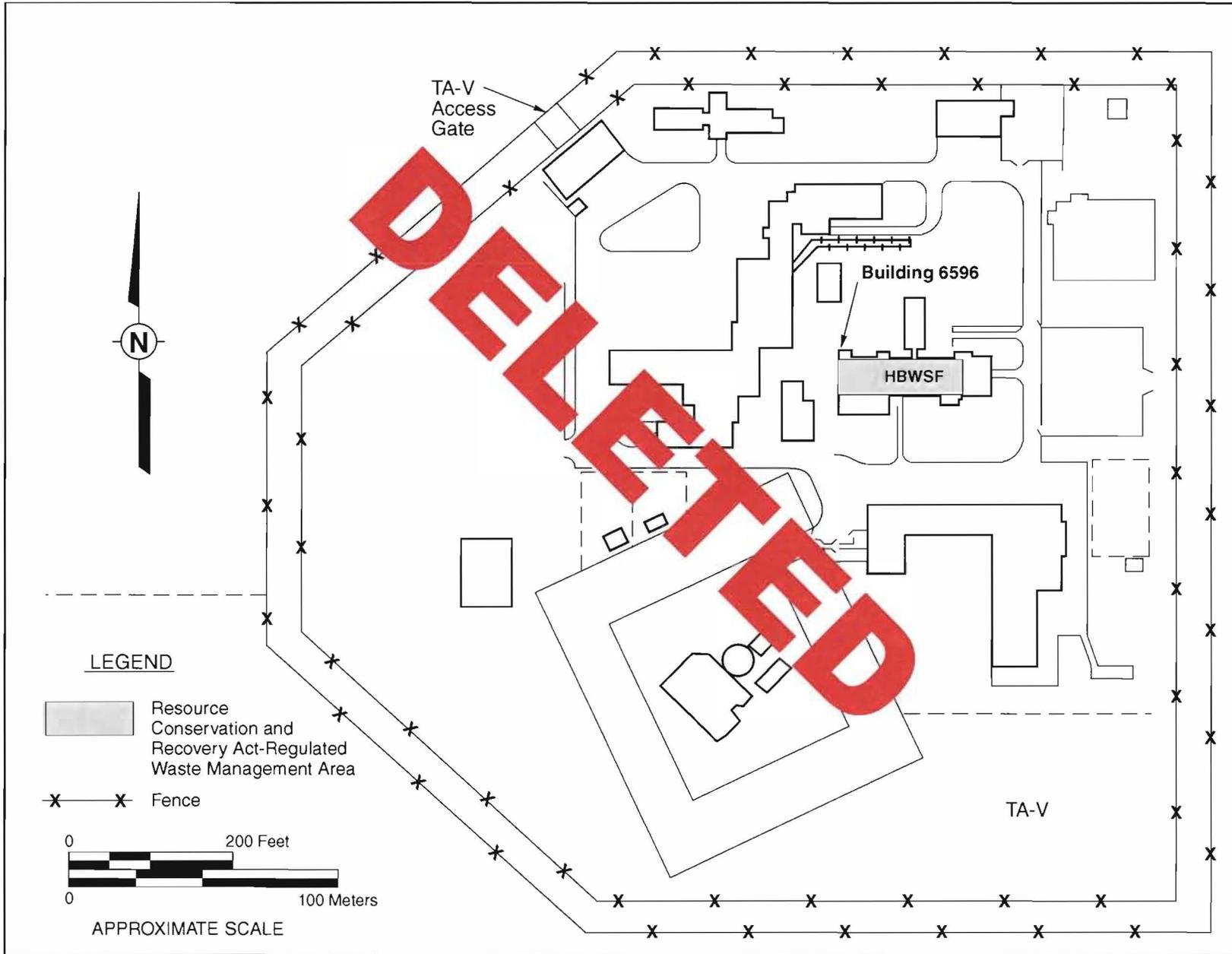
See footnotes at end of section

## Footnotes for Process Codes and Capacities

- a Wastes are stored in a variety of containers, including large boxes, 55-gallon drums, and smaller containers.
- b The quantity of waste undergoing treatment at any one time cannot exceed the 20.8-gallon capacity of the burn pan.
- c Wastes are treated by stabilization, chemical deactivation, and amalgamation in a variety of containers, including 55-gallon drums, 5-gallon buckets, laboratory glassware, and other containers as appropriate for the process.
- d Wastes are placed in suitable containers and macroencapsulated. The container size is determined by the quantity of waste requiring treatment and the macroencapsulation process. Containers include 7 ft X 4 ft X 4 ft boxes (equivalent volume of 840 gallons), 55-gallon drums, and smaller containers. Liquid wastes are not treated through macroencapsulation; the volume of waste treated is equivalent to the number of gallons listed.
- e Wastes are placed in the thermal deactivation equipment and treated. The time required to complete treatment depends on the waste.
- f Physical separation volumes depend on the size of the equipment or other item undergoing treatment (e.g., size reduction, separation). Volumes vary widely.
- g During operation of the Corrective Action Management Unit (2001-2003), remediation wastes (soils and residues) were stored, treated as needed, and placed in the containment cell. The Unit was closed in 2003. The closed containment cell is undergoing post-closure care.

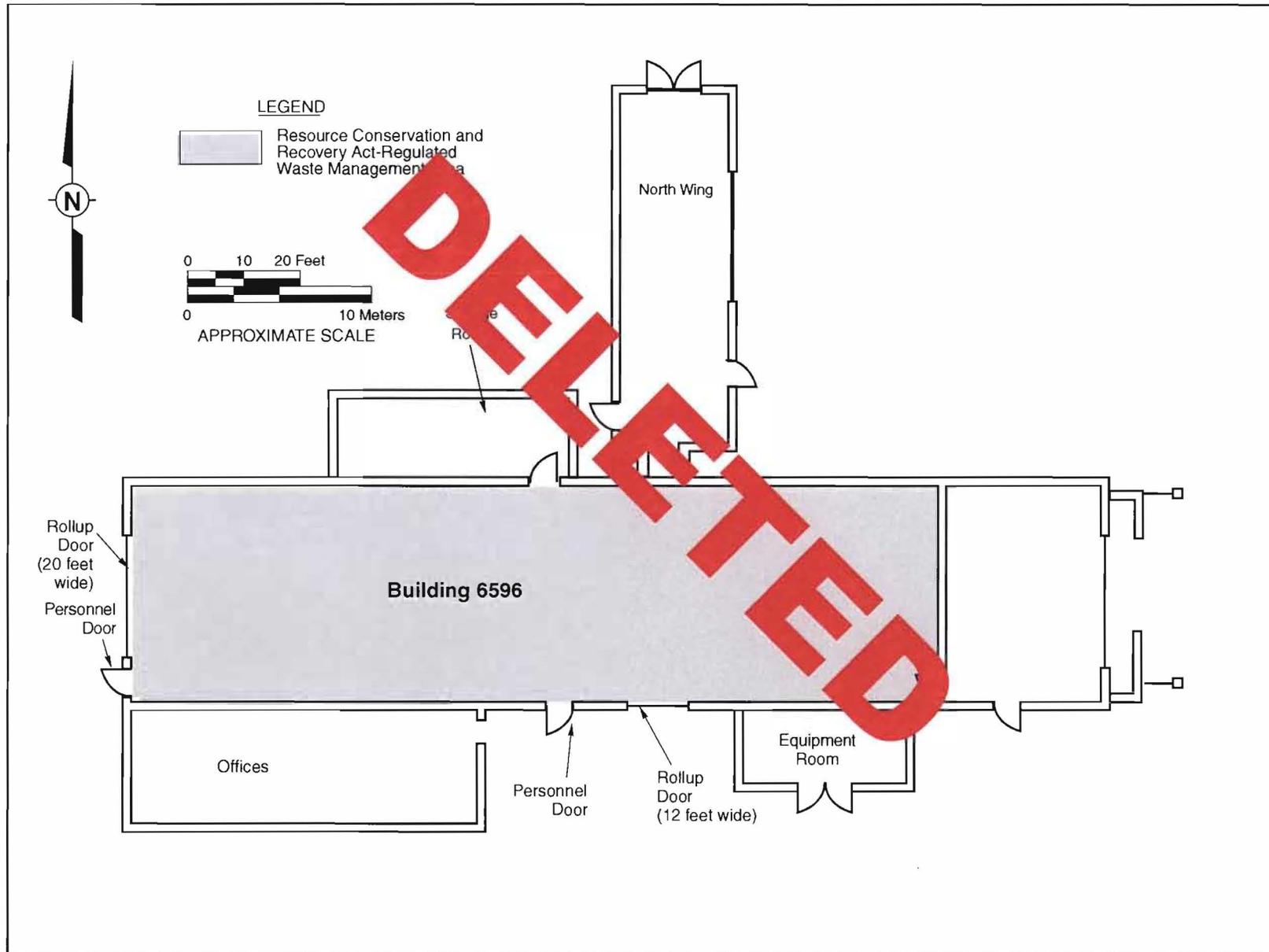


**Figure B-2**  
**Sandia National Laboratories/New Mexico,**  
**Technical Areas (TAs) and Resource Conservation and Recovery Act-Regulated**  
**Waste Management Units**



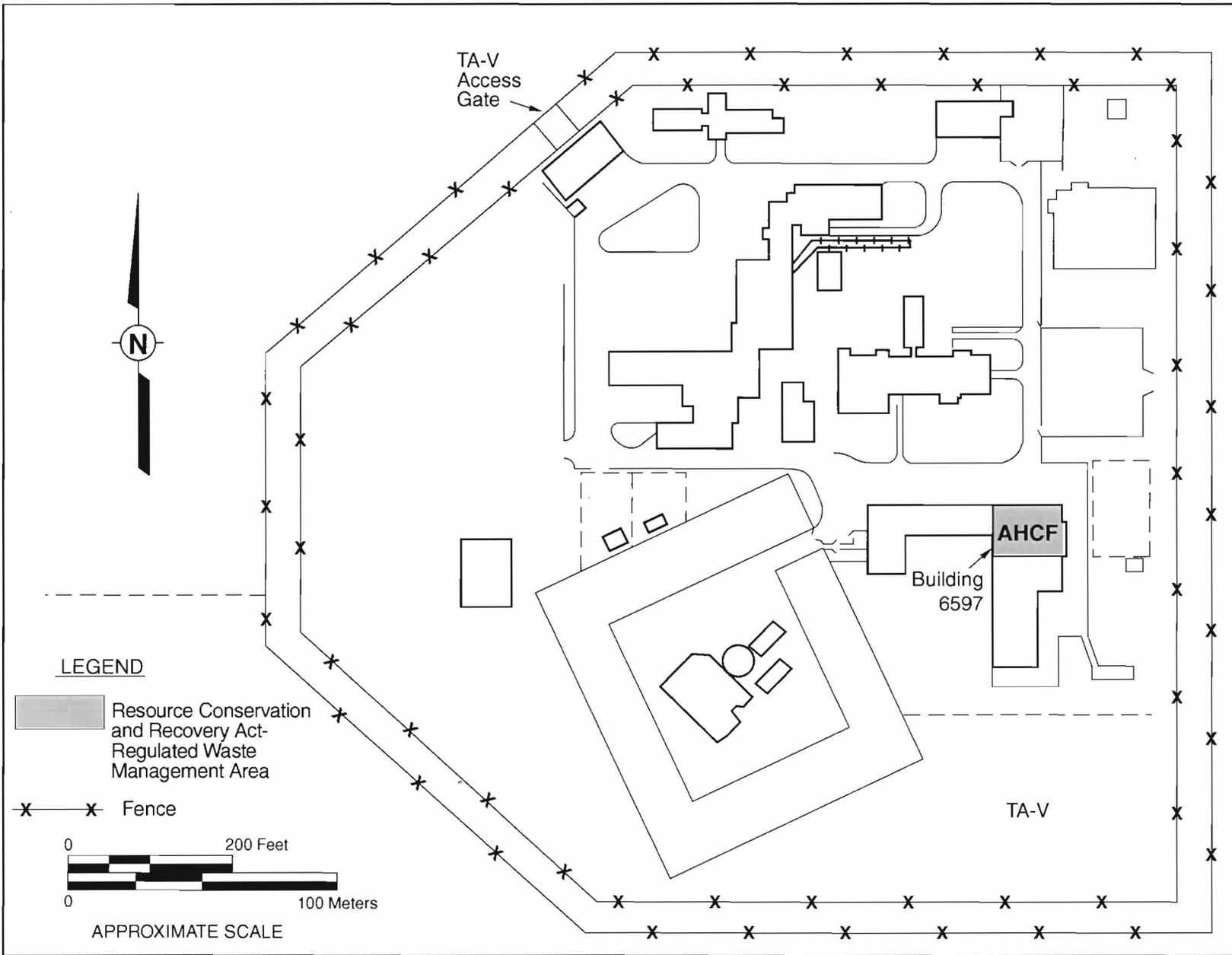
**Figure B-13**  
**Location of the High Bay Waste Storage Facility (HBWSF) in Technical Area (TA) V**

Document: SNL/NM General Part A,  
 Appendix B  
 Revision No.: 9.0  
 Date: October 2005



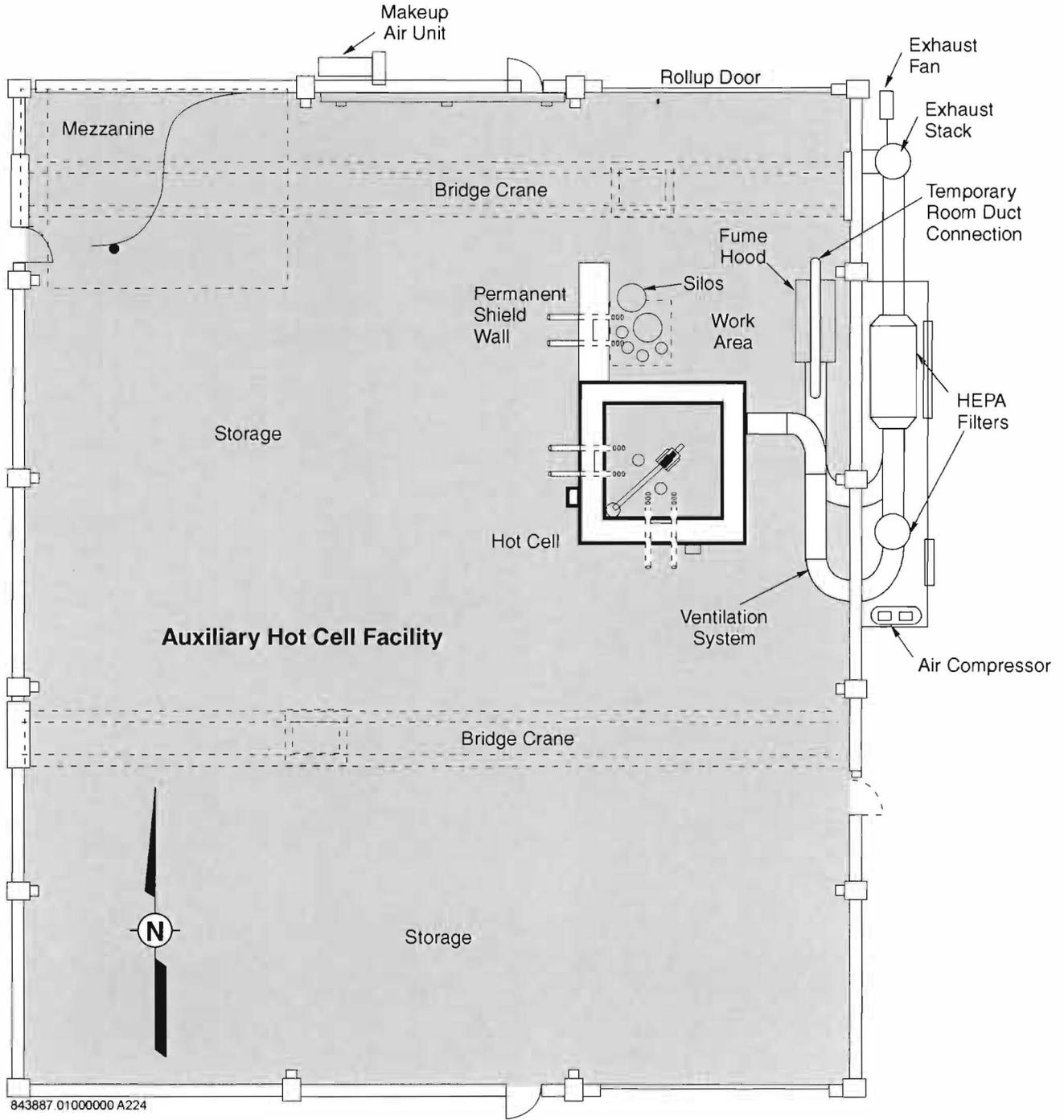
**Figure B-14**  
**High Bay Waste Storage Facility,**  
**Resource Conservation and Recovery Act-Regulated Waste Management Area**

Document: SNL/NM General Part A,  
Appendix B  
Revision No.: 9.0  
Date: October 2005



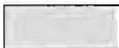
Document: SNL/NM General Part A,  
Appendix B  
Revision No.: 9-9 10.0  
Date: October-2005, February 2007

**Figure B-15 13**  
**Location of the Auxiliary Hot Cell Facility (AHCF) in Technical Area (TA) V**



843887 01000000 A224

**LEGEND**

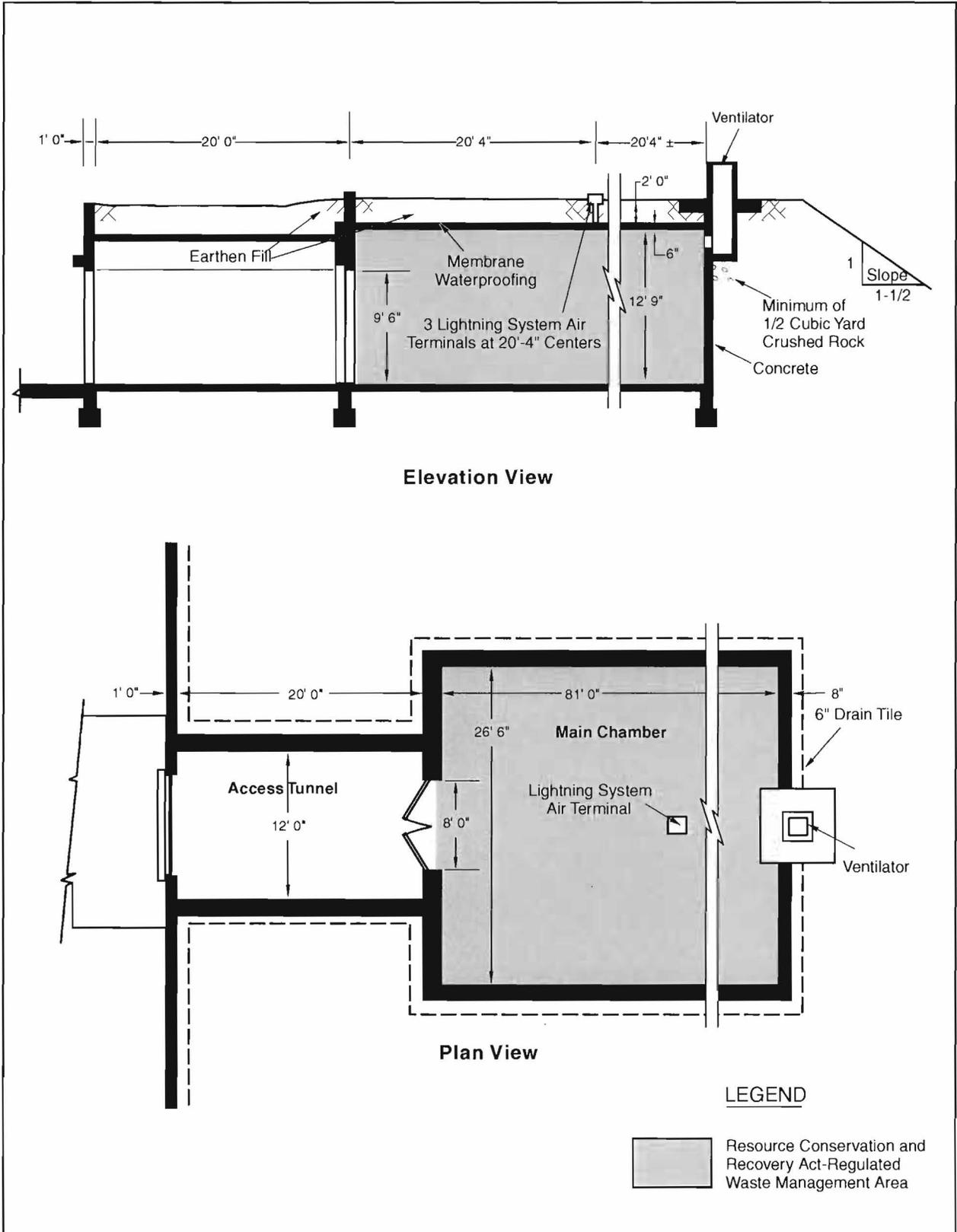
 Resource Conservation and Recovery Act-Regulated Waste Management Area

APPROXIMATE SCALE



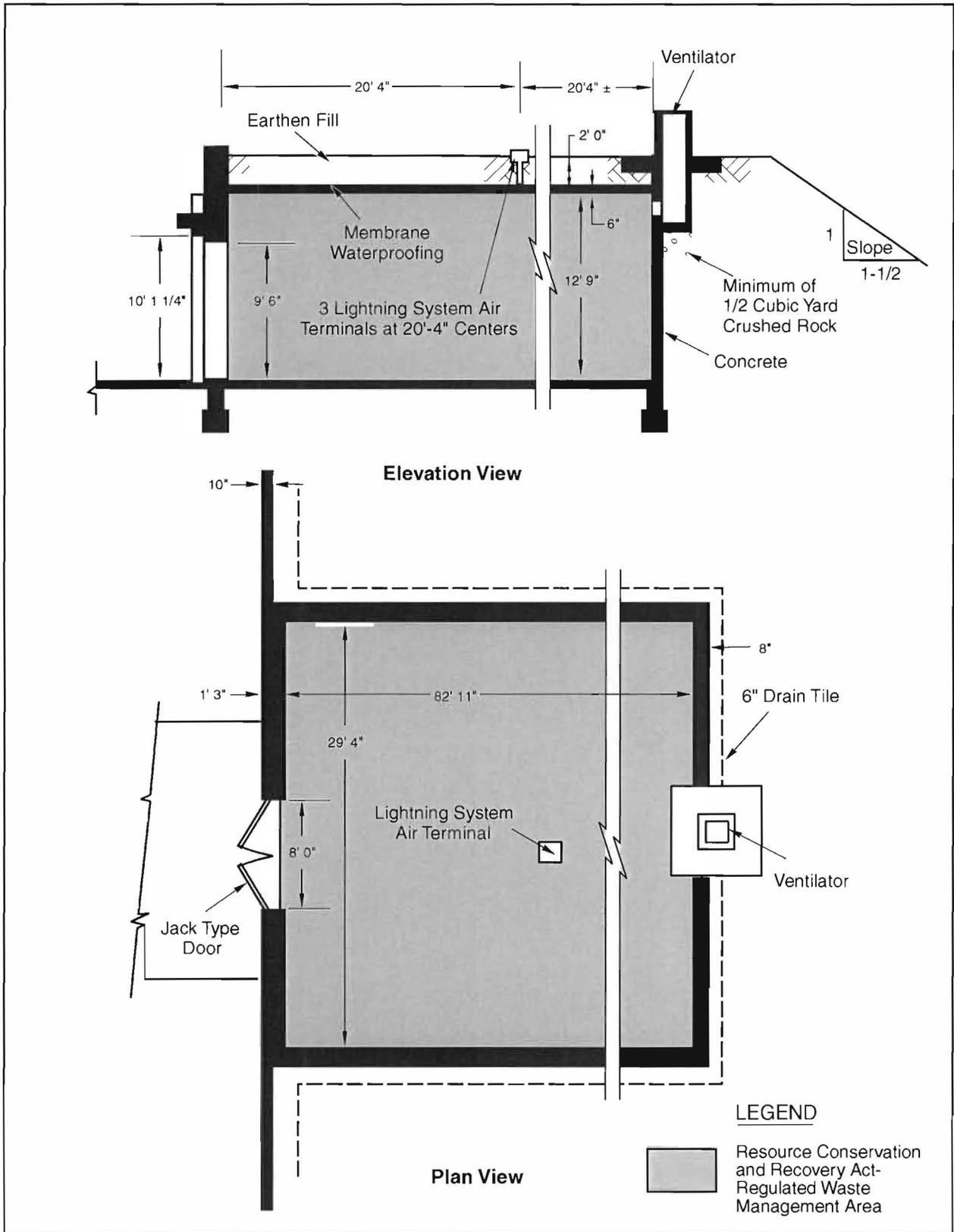
**Figure B-16 14**  
**Auxiliary Hot Cell Facility,**  
**Resource Conservation and Recovery Act-**  
**Regulated Waste Management Areas**



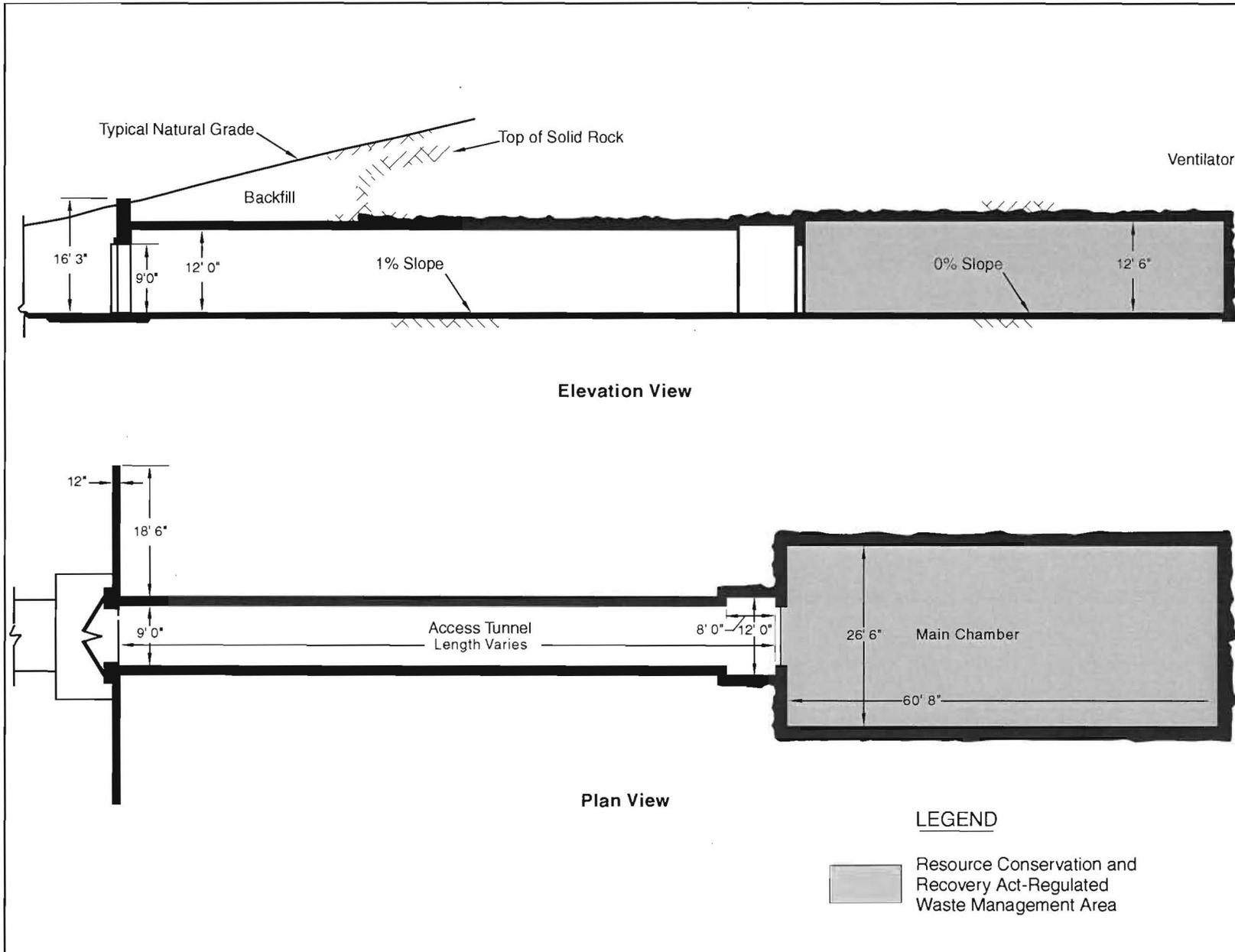


843887.01000000 A226

**Figure B-18 16**  
**Manzano Storage Bunkers, Type B,**  
**Bunkers 37034 and 37063**



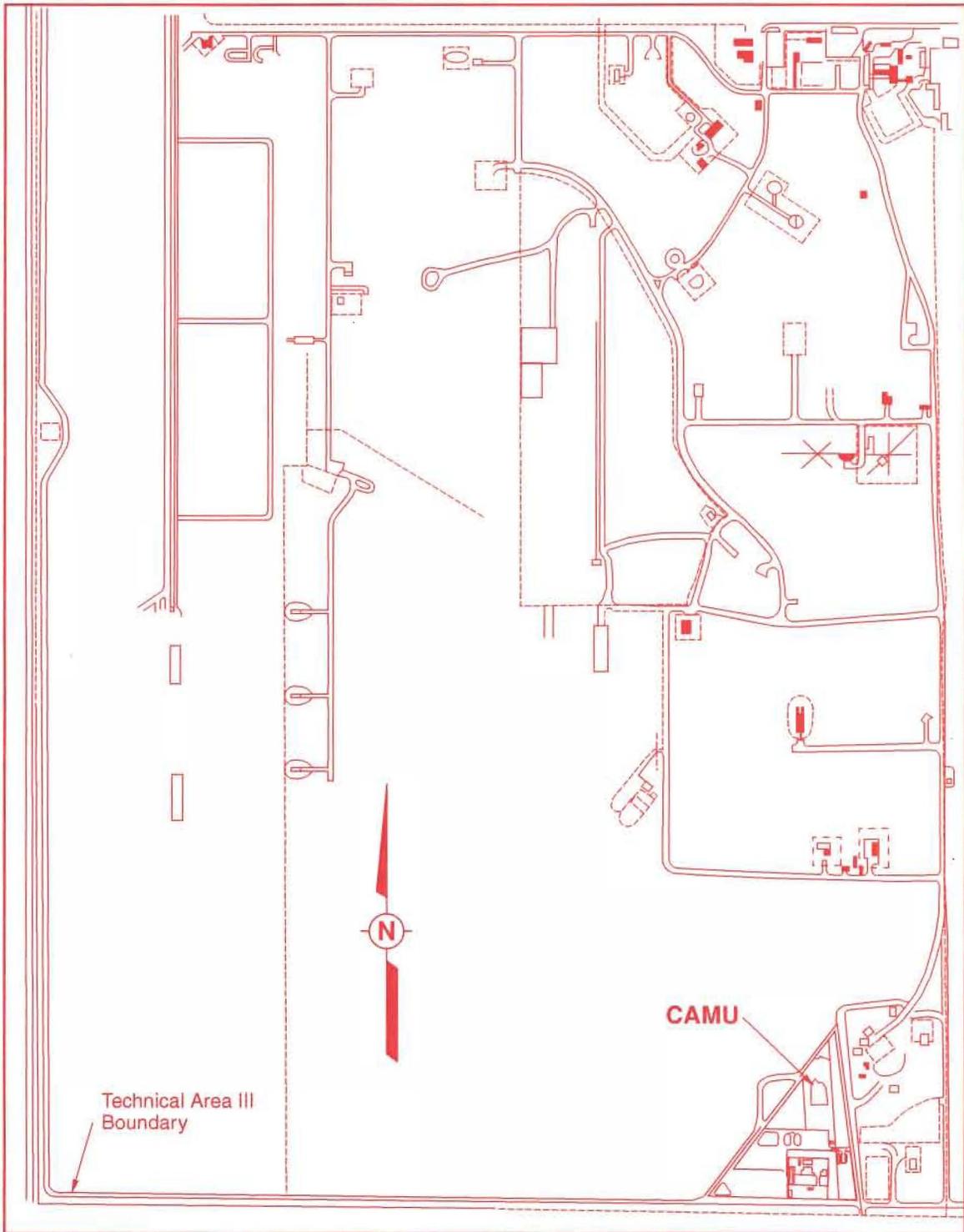
**Figure B-19 17**  
 Manzano Storage Bunkers, Type C,  
 Bunkers 37078 and 37118



**Figure B-20 18**  
**Manzano Storage Bunkers, Type D**  
**Bunkers 37045, 37055, and 37057**

Document: SNL/NM General Part A,  
 Appendix B  
 Revision No.: ~~9-9~~ 10.0  
 Date: ~~October-2005~~ February 2007

APPROXIMATE  
0 .125 .25  
  
SCALE IN MILES

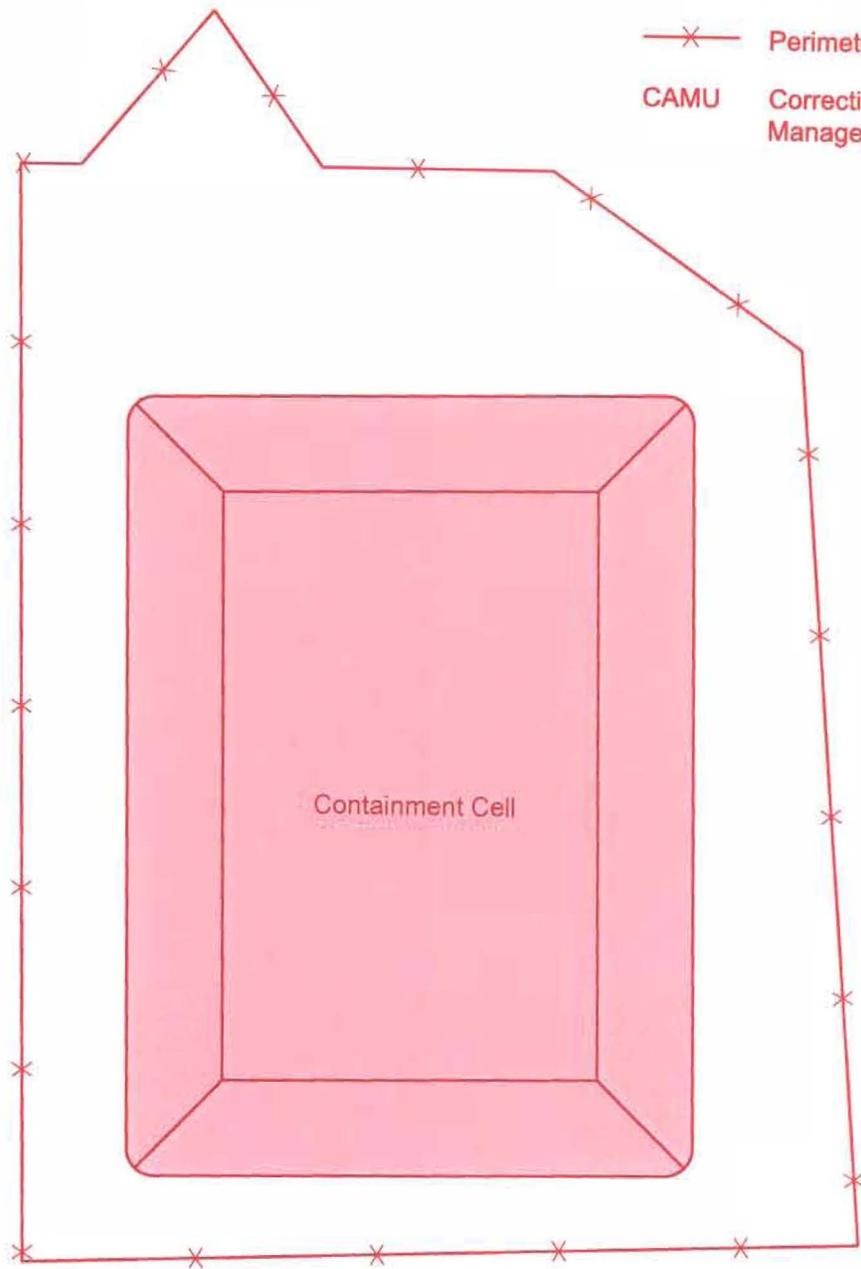


843887.01000000 A229

**Figure B-19**  
**Location of the Corrective Action Management Unit**  
**Containment Cell in Technical Area III**

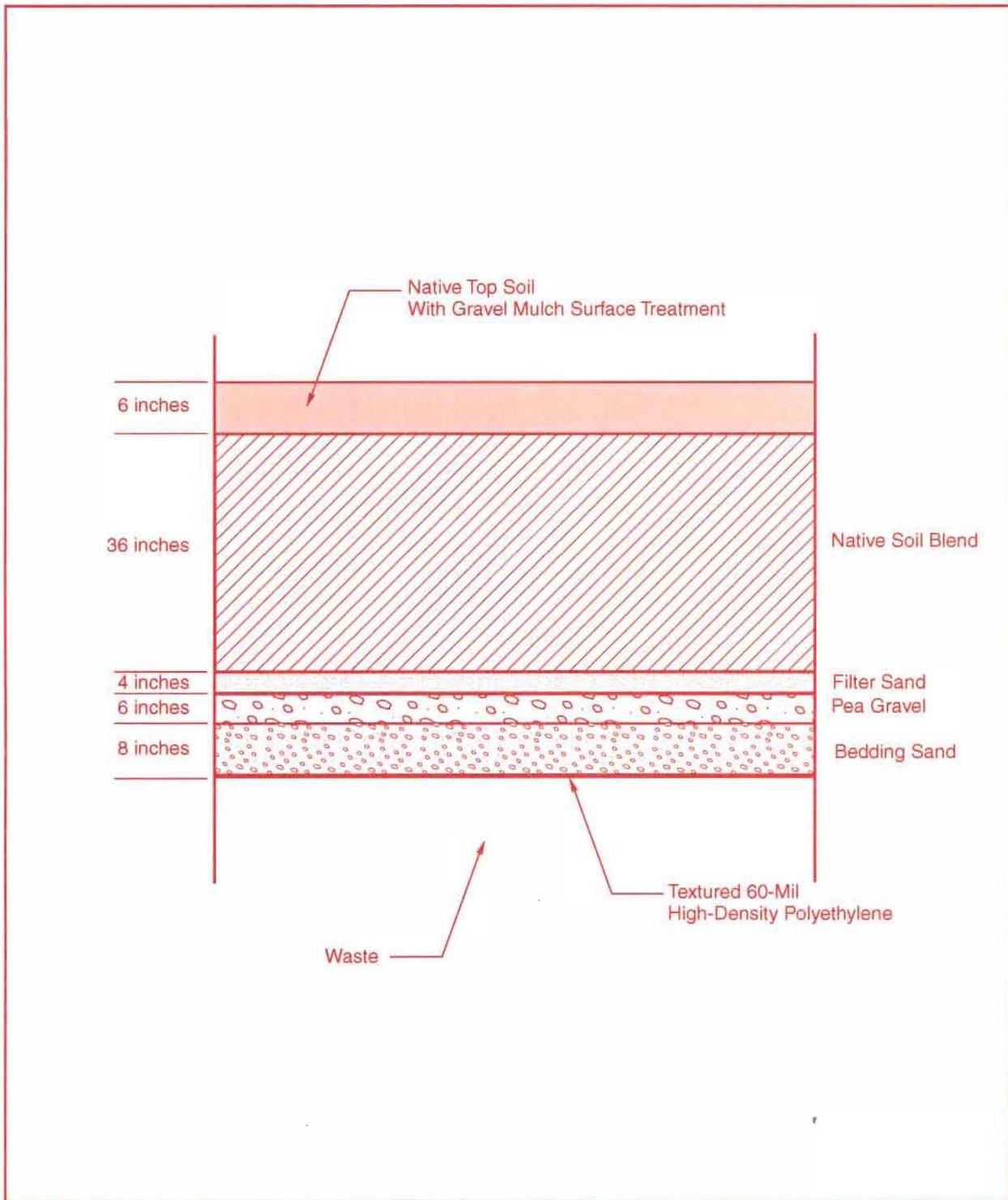
Legend

- x— Perimeter Boundary
- CAMU Corrective Action Management Unit



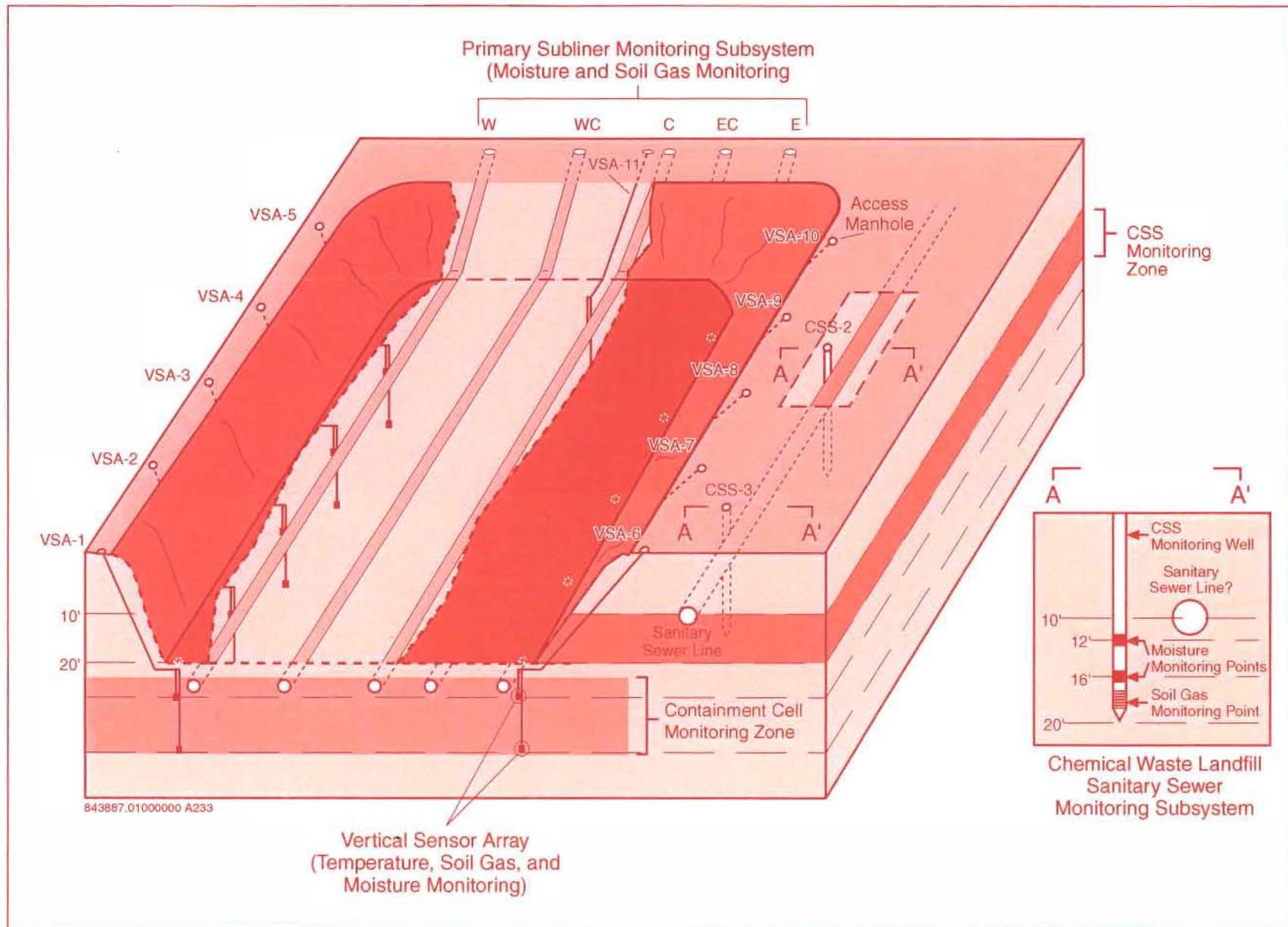
SCALE 1" = 80'

**Figure B-20**  
**Corrective Action Management Unit**  
**Resource Conservation and Recovery Act-Regulated**  
**Waste Management Area**

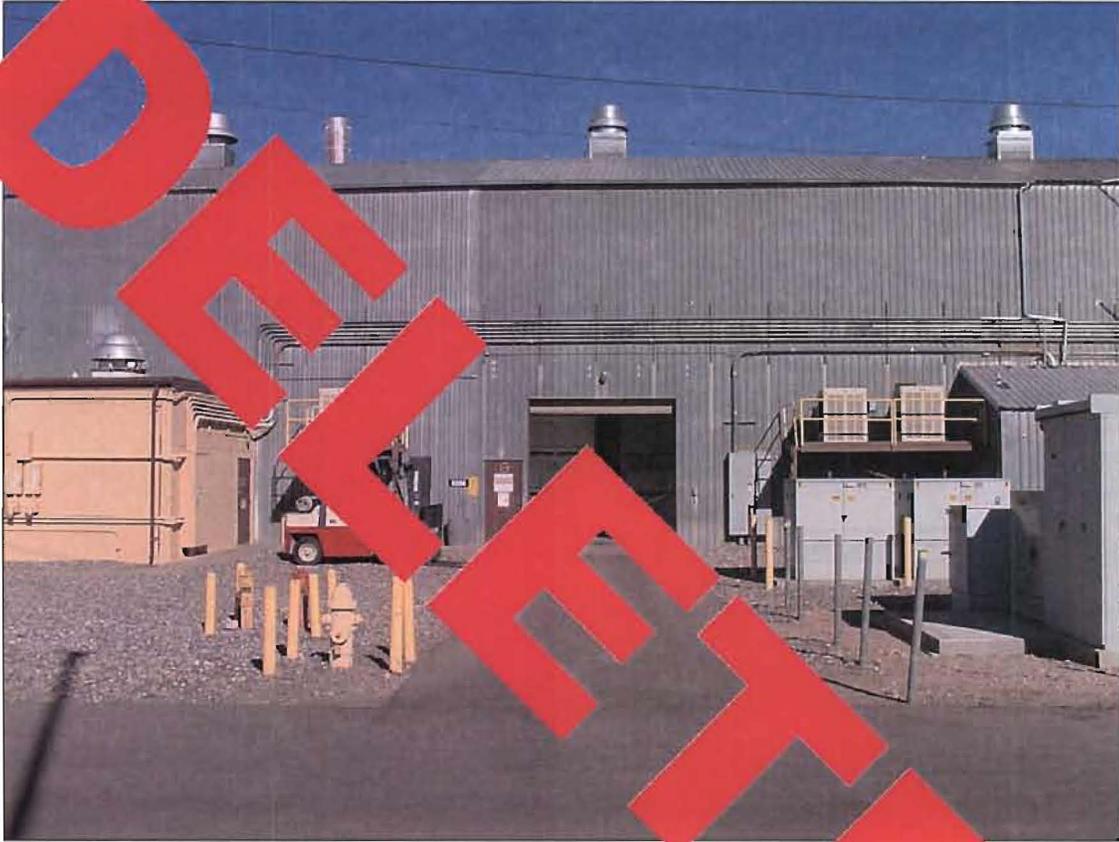


843887.01000000 A232

**Figure B-21**  
**Corrective Action Management Unit Containment Cell**  
**Schematic Cross-Section of Final Cover System**



**Figure B-22**  
**Block Diagram of Corrective Action Management Unit Containment Cell**  
**and Vadose Zone Monitoring System**



**High Bay Waste Storage Facility, South Side Building 596**  
Photograph Taken on December 5, 2001  
Process Code: S01



**High Bay Waste Storage Facility, West Side of P 659**  
Photograph Taken on December 5, 2001  
Process Code: S01



**Manzano Storage Bunkers, Type B, Front View**

Photograph Taken on December 5,  
Process Code: S01

370



**Manzano Storage Bunkers, Type C, Front view of Bunker**  
Photograph Taken on December 13, 2001  
Process Code: S01



**Corrective Action Management Unit**  
**South End and Southeast Corner of Containment Cell**  
Photograph Taken on February 21, 2007  
Process Code: S99

The containment cell is comprised of the following elements (from the top down):

- Multi-component engineered cover system.
- Treated waste.
- Leachate collection and removal system.
- Multi-component engineered liner system on sidewalls and bottom of cell.
- Vadose zone monitoring system.

The vadose zone monitoring system is designed to provide information on containment cell performance and early detection of leaks. It is comprised of three subsystems:

- Primary subliner monitoring system for leak detection – five horizontal clay pipes that run the length (north-south) of the containment cell under the bottom liner. The pipes are equipped with access tubes at either end for a probe to monitor moisture; the southern access tubes for four of the five pipes are visible in the photograph.
- Chemical Waste Landfill and sanitary sewer line monitoring subsystem - 6 vertical boreholes near the sewer line east of the containment cell. The boreholes allow access for monitoring equipment and collecting samples to detect leaks from the sewer line or migration of constituents from the former landfill; the top of one of the boreholes is visible at the right edge of the picture. The yellow posts on either side of the borehole provide protection from vehicles.
- Vertical sensor array subsystem - 11 monitoring locations below the containment cell. These locations house monitoring equipment and allow access for collecting samples. They are not visible in this photograph.



**Corrective Action Management Unit  
East Side of Containment Cell**  
Photograph Taken on February 21, 2007  
Process Code: S99

The top of one of the boreholes in the Chemical Waste Landfill and sanitary sewer line monitoring subsystem is visible at the left side of the picture.

Tops of three access points in the vertical sensor array subsystem (small grey boxes on grey posts) are visible along the edge of the containment cell. The boxes house cables and tubing connected to the monitoring and sampling equipment located under the containment cell.



**Corrective Action Management Unit**  
**North End and Northeast Corner of Containment Cell**  
Photograph Taken on February 21, 2007  
Process Code: S99

The top of one of the boreholes in the Chemical Waste Landfill and sanitary sewer line monitoring subsystem is visible in the foreground beyond the CAMU perimeter fence.

The northern access tubes for four of the five pipes in the primary subliner leak detection subsystem are visible at the right edge of the photograph.

The larger tube extending from the north end of the cap (with a support brace, visible at the right side of the photograph) is the access point for the leachate collection and removal system. The tube is connected to the leachate collection sump at the bottom of the containment cell, and allows access for a portable pump to remove leachate. The pump is stored in a container near the base of the support brace when not in use.

The tops of two utility poles are visible beyond the top of the containment cell (above the signs in the left side of the photograph).



**Corrective Action Management Unit  
Containment Cell and Leachate Management**

Photograph Taken on February 21, 2007

Process Code: S99

The leachate accumulation area is shown in the foreground. Leachate is pumped from the collection sump at the bottom of the containment cell using a portable pump. The access tube for the collection system is visible in the north end of the cell (near the center of the photograph). The container used for storage of the pump is immediately to the right of the access tube; sunlight is reflected off the container lid.

The leachate is collected in the blue containers. The containers are stored on a (yellow) portable spill containment pallet. Other wastes are stored in the white containers on a second pallet. Pallets are stored upside down when not in use to prevent rainwater accumulation.

The portable metal building at the right houses electrical equipment and is used for storage of spill cleanup supplies and safety-related items.

The tops of several utility poles are visible beyond the top of the containment cell.

**Attachment B**

**Sandia National Laboratories  
General Part A Permit Request  
NM5890110518**

**Technical and Administrative Updates**



# Sandia National Laboratories

---

**Sandia National Laboratories/New Mexico**

## **General Part A Permit Request**

**Hazardous Waste Management Facility  
Thermal Treatment Facility  
Radioactive and Mixed Waste Management Facility  
Auxiliary Hot Cell Facility  
Manzano Storage Bunkers  
Corrective Action Management Unit**

**Revision 10.0  
February 2007**



# **Sandia National Laboratories/New Mexico General Part A Permit Renewal Request/Application**

**Revision 10.0**

**February 2007**

Prepared by  
Sandia National Laboratories/New Mexico  
Albuquerque, New Mexico 87185

Prepared for  
The U.S. Department of Energy

**This page left intentionally blank.**

## **TABLE OF CONTENTS**

LIST OF FIGURES

LIST OF PHOTOGRAPHS

RCRA SUBTITLE C SITE IDENTIFICATION FORM

HAZARDOUS WASTE PERMIT INFORMATION FORM

APPENDIX A ACTIVE ENVIRONMENTAL PERMITS

APPENDIX B LOCATION-SPECIFIC PROCESS CODE LISTINGS, DESIGN CAPACITIES,  
ANNUAL QUANTITIES, FIGURES, AND PHOTOGRAPHS

## LIST OF FIGURES

<b><u>Figure No.</u></b>	<b><u>Title</u></b>
B-1	Topographic Map
B-2	Sandia National Laboratories/New Mexico, Technical Areas (TAs) and Resource Conservation and Recovery Act-Regulated Waste Management Units
B-3	Hazardous Waste Management Facility, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-4	Hazardous Waste Storage Building (Building 958), Floor Plan
B-5	Hazardous Waste Packaging Building (Building 959), Floor Plan
B-6	Thermal Treatment Facility, Resource Conservation and Recovery Act-Regulated Waste Management Area
B-7	Thermal Treatment Facility (TTF)-Plan View
B-8	Location of the Radioactive and Mixed Waste Management Facility in Technical Area III
B-9	Radioactive and Mixed Waste Management Facility, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-10	Radioactive and Mixed Waste Management Facility, Building 6920, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-11	Radioactive and Mixed Waste Management Facility, Building 6921, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-12	Radioactive and Mixed Waste Management Facility, Buildings 6925 and 6926, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-13	Location of the Auxiliary Hot Cell Facility (AHCF) in Technical Area (TA) V
B-14	Auxiliary Hot Cell Facility, Resource Conservation and Recovery Act-Regulated Waste Management Areas
B-15	Location of the Manzano Storage Bunkers at Manzano Base
B-16	Manzano Storage Bunker, Type B, Bunker 37034
B-17	Manzano Storage Bunker, Type C, Bunker 37118
B-18	Manzano Storage Bunkers, Type D, Bunkers 37045, 37055, and 37057
B-19	Location of the Corrective Action Management Unit Containment Cell in Technical Area III
B-20	Corrective Action Management Unit Resource Conservation and Recovery Act-Regulated Waste Management Area
B-21	Corrective Action Management Unit Containment Cell Schematic Cross-Section of Final Cover System
B-22	Block Diagram of Corrective Action Management Unit Containment Cell and Vadose Zone Monitoring System

## LIST OF PHOTOGRAPHS

### Photograph Title

Hazardous Waste Management Facility, Buildings 958 and 959  
Hazardous Waste Management Facility, Flammable Waste Storage Bay in Building 958  
Hazardous Waste Management Facility, Waste Storage Bays in Building 959  
Hazardous Waste Management Facility, Modular Storage Buildings (958B and 958C) for  
Reactive and Ignitable Wastes  
Thermal Treatment Facility, Viewed from Roof of Building 6715  
Thermal Treatment Facility, Rear View of Burn Cage from Top of Earthen Berm  
Thermal Treatment Facility, Front View of Burn Pan (with Lid Down) Inside Burn Cage  
Radioactive and Mixed Waste Management Facility, East Side of Building 6920  
Radioactive and Mixed Waste Management Facility, West Side of Building 6920  
Radioactive and Mixed Waste Management Facility, Building 6920, South Bay  
Radioactive and Mixed Waste Management Facility, Building 6921  
Radioactive and Mixed Waste Management Facility, Building 6925  
Radioactive and Mixed Waste Management Facility, Building 6925, Interior  
Radioactive and Mixed Waste Management Facility, Building 6926  
Radioactive and Mixed Waste Management Facility, Modular Storage Buildings  
Auxiliary Hot Cell Facility, North Side of Building 6597  
Auxiliary Hot Cell Facility, Work Area North of Auxiliary Hot Cell  
Auxiliary Hot Cell Facility, Fume Hood and Work Area North of Auxiliary Hot Cell  
Auxiliary Hot Cell Facility, Operator Controls for Work Area and Hot Cell  
Manzano Storage Bunkers, Type B, Front View of Bunker 37034  
Manzano Storage Bunkers, Type C, Front View of Bunker 37118  
Manzano Storage Bunkers, Type D, Front View of Bunker 37045  
Manzano Storage Bunkers, Type D, Front View of Bunker 37055  
Manzano Storage Bunkers, Type D, Front View of Bunker 37057  
Corrective Action Management Unit, South End and Southeast Corner of Containment Cell  
Corrective Action Management Unit, East Side of Containment Cell  
Corrective Action Management Unit, North End and Northeast Corner of Containment Cell  
Corrective Action Management Unit, Containment Cell and Leachate Management

<p><b><u>SEND COMPLETED FORM TO:</u></b> The Appropriate State or EPA Regional Office.</p>	<p>United States Environmental Protection Agency</p> <p><b>RCRA SUBTITLE C SITE IDENTIFICATION FORM</b></p>		
<p><b>1. Reason for Submittal (See instructions on page 14)</b></p> <p>MARK ALL BOX(ES) THAT APPLY</p>	<p><b>Reason for Submittal:</b></p> <p><input type="checkbox"/> To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities).</p> <p><input type="checkbox"/> To provide Subsequent Notification of Regulated Waste Activity (to update site identification information).</p> <p><input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application.</p> <p><input checked="" type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # 10)</p> <p><input type="checkbox"/> As a component of the Hazardous Waste Report.</p>		
<p><b>2. Site EPA ID Number (page 15)</b></p>	<p><b>EPA ID Number:</b> <i>NM5 890 110 518</i></p>		
<p><b>3. Site Name (page 15)</b></p>	<p><b>Name:</b> <i>Sandia National Laboratories</i></p>		
<p><b>4. Site Location Information (page 15)</b></p>	<p><b>Street Address:</b> <i>1515 Eubank Blvd. SE</i></p>		
	<p><b>City, Town, or Village:</b> <i>Albuquerque</i></p>	<p><b>State:</b> <i>NM</i></p>	
	<p><b>County Name:</b> <i>Bernalillo</i></p>	<p><b>Zip Code:</b> <i>87123</i></p>	
<p><b>5. Site Land Type (page 15)</b></p>	<p><b>Site Land Type :</b> <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		
<p><b>6. North American Industry Classification System (NAICS) Code(s) for the Site (page 15)</b></p>	<p><b>A.</b> <i>92811</i></p>	<p><b>B.</b> <i>54171</i></p>	
	<p><b>C.</b></p>	<p><b>D.</b></p>	
<p><b>7. Site Mailing Address (page 16)</b></p>	<p><b>Street or P.O. Box:</b> <i>P.O. Box 5400, Sandia Site Office</i></p>		
	<p><b>City, Town, or Village:</b> <i>Albuquerque</i></p>		
	<p><b>State:</b> <i>NM</i></p>		
	<p><b>Country:</b> <i>USA</i></p>	<p><b>Zip Code:</b> <i>87185-5400</i></p>	
<p><b>8. Site Contact Person (page 16)</b></p>	<p><b>First Name:</b> <i>David</i></p>	<p><b>MI:</b></p>	<p><b>Last Name:</b> <i>Rast</i></p>
	<p><b>Phone Number:</b> <i>(505)-845-5349</i></p>	<p><b>Extension:</b></p>	<p><b>Email address:</b> <i>drast@doeal.gov</i></p>
<p><b>9. Operator and Legal Owner of the Site (pages 16 and 17)</b></p>	<p><b>A. Name of Site's Operator:</b> <i>Sandia Corporation</i></p>		<p><b>Date Became Operator (mm/dd/yyyy):</b> <i>11/01/1949</i></p>
	<p><b>Operator Type:</b> <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input checked="" type="checkbox"/> Other</p>		
	<p><b>B. Name of Site's Legal Owner:</b> <i>US Department of Energy</i></p>		<p><b>Date Became Owner (mm/dd/yyyy):</b> <i>09/1945</i></p>
	<p><b>Owner Type:</b> <input type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		

9. Legal owner (continued) Address	Street or P.O. Box: <i>P.O. Box 5400, Sandia Site Office</i>	
	City, Town, or Village: <i>Albuquerque</i>	
	State: <i>NM</i>	
	Country: <i>USA</i>	Zip Code: <i>87185-5400</i>

**10. Type of Regulated Waste Activity**  
(Mark "Yes" or "No" for all activities; complete any additional boxes as instructed. (See instructions on pages 18 to 21))

**A. Hazardous Waste Activities**  
Complete all parts for 1 through 6

Y  N  **1. Generator of Hazardous Waste**

If "Yes", choose only one of the following – a, b, or c.

- a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo) of non-acute hazardous waste; or
- b. SQG: 100 to 1,000 kg/mo (220 – 2,200 lbs./mo.) of non-acute hazardous waste; or
- c. CESQG: Less than 100 kg/mo (220 lbs./mo.) of non acute hazardous waste

In addition, indicate other generator activities

- Y  N  d. United States Importer of Hazardous Waste
- Y  N  e. Mixed Waste (hazardous and radioactive) Generator

Y  N  **2. Transporter of Hazardous Waste**

Y  N  **3. Treater, Storer, or Disposer of Hazardous Waste (at your site)** Note: A hazardous waste permit is required for this activity.

Y  N  **4. Recycler of Hazardous Waste (at your site)**

Y  N  **5. Exempt Boiler and/or Industrial Furnace**  
If "Yes", mark each that applies.

- a. Small Quantity On-site Burner Exemption
- b. Smelting, Melting and Refining Furnace Exemption

Y  N  **6. Underground Injection Control**

**B. Universal Waste Activities**

Y  N  **1. Large Quantity Handler Of Universal Waste (accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste generated and/or accumulated at your site. If "Yes", mark all boxes that apply:**

	<u>Generate</u>	<u>Accumulate</u>
a. Batteries	<input type="checkbox"/>	<input type="checkbox"/>
b. Pesticides	<input type="checkbox"/>	<input type="checkbox"/>
c. Thermostats	<input type="checkbox"/>	<input type="checkbox"/>
d. Lamps	<input type="checkbox"/>	<input type="checkbox"/>
e. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
f. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>
g. Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>

Y  N  **2. Destination Facility for Universal Waste:**

Note: A hazardous waste permit may be required for this activity.

**C. Used Oil Activities**  
Mark all boxes that apply

Y  N  **1. Used Oil Transporter**  
If "Yes" mark each that applies

- a. Transporter
- b. Transfer Facility

Y  N  **2. Used Oil Processor and/or Re-refiner**  
If "Yes" mark each that applies

- a. Processor
- b. Re-refiner

Y  N  **3. Off-Specification Used Oil Burner**

Y  N  **4. Used Oil Fuel Marketer**  
If "Yes" mark each that applies

- a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- b. Marketer Who First Claims the Used Oil Meets the Specifications



United States Environmental Protection Agency  
**HAZARDOUS WASTE PERMIT INFORMATION FORM**

1. Facility Permit Contact (See instructions on page 23)	First Name: <i>David</i>	MI:	Last Name: <i>Rast</i>
	Phone Number: <i>505-845-5349</i>		Phone Number Extension:
2. Facility Permit Contact Mailing Address (See instructions on page 23)	Street Address: <i>P.O. Box 5400, US Department of Energy, Sandia Site Office</i>		
	City, Town, or Village: <i>Albuquerque</i>		State: <i>NM</i>
	County Name: <i>USA</i>		Zip Code: <i>87185-5400</i>
3. Operator Mailing Address and Telephone Number (See instructions on page 23)	Street or P.O. Box: <i>P.O. Box 5800, Waste Management</i>		
	City, Town, or Village: <i>Albuquerque</i>		
	State: <i>NM</i>		
	Country: <i>USA</i>	Zip Code: <i>87185-5800</i>	Phone Number: <i>505-845-0011</i>
4. Legal owner Mailing Address and Telephone Number (See instructions on page 23)	Street or P.O. Box: <i>P.O. Box 5400</i>		
	City, Town, or Village: <i>Albuquerque</i>		
	State: <i>NM</i>		
	Country: <i>USA</i>	Zip Code: <i>87185-5400</i>	Phone Number: <i>505-845-6036</i>
5. Facility Existence Date (See instructions on page 24)	Facility Existence Date (mm/dd/yyyy): <i>11/19/1980</i>		
6. Other Environmental Permits (See instructions on page 24) <i>See Appendix A</i>			
<b>A. Permit Type</b>	<b>B. Permit Number</b>		<b>C. Description</b>
7. Nature of Business (Provide a brief description; see instructions on page 24)			
<p><i>Sandia National Laboratories/New Mexico is a multi-program research and Development (R&amp;D) laboratory of the U.S. Department of Energy. Missions include R&amp;D related to nuclear weapons, energy, and other programs of national interest.</i></p>			

**8. Process Codes and Design Capacities (See instructions on page 24) – Enter information in the Sections on Form Page 3.**

**A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Fifteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), enter the process information in Item 9 (including a description).**

**B. PROCESS DESIGN CAPACITY- For each code entered in Section A, enter the capacity of the process.**

- 1. AMOUNT - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.**
- 2. UNIT OF MEASURE - For each amount entered in Section B(1), enter the code in Section B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.**

**C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.**

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
<u>Disposal:</u>			<u>Treatment (continued)</u>		
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	Cement Kiln	For T81-T93:
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime Kiln	
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour ; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure Listed Below	T86	Blast Furnace	
<u>Storage:</u>			T87	Smelting, Melting, or Refining Furnace	Hour; Liters Per Hour; Kilograms Per Hour; or Million Btu Per Hour
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide Chloride Oxidation Reactor	
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T89	Methane Reforming Furnace	
S03	Waste Pile	Cubic Yards or Cubic Meters	T90	Pulping Liquor Recovery Furnace	
S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T91	Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid	
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards	T92	Halogen Acid Furnaces	
S06	Containment Building Storage	Cubic Yards or Cubic Meters	T93	Other Industrial Furnaces Listed In 40 CFR §260.10	
S99	Other Storage	Any Unit of Measure Listed Below	T94	Containment Building –Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
<u>Treatment:</u>			<u>Miscellaneous (Subpart X)</u>		
T01	Tank Treatment	Gallons Per Day; Liters Per Day	X01	Open Burning/Open Detonation	Any Unit of Measure in Code Table Below
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day	X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour	X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour ; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour	X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons .....	G	Short Tons Per Hour.....	D	Cubic Yards.....	Y
Gallons Per Hour.....	E	Metric Tons Per Hour .....	W	Cubic Meters .....	C
Gallons Per Day .....	U	Short Tons Per Day.....	N	Acres .....	B
Liters.....	L	Metric Tons Per Day .....	S	Acre-feet .....	A
Liters Per Hour .....	H	Pounds Per Hour .....	J	Hectares .....	Q
Liters Per Day .....	V	Kilograms Per Hour .....	R	Hectare-meter.....	F
		Million BTU Per Hour .....	X	BTU Per Hour .....	I

**8. Process Codes and Design Capacities (Continued) See Appendix B**

**EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons**

Line Number	A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	For Official Use Only
				(1) Amount (Specify)	(2) Unit of Measure (Enter code)		
X 1	S	0	2	533.788	G	001	
1	S	0	1	409,786.0	G	008	
2	T	0	4	945.0	U	006	
3	T	0	4	52.0	J	004	
4							
5	X	0	1	20.8	G	001	
6	S	9	9	31,800.0	Y	001	

**NOTE: If you need to list more than 15 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9.**

**9. Other Processes (See instructions on page 25 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes)**

Line Number (Enter #s in sequence with Item 8)	A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY		C. Process Total Number of Units	D. Description of Process
				(1) Amount (Specify)	(2) Unit of Measure (Enter code)		
X 2	T	0	4	100.000	U	001	<b>In-situ Vitrification</b>
2	T	0	4	120.0	U	002	Chemical Deactivation, gallons per day
2	T	0	4	895.0	U	002	Macroencapsulation, gallons per day (volume equivalent)
2	T	0	4	605.0	U	002	Stabilization, gallons per day
3	T	0	4	10.0	J	001	Thermal Deactivation, pounds per hour
3	T	0	4	40.0	J	002	Physical Treatment, pounds per hour
3	T	0	4	2.0	J	001	Amalgamation, pounds per hour
6	S	9	9	31,800.0	Y	001	Closed Containment Cell, Corrective Action Management Unit, cubic yards

**10. Description of Hazardous Wastes (See instructions on page 25) – Enter information in the Sections on Form Page 5.**

- A. EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY** - For each listed waste entered in Section A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Section A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE** - For each quantity entered in Section B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

**D. PROCESSES**

**1. PROCESS CODES:**

*For listed hazardous waste:* For each listed hazardous waste entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose all the listed hazardous wastes.

*For non-listed hazardous waste:* For each characteristic or toxic contaminant entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

**NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:**

1. Enter the first two as described above.
2. Enter "000" in the extreme right box of Item 10.D(1).
3. Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E.

**2. PROCESS DESCRIPTION:** If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).

**NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER** - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in Section A. On the same line complete Sections B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In Section A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Section D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

**EXAMPLE FOR COMPLETING Item 10** (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity Of Waste	C. Unit of Measure (Enter Code)	D. PROCESSES	
				(1) PROCESS CODES (Enter Code)	(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X-1	K054	900	P	T03 D80	
X-2	D002	400	P	T03 D80	
X-3	D001	100	P	T03 D80	
X-4	D002				Included With Above

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	P001	125	K	S01			
2	P002	110	K	S01			
3	P003	110	K	S01			
4	P004	110	K	S01			
5	P005	125	K	S01			
6	P006	110	K	S01			
7	P007	110	K	S01			
8	P008	110	K	S01			
9	P009	110	K	S01			
10	P010	110	K	S01			
11	P011	125	K	S01			
12	P012	110	K	S01			
13	P013	110	K	S01			
14	P014	110	K	S01			
15	P015	110	K	S01			
16	P016	110	K	S01			
17	P017	110	K	S01			
18	P018	110	K	S01			
19	P020	110	K	S01			
20	P021	110	K	S01			
21	P022	200	K	S01			
22	P023	110	K	S01			
23	P024	110	K	S01			
24	P026	110	K	S01			
25	P027	110	K	S01			
26	P028	110	K	S01			
27	P029	1,600	K	S01			
28	P030	350	K	S01			
29	P031	110	K	S01			
30	P033	110	K	S01			
31	P034	110	K	S01			
32	P036	110	K	S01			
33	P037	110	K	S01			
34	P038	110	K	S01			
35	P039	110	K	S01			
36	P040	110	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
37	P041	110	K	S01			
38	P042	110	K	S01			
39	P043	110	K	S01			
40	P044	110	K	S01			
41	P045	110	K	S01			
42	P046	110	K	S01			
43	P047	110	K	S01			
44	P048	110	K	S01			
45	P049	110	K	S01			
46	P050	110	K	S01			
47	P051	110	K	S01			
48	P054	110	K	S01			
49	P056	110	K	S01			
50	P057	110	K	S01			
51	P058	110	K	S01			
52	P059	110	K	S01			
53	P060	110	K	S01			
54	P062	110	K	S01			
55	P063	110	K	S01			
56	P064	250	K	S01			
57	P065	110	K	S01			
58	P066	110	K	S01			
59	P067	110	K	S01			
60	P068	110	K	S01			
61	P069	110	K	S01			
62	P070	110	K	S01			
63	P071	110	K	S01			
64	P072	110	K	S01			
65	P073	110	K	S01			
66	P074	110	K	S01			
67	P075	110	K	S01			
68	P076	110	K	S01			
69	P077	110	K	S01			
70	P078	130	K	S01			
71	P081	110	K	S01			
72	P082	110	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
73	P084	110	K	S01			
74	P085	110	K	S01			
75	P087	150	K	S01			
76	P088	110	K	S01			
77	P089	110	K	S01			
78	P092	110	K	S01			
79	P093	110	K	S01			
80	P094	110	K	S01			
81	P095	110	K	S01			
82	P096	110	K	S01			
83	P097	110	K	S01			
84	P098	150	K	S01	T04		chemical deactivation
85	P099	110	K	S01			
86	P101	110	K	S01			
87	P102	110	K	S01			
88	P103	110	K	S01			
89	P104	200	K	S01			
90	P105	110	K	S01			
91	P106	1100	K	S01			
92	P108	110	K	S01			
93	P109	110	K	S01			
94	P110	110	K	S01			
95	P111	110	K	S01			
96	P112	110	K	S01			
97	P113	150	K	S01			
98	P114	110	K	S01			
99	P115	110	K	S01			
100	P116	110	K	S01			
101	P118	110	K	S01			
102	P119	110	K	S01			
103	P120	125	K	S01			
104	P121	110	K	S01			
105	P122	110	K	S01			
106	P123	110	K	S01			
107	P127	110	K	S01			
108	P128	110	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
109	P185	110	K	S01			
110	P188	110	K	S01			
111	P189	110	K	S01			
112	P190	110	K	S01			
113	P191	110	K	S01			
114	P192	110	K	S01			
115	P194	110	K	S01			
116	P196	110	K	S01			
117	P197	110	K	S01			
118	P198	110	K	S01			
119	P199	110	K	S01			
120	P201	110	K	S01			
121	P202	110	K	S01			
122	P203	110	K	S01			
123	P204	110	K	S01			
124	P205	110	K	S01			
125	U001	110	K	S01			
126	U002	1,100	K	S01			
127	U003	350	K	S01			
128	U004	110	K	S01			
129	U005	110	K	S01			
130	U006	110	K	S01			
131	U007	110	K	S01			
132	U008	200	K	S01			
133	U009	110	K	S01			
134	U010	110	K	S01			
135	U011	110	K	S01			
136	U012	125	K	S01			
137	U014	110	K	S01			
138	U015	110	K	S01			
139	U016	110	K	S01			
140	U017	110	K	S01			
141	U018	110	K	S01			
142	U019	250	K	S01			
143	U020	110	K	S01			
144	U021	110	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
145	U022	110	K	S01			
146	U023	110	K	S01			
147	U024	110	K	S01			
148	U025	110	K	S01			
149	U026	110	K	S01			
150	U027	110	K	S01			
151	U028	5,100	K	S01			
152	U029	110	K	S01			
153	U030	110	K	S01			
154	U031	600	K	S01			
155	U032	600	K	S01			
156	U033	110	K	S01			
157	U034	110	K	S01			
158	U035	150	K	S01			
159	U036	600	K	S01			
160	U037	150	K	S01			
161	U038	110	K	S01			
162	U039	110	K	S01			
163	U041	110	K	S01			
164	U042	110	K	S01			
165	U043	110	K	S01			
166	U044	250	K	S01			
167	U045	125	K	S01			
168	U046	110	K	S01			
169	U047	110	K	S01			
170	U048	110	K	S01			
171	U049	110	K	S01			
172	U050	110	K	S01			
173	U051	175	K	S01			
174	U052	125	K	S01			
175	U053	110	K	S01			
176	U055	125	K	S01			
177	U056	350	K	S01			
178	U057	125	K	S01			
179	U058	110	K	S01			
180	U059	110	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
181	U060	110	K	S01			
182	U061	110	K	S01			
183	U062	110	K	S01			
184	U063	110	K	S01			
185	U064	110	K	S01			
186	U066	110	K	S01			
187	U067	125	K	S01			
188	U068	110	K	S01			
189	U069	200	K	S01			
190	U070	150	K	S01			
191	U071	110	K	S01			
192	U072	110	K	S01			
193	U073	110	K	S01			
194	U074	110	K	S01			
195	U075	300	K	S01			
196	U076	110	K	S01			
197	U077	300	K	S01			
198	U078	150	K	S01			
199	U079	150	K	S01			
200	U080	1,100	K	S01			
201	U081	110	K	S01			
202	U082	110	K	S01			
203	U083	110	K	S01			
204	U084	110	K	S01			
205	U085	110	K	S01			
206	U086	110	K	S01			
207	U087	110	K	S01			
208	U088	110	K	S01			
209	U089	110	K	S01			
210	U090	110	K	S01			
211	U091	110	K	S01			
212	U092	110	K	S01			
213	U093	110	K	S01			
214	U094	110	K	S01			
215	U095	110	K	S01			
216	U096	110	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)								
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)				
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))	
217	U097	110	K	S01				
218	U098	110	K	S01				
219	U099	110	K	S01				
220	U101	110	K	S01				
221	U102	120	K	S01	T04			stabilization
222	U103	110	K	S01				
223	U105	110	K	S01	T04			physical treatment
224	U106	110	K	S01				
225	U107	150	K	S01	T04			stabilization
226	U108	150	K	S01				
227	U109	110	K	S01				
228	U110	110	K	S01				
229	U111	110	K	S01				
230	U112	1,100	K	S01				
231	U113	110	K	S01				
232	U114	110	K	S01				
233	U115	110	K	S01				
234	U116	110	K	S01				
235	U117	130	K	S01				
236	U118	110	K	S01				
237	U119	110	K	S01				
238	U120	110	K	S01				
239	U121	300	K	S01				
240	U122	600	K	S01				
241	U123	135	K	S01				
242	U124	110	K	S01				
243	U125	110	K	S01				
244	U126	110	K	S01				
245	U127	110	K	S01				
246	U128	110	K	S01				
247	U129	110	K	S01				
248	U130	110	K	S01				
249	U131	150	K	S01				
250	U132	125	K	S01				
251	U133	350	K	S01				
252	U134	2,100	K	S01				

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
253	U135	175	K	S01			
254	U136	110	K	S01			
255	U137	110	K	S01			
256	U138	110	K	S01			
257	U140	150	K	S01			
258	U141	110	K	S01			
259	U142	110	K	S01			
260	U143	110	K	S01			
261	U144	400	K	S01			
262	U145	110	K	S01			
263	U146	110	K	S01			
264	U147	200	K	S01			
265	U148	110	K	S01			
266	U149	110	K	S01			
267	U150	110	K	S01			
268	U151	1,400	K	S01	T04		amalgamation, physical treatment
269	U152	110	K	S01			
270	U153	110	K	S01			
271	U154	600	K	S01			
272	U155	110	K	S01			
273	U156	110	K	S01			
274	U157	110	K	S01			
275	U158	125	K	S01			
276	U159	225	K	S01			
277	U160	150	K	S01			
278	U161	150	K	S01			
279	U162	200	K	S01			
280	U163	110	K	S01			
281	U164	110	K	S01			
282	U165	1,100	K	S01			
283	U166	110	K	S01			
284	U167	110	K	S01			
285	U168	110	K	S01			
286	U169	300	K	S01			
287	U170	110	K	S01			
288	U171	125	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
289	U172	110	K	S01			
290	U173	110	K	S01			
291	U174	110	K	S01			
292	U176	110	K	S01			
293	U177	150	K	S01			
294	U178	150	K	S01			
295	U179	200	K	S01			
296	U180	200	K	S01			
297	U181	150	K	S01			
298	U182	125	K	S01			
299	U183	125	K	S01			
300	U184	125	K	S01			
301	U185	125	K	S01			
302	U186	150	K	S01			
303	U187	110	K	S01			
304	U188	125	K	S01			
305	U189	110	K	S01			
306	U190	110	K	S01			
307	U191	110	K	S01			
308	U192	110	K	S01			
309	U193	110	K	S01			
310	U194	110	K	S01			
311	U196	125	K	S01			
312	U197	110	K	S01			
313	U200	110	K	S01			
314	U201	125	K	S01			
315	U202	110	K	S01			
316	U203	110	K	S01			
317	U204	125	K	S01			
318	U205	110	K	S01			
319	U206	110	K	S01			
320	U207	110	K	S01			
321	U208	110	K	S01			
322	U209	120	K	S01			
323	U210	125	K	S01			
324	U211	200	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
325	U213	450	K	S01			
326	U214	110	K	S01			
327	U215	110	K	S01			
328	U216	110	K	S01			
329	U217	110	K	S01			
330	U218	110	K	S01			
331	U219	125	K	S01			
332	U220	600	K	S01			
333	U221	110	K	S01			
334	U222	110	K	S01			
335	U223	1,100	K	S01			
336	U225	150	K	S01			
337	U226	4,100	K	S01			
338	U227	1,600	K	S01			
339	U228	1,100	K	S01			
340	U234	110	K	S01	T04		physical treatment
341	U235	110	K	S01			
342	U236	110	K	S01			
343	U237	110	K	S01			
344	U238	110	K	S01			
345	U239	350	K	S01			
346	U240	110	K	S01			
347	U243	110	K	S01			
348	U244	110	K	S01			
349	U246	110	K	S01			
350	U247	110	K	S01			
351	U248	110	K	S01			
352	U249	110	K	S01			
353	U271	110	K	S01			
354	U278	110	K	S01			
355	U279	110	K	S01			
356	U280	110	K	S01			
357	U328	110	K	S01			
358	U353	110	K	S01			
359	U359	200	K	S01			
360	U364	110	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
361	U367	110	K	S01			
362	U372	110	K	S01			
363	U373	110	K	S01			
364	U387	110	K	S01			
365	U389	110	K	S01			
366	U394	110	K	S01			
367	U395	110	K	S01			
368	U404	110	K	S01			
369	U409	110	K	S01			
370	U410	110	K	S01			
371	U411	110	K	S01			
372	F001	265,000	K	S01	T04		macroencapsulation, stabilization, physical treatment
373	F002	272,000	K	S01	T04		macroencapsulation, stabilization, physical treatment
374	F003	275,000	K	S01	T04	X01	thermal treatment, macroencapsulation, stabilization, physical treatment
375	F004	1,500	K	S01	T04		macroencapsulation, stabilization, physical treatment
376	F005	262,000	K	S01	T04	X01	thermal treatment, macroencapsulation, stabilization, physical treatment
377	F006	200	K	S01			
378	F007	6,500	K	S01			
379	F008	200	K	S01			
380	F009	200	K	S01			
381	F010	200	K	S01			
382	F011	200	K	S01			
383	F012	100	K	S01			
384	F019	100	K	S01			
385	F020	100	K	S01			
386	F021	100	K	S01			
387	F022	100	K	S01			
388	F023	100	K	S01			
389	F024	100	K	S01			
390	F025	100	K	S01			
391	F026	100	K	S01			
392	F027	150	K	S01			
393	F028	100	K	S01			

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)							
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)			
				(1) PROCESS CODES (Enter Code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
394	F032	100	K	S01			
395	F034	100	K	S01			
396	F035	100	K	S01			
397	F037	100	K	S01			
398	F038	100	K	S01			
399	F039	250,000	K	S01			
400	D001	125,500	K	S01	T04	X01	thermal treatment, thermal deactivation, chemical deactivation, physical treatment
401	D002	58,000	K	S01	T04		chemical deactivation, physical treatment
402	D003	41,000	K	S01	T04	X01	thermal treatment, thermal deactivation, chemical deactivation, physical treatment
403	D004	39,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
404	D005	48,000	K	S01	T04		thermal deactivation, chemical deactivation, stabilization, macroencapsulation, physical treatment
405	D006	105,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
406	D007	66,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
407	D008	125,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
408	D009	40,000	K	S01	T04		stabilization, macroencapsulation, amalgamation, physical treatment
409	D010	10,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
410	D011	45,000	K	S01	T04		stabilization, macroencapsulation, physical treatment
411	D012	150	K	S01			
412	D013	150	K	S01			
413	D014	150	K	S01			
414	D015	150	K	S01			
415	D016	150	K	S01			
416	D017	150	K	S01			
417	D018	32,000	K	S01	T04		physical treatment
418	D019	25,200	K	S01	T04		physical treatment
419	D020	25,050	K	S01	T04		physical treatment
420	D021	25,100	K	S01	T04		physical treatment
421	D022	26,000	K	S01	T04		physical treatment
422	D023	25,050	K	S01	T04		physical treatment
423	D024	25,050	K	S01	T04		physical treatment
424	D025	25,050	K	S01	T04		physical treatment

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)								
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)				
				(1) PROCESS CODES (Enter Code)				(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
425	D026	25,100	K	S01	T04			physical treatment
426	D027	25,100	K	S01	T04			physical treatment
427	D028	26,000	K	S01	T04			physical treatment
428	D029	25,100	K	S01	T04			physical treatment
429	D030	25,500	K	S01	T04			physical treatment
430	D031	25,050	K	S01	T04			physical treatment
431	D032	25,100	K	S01	T04			physical treatment
432	D033	25,100	K	S01	T04			physical treatment
433	D034	25,500	K	S01	T04			physical treatment
434	D035	40,000	K	S01	T04			physical treatment
435	D036	25,100	K	S01	T04			physical treatment
436	D037	25,100	K	S01	T04			physical treatment
437	D038	25,100	K	S01	T04			physical treatment
438	D039	27,000	K	S01	T04			physical treatment
439	D040	30,000	K	S01	T04			physical treatment
440	D041	25,050	K	S01	T04			physical treatment
441	D042	25,050	K	S01	T04			physical treatment
442	D043	25,050	K	S01	T04			physical treatment
443	D004	31,800	Y	S99				corrective action containment cell
	D005							included with above
	D006							included with above
	D007							included with above
	D008							included with above
	D009							included with above
	D010							included with above
	D011							included with above
	D021							included with above
	D023							included with above
	D027							included with above
	D028							included with above
	D032							included with above
	D033							included with above
	D034							included with above
	D035							included with above
	D036							included with above
	D037							included with above

10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5a, etc.)								
Line Number	A. EPA Hazardous Waste No. (Enter code) (See Note 1)	B. Estimated Annual Quantity of Waste (See Notes 2 and 3)	C. Unit of Measure (Enter Code)	D. PROCESSES (See Notes 4 and 5)				(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
				(1) PROCESS CODES (Enter Code)				
	D039							included with above
	D040							included with above
	D041							included with above
	D042							included with above
	F001							included with above
	F002							included with above
	F003							included with above
	F004							included with above
	F005							included with above

NOTE 1 (applicable to Lines 1-442): Waste types and volumes are highly variable due to the large number of one-time activities and the nature of the research and development activities at SNL. For clarity, each waste number is listed only once. Individual wastes may have more than one number.

NOTE 2 (applicable to lines 1-442): The estimated annual quantity of waste with a particular waste number includes the full quantity of each waste with that number, even if the waste also has other applicable numbers. For example, 10 kg of waste F001 F002 and 10 kg of waste F002 would be listed on this form as 10 kg of F001 and 20 kg of F002.

NOTE 3 (applicable to lines 1-442): The estimated total annual quantity of waste with any and all hazardous waste numbers is 635,000 kg.

NOTE 4 (applicable to lines 1-442): The treatment methods listed for each hazardous waste number are the methods that are appropriate for that waste number. Wastes with multiple numbers may undergo one or more types of treatment at SNL/NM for some or all of the characteristics and/or constituents. Wastes are then sent to off-site TSDFs for further treatment as needed before disposal. For example, a liquid waste containing explosives, silver, acetone, and other constituents (numbers D001, D003, F003, D011, and potentially F005) is generated by research activities. The waste is treated on site (at the Thermal Treatment Facility) to deactivate the explosive and render it nonignitable. The quantity of waste is included in the quantities shown in Section C for D001, D003, F003, D011, and F005. Thermal treatment is listed as a process in Section D for D001, D003, F003, and F005 because the on-site treatment addresses these hazardous waste constituents and characteristics. Thermal treatment is not listed as a process in Section D for D011 because the silver in the waste is not treated when the waste is subjected to thermal treatment. The silver-containing residue from the thermal treatment process is sent to an off-site TSDF for further treatment before disposal.

NOTE 5 (applicable to Line 443 only): The Corrective Action Management Unit containment cell holds remediation wastes generated during corrective action at SNL/NM. The cell has been closed and is undergoing post-closure care.

<p><b>11. Map (See instructions on pages 25 and 26)</b></p>	<p><i>See Figure B-1</i></p>
<p><i>Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.</i></p>	
<p><b>12. Facility Drawing (See instructions on Page 26)</b></p>	<p><i>See Appendix B</i></p>
<p><i>All existing facilities must include a scale drawing of the facility (see instructions for more detail).</i></p>	
<p><b>13. Photographs (See instructions on page 26)</b></p>	<p><i>See Appendix B</i></p>
<p><i>All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).</i></p>	
<p><b>14. Comments (See instructions on page 26)</b></p>	
<p> </p>	

**APPENDIX A**

**ACTIVE ENVIRONMENTAL PERMITS**

**This page intentionally left blank.**

**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 1/31/07**

Permit Type and/or Facility Name	Permit Number	Issue Date	Expiration Date	Regulatory Agency
<b>SEWER WASTEWATER</b>				
General	2069 A-6	07/01/03	12/31/07	COA
General	2069 F-6	08/01/03	01/31/08	COA
Microelectronics Development Laboratory	2069 G-6	10/12/05	8/31/09	COA
General	2069 I-5	02/01/04	07/31/08	COA
General	2069 K-5	11/17/04	12/31/08	COA
Center for Integrated Nanotechnology	2238A	01/05/07	04/30/11	COA
<b>SURFACE DISCHARGE</b>				
Pulsed Power Development Facilities (Discharge Plan)	DP-530	09/21/01	09/21/06 <sup>a</sup>	NMED
<b>STORM WATER</b>				
National Pollutant Discharge Elimination System Multi-Sector General Permit	NMR05A961	02/01	10/30/05 <sup>a</sup>	EPA
<b>NPDES CONSTRUCTION PERMITS</b>				
Microsystems and Engineering Sciences Applications Facility	NM0002376	01/28/02	07/31/09	EPA
20 <sup>th</sup> Street Stockpile Area	NMR 15E764	04/29/05	03/30/07	EPA
TA-1 Waterline Replacement Phase III	NMR 15EO38	12/16/05	03/28/07	EPA
46kV Feeder #1 Replacement and Switching Station	NMR 15EO48	12/21/05	10/30/07	EPA
New Master Substation Utility Sub 42	NMR 15EO73	12/23/05	05/30/07	EPA
Infrastructure Upgrades TA-II	NMR 15EW77	04/11/06	10/30/06 <sup>b</sup>	EPA
Water Line Rehabilitation – WSR Phase II	NMR 15EY34	05/04/06	05/30/07	EPA
Mixed Waste Landfill Cover	NMR15EZ15	05/18/06	06/19/07	EPA
Building 806 Demolition	NMR15EW63	04/10/06	10/30/06 <sup>b</sup>	EPA
TA-III Concrete Recycle/Borrow	NMR15F015	05/31/06	07/01/08	EPA
16" Chilled Water Line Installation	NMR15F083	06/11/06	12/30/06 <sup>b</sup>	EPA
TA-1 Limited Area Fence Expansion	NMR15F452	07/31/06	12/15/06 <sup>b</sup>	EPA
Hardin & 20 <sup>th</sup> Intersection	NMR15F829	09/27/06	03/30/07	EPA
<b>NPDES CONSTRUCTION PERMIT WAIVERS</b>				
Building 800 Parking Lot Renovation	NMLEW 0454	11/15/06	07/30/07	EPA

**NOTE:**

- <sup>a</sup> Applied for permit or permit renewal, not yet received. Existing permit continues.
- <sup>b</sup> Existing permit remains active.
- COA = City of Albuquerque
- NMED = New Mexico Environment Department
- EPA = U.S. Environmental Protection Agency
- UST Bur. = Underground Storage Tank Bureau, NMED

**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 1/31/07 (Continued)**

Permit Type and/or Facility Name	Permit Number	Issue Date	Expiration Date	Regulatory Agency
<b>ECOLOGICAL</b>				
New Mexico Department of Game and Fish, for Scientific/Educational Purposes, Authorization for Taking of Protected Wildlife	b	Pending <sup>a</sup>	12/31/07	New Mexico Department of Game and Fish
Fish and Wildlife Special Purpose Salvage Permit (for migratory birds)	b	Pending <sup>a</sup>	12/31/07	U.S. Fish and Wildlife Service
<b>UNDERGROUND STORAGE TANKS</b>				
20,000 gal oil storage tank	1485	07/01/06	06/30/07	NMED
20,000 gal oil storage tank	1486	07/01/06	06/30/07	NMED
<b>ABOVEGROUND STORAGE TANKS</b>				
10,000 gal storage tank	1487	07/01/06	06/30/07	NMED
10,000 gal storage tank	1487	07/01/06	06/30/07	NMED
10,000 gal storage tank	1487	07/01/06	06/30/07	NMED
1,500 gal storage tank	1487	07/01/06	06/30/07	NMED
2,000 gal storage tank	1487	07/01/06	06/30/07	NMED
5,000 gal storage tank	1487	07/01/06	06/30/07	NMED
5,500 gal storage tank	1487	07/01/06	06/30/07	NMED

**NOTE:**

- <sup>a</sup> Applied for permit or permit renewal; not yet received. Existing permit continues.
  - <sup>b</sup> Permit number not issued yet.
- NMED = New Mexico Environment Department

**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 1/31/07 (Continued)**

<b>Permit Type and/or Facility Name</b>	<b>Permit Number</b>	<b>Issue Date</b>	<b>Expiration Date</b>	<b>Regulatory Agency</b>
<b>RCRA</b>				
RCRA Part B Operating Permit for the Hazardous Waste Management Facility Module I - General Permit Conditions Module II - General Facility Conditions Module III - Containers	NM5890110518-1	08/06/92	08/06/02 <sup>c</sup>	NMED
RCRA Part B Operating Permit Module IV - Hazardous and Solid Waste Amendments Portion for Solid Waste Management Units	NM5890110518-1	08/26/93	09/20/02 <sup>c</sup>	EPA/NMED
RCRA Part B Operating Permit for the Thermal Treatment Facility Module I - General Permit Conditions Module II - General Facility Conditions Module III - Containers	NM5890110518-2	12/04/94	12/04/04 <sup>c</sup>	NMED
General Part A Permit Request Storage and/or treatment of the hazardous component of mixed waste at ten waste management Units.	NM5890110518	First submitted 8/90 Rev. 9, 10/25/05	Pending Review (No expiration date)	NMED
Class III Permit Modification for the Management of Hazardous Remediation Waste in the Corrective Action Management Unit (CAMU), Technical Area III	NM5890110518	09/25/97	09/20/02 <sup>c</sup> 07/03/03 <sup>d</sup>	NMED
Comprehensive Part B Permit Request Storage and/or treatment of RCRA-regulated waste at nine waste management Units.	NM5890110518	02/06/02 <sup>c</sup>	Pending Review (No expiration date)	NMED
Post-Closure Care Plan and Application for Part B Permit Chemical Waste Landfill, Technical Area III	NM5890110518	09/05	Pending Review (No expiration date)	NMED
<b>TSCA</b>				
Risk-Based Approval Request under 40 CFR 761.61(c); Risk-Based Method for Management of PCB Materials; Chemical Waste Landfill and CAMU		06/26/02	No expiration date <sup>d</sup>	EPA

**NOTE:**

- <sup>a</sup> Applied for permit or permit renewal; not yet received. Existing permit continues.
  - <sup>c</sup> Submitted application for renewal on 02/06/2002, undergoing NMED review. Application has been revised in response to NMED comments.
  - <sup>d</sup> CAMU permit modification request for post-closure care submitted on 07/03/03, undergoing NMED review.
- EPA = U.S. Environmental Protection Agency  
NMED = New Mexico Environment Department  
RCRA = Resource Conservation and Recovery Act  
TSCA = Toxic Substances Control Act

**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 1/31/07 (Continued)**

<b>Permit Type and/or Facility Name</b>	<b>Permit Number</b>	<b>Issue Date</b>	<b>Expiration Date</b>	<b>Regulatory Agency</b>
<b>AIR (Open Burn Permits)</b>				
Igloo Building (9830)	07-0007	01/01/07	12/31/07	COA
Thermal Treatment Facility (copy of permit must be submitted to NMED within 30 days of receipt)	07-0001	01/01/07	12/31/07	COA
Explosive Applications	06-0080	01/01/07	12/31/07	COA
Burn Site (Large Pool Fire Tests)	07-0003	01/01/07	12/31/07	COA
Burn Site/Sled Track (Wood Crib Fire Tests)	07-0012	01/01/07	12/31/07	COA
Propellant Applications	06-0081	01/01/07	12/31/07	COA
Explosive Testing (9940)	07-0010	01/01/07	12/31/07	COA
Thermite Applications	06-0082	01/1/07	12/31/07	COA
Panel Box Tests	06-0084	01/01/07	12/31/07	COA
Explosives Testing (Thunder Range)	<sup>b</sup>	Pending	Pending	COA
<b>AIR (Permits &amp; Registrations)</b>				
Document Disintegrator Facility	144-M1	09/28/06	Biennial update	COA
Fire Laboratory used for the Authentication of Modeling and Experiments	196	05/19/88	Registration <sup>†</sup>	COA
Neutron Generator Facility	374- M1	07/17/98	Biennial update	COA
Standby diesel generators (four)	402	05/07/96	Biennial update	COA
Radioactive & Mixed Waste Management Facility	415- M1	05/10/97	Biennial update	COA
Explosive Component Facility	547	05/21/97	Biennial update	COA
Air Quality Emission Sources	515	Pending <sup>a</sup>	Pending	COA
Thermal Test Complex	1712	04/09/04	Biennial update	COA
Center for Integrated Nanotechnology	1725	10/11/04	Biennial update	COA
Microsystems and Engineering Sciences Applications	1820	09/26/06	Biennial update	COA
Weapons Integration Facility	1828	09/28/06	Biennial update	COA
Heating System Modernization	1830	Pending <sup>a</sup>	Biennial update	COA
Advanced Manufacturing Prototype Facility	1406	11/06/00	Registration <sup>†</sup>	COA
Microelectronics Development Laboratory	1678-M1	12/14/04	Biennial update	COA
Emergency Generator	924	05/05/98	Biennial update	COA

**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 1/31/07 (Continued)**

<b>Permit Type and/or Facility Name</b>	<b>Permit Number</b>	<b>Issue Date</b>	<b>Expiration Date</b>	<b>Regulatory Agency</b>
Processing and Environmental Technology Laboratory	925-M1	03/05/01	Biennial update	COA
Processing and Environmental Technology Laboratory	936	05/05/04	Registration †	COA
Steam Plant	1705	11/10/04	Biennial update	COA
Advanced Materials Laboratory Hazardous Air Pollutant (HAP)	b	Pending <sup>a</sup>	Registration †	COA
Building 869 HAP	b	Pending <sup>a</sup>	Registration †	COA
Sled Track HAP	b	Pending <sup>a</sup>	Registration †	COA
Building 9940 HAP	b	Pending <sup>a</sup>	Registration †	COA
Microsystems and Engineering Sciences Applications HAP	b	Pending <sup>a</sup>	Registration †	COA
Advanced Manufacturing Processes Laboratory HAP	b	Pending <sup>a</sup>	Registration †	COA
Miscellaneous HAP	b	Pending <sup>a</sup>	Registration †	COA
Building 895 HAP	b	Pending <sup>a</sup>	Registration †	COA
Sitewide Generator	b	Pending <sup>a</sup>	Registration †	COA

**NOTE:**

- <sup>a</sup> Applied for permit or permit renewal; not yet received. Existing permit continues.
- <sup>b</sup> Permit number not issued yet.
- † Registration = Certificate, no permit required.
- COA = City of Albuquerque

**Sandia National Laboratories/New Mexico  
Active Environmental Permits as of 1/31/07 (Concluded)**

<b>Permit Type and/or Facility Name</b>	<b>Permit Number</b>	<b>Issue Date</b>	<b>Expiration Date</b>	<b>Regulatory Agency</b>
<b>FUGITIVE DUST CONTROL AND DEMOLITION</b>				
Borrow Site Cell No. 1	10-348-2925	08/18/04	08/18/09	COA
Moving Vehicle Test	10-348-3305	10/17/05	10/17/10	COA
Building 806 Demolition	10-210-3442	04/07/06	04/07/07	COA
Mixed Waste Landfill Cover	10-411-3440	04/05/06	04/05/07	COA
46 KV Feeder	10-555-3450	04/20/06	04/20/07	COA
20 <sup>th</sup> Street Extension	10-10-3537	08/02/06	08/02/07	COA
16-inch Chilled Water	10-10-3538	08/02/06	08/02/07	COA
Waterline Replacement	10-149-3610	11/01/06	11/01/07	COA
Building 770	10-344-3390	02/02/06	03/15/07	COA
Building 9990 Comm. System	10-430-3426	03/23/06	03/23/07	COA
Building 880	10-564-3477	05/25/06	05/25/07	COA
Building 9940 Programmatic	P05-0057	11/10/05	11/10/10	COA
Thunder Range	P06-0004	05/02/06	05/02/11	COA

**NOTE:**

COA = City of Albuquerque

**APPENDIX B**

**LOCATION-SPECIFIC PROCESS CODE LISTINGS,  
DESIGN CAPACITIES, ANNUAL QUANTITIES, FIGURES, AND PHOTOGRAPHS**

**This page left intentionally blank.**

Document: SNL/NM General Part A, Appendix B  
Revision No.: 8.0  
Date: February 2005

**LOCATION-SPECIFIC PROCESS CODE LISTINGS,  
DESIGN CAPACITIES, AND ANNUAL QUANTITIES**

**This page left intentionally blank.**

## Explanation of Process Code Listings and Design Capacities at the Hazardous Waste Management Facility

Description	Capacity	Associated Structure/Building
<b>Line 1 S01 Container Storage<sup>a</sup></b>		
Container storage area	59,950 gallons	Building 958
Container storage area	7,590 gallons	Building 959
Container storage area	5,000 gallons	Modular Storage Building 958B
Container storage area	5,000 gallons	Modular Storage Building 958C
<b>Total S01</b>	<b>7,7540 gallons</b>	

See footnotes at end of section

**Explanation of Process Code Listings, Design Capacities, and  
Annual Quantities at the Thermal Treatment Facility**

Description	Capacity	Annual Quantity	Associated Structure/Building
<b>Line 5 X01 Treatment: Thermal <sup>b</sup></b>			
Thermal treatment of explosive waste	20.8 gallons/batch 190 pounds/batch	9,500 pounds/year	South of Building 6715
<b>Total X01</b>	<b>20.8 gallons/batch 190 pounds/batch</b>	<b>9,500 pounds/year</b>	

See footnotes at end of section

**Explanation of Process Code Listings, Design Capacities, and  
Annual Quantities at the Radioactive and Mixed Waste  
Management Facility (RMWMF)**

<b>Description</b>	<b>Capacity</b>	<b>Associated Structure/Building</b>
<b>Line 1 S01 Container Storage <sup>a</sup></b>		
Container storage area	13,420 gallons	Building 6920
Container storage area	7,810 gallons	Building 6921
Container storage area	83,160 gallons	Building 6925
Container storage area	83,160 gallons	Building 6926
Container storage area	1,100 gallons	Modular Storage Building TP150
Container storage area	1,100 gallons	Modular Storage Building TP153
Container storage area	19,800 gallons	Asphalt area N, E, and W of Building 6920
<b>Total S01</b>	<b>209,550 gallons</b>	

See footnotes at end of section

**Explanation of Process Code Listings, Design Capacities, and  
Annual Quantities at the Radioactive and Mixed Waste  
Management Facility (RMWMF) (Continued)**

Description	Capacity	Annual Quantity	Associated Structure/Building
<b>Line 3 T04 Other Treatment (in containers)<sup>c, d, e</sup></b>			
Chemical deactivation	65 gallons/day	3,000 gallons/year	Building 6920, Building 6921
Macroencapsulation	840 gallons/day	6,000 gallons/year	Building 6920, Building 6921, Building 6925
Stabilization	550 gallons/day	6,000 gallons/year	Building 6920, Building 6921
Thermal deactivation	10 pounds/hour	150 pounds/year	Building 6920, Building 6921
Amalgamation	2 pounds/hour	100 pounds/year	Building 6920, Building 6921
<b>Total T04</b>	<b>1,455 gallons/day and 12 pounds/hour</b>	<b>15,000 gallons/year and 250 pounds/year</b>	

Description	Capacity	Annual Quantity	Associated Structure/Building
<b>Line 3 T04 Other Treatment (physical treatment)<sup>f</sup></b>			
Physical treatment	20 pounds/hour	4,000 pounds/year	Building 6920, Building 6921
<b>Total T04</b>	<b>20 pounds/hour</b>	<b>4,000 pounds/year</b>	

See footnotes at end of section

**Explanation of Process Code Listings, Design Capacities, and  
Annual Quantities at the Auxiliary Hot Cell Facility**

Description	Capacity	Associated Structure/Building
<b>Line 1 S01 Container Storage <sup>a</sup></b>		
Container storage area	3,520 gallons	Building 6597
Storage silos	1,456 gallons	Building 6597
Hot cell	900 gallons	Building 6597
Fume hood	110 gallons (capacity included in work area)	Building 6597
Work area	2,200 gallons	Building 6597
<b>Total S01</b>	<b>6,976 gallons</b>	

Description	Capacity	Annual Quantity	Associated Structure/Building
<b>Line 2 T04 Other Treatment (in containers) <sup>c, d</sup></b>			
Chemical deactivation	55 gallons/day	2,000 gallons/ year	Building 6597
Macroencapsulation	55 gallons/day	6,000 gallons/year	Building 6597
Stabilization	55 gallons/day	2,000 gallons/year	Building 6597
<b>Total T04</b>	<b>165 gallons/day</b>	<b>10,000 gallons/year</b>	

Description	Capacity	Annual Quantity	Associated Structure/Building
<b>Line 3 T04 Other Treatment (physical treatment) <sup>f</sup></b>			
Physical treatment	20 pounds/hour	4,000 pounds/year	Building 6597
<b>Total T04</b>	<b>20 pounds/hour</b>	<b>4,000 pounds/year</b>	

See footnotes at end of section

## Explanation of Process Code Listings and Design Capacities at the Manzano Storage Bunkers

Description	Capacity	Associated Structure/Building
<b>Line 1 S01 Container Storage<sup>a</sup></b>		
Container storage area	25,080 gallons	Type B Bunker Bunker 37034
Container storage area	35,200 gallons	Type C Bunker Bunker 37118
Container storage area	55,440 gallons	Type D Bunkers Bunkers 37045, 37055, and 37057
<b>Total S01</b>	<b>115,720 gallons</b>	

See footnotes at end of section

## Explanation of Process Code Listings and Design Capacities for the Corrective Action Management Unit

Description	Capacity	Associated Structure/Building
<b>Line 6 S99 Containment</b> <sup>9</sup>		
Closed Containment Cell	31,800 cubic yards	Corrective Action Management Unit Containment Cell
<b>Total S99</b>	<b>31,800 cubic yards</b>	

See footnotes at end of section

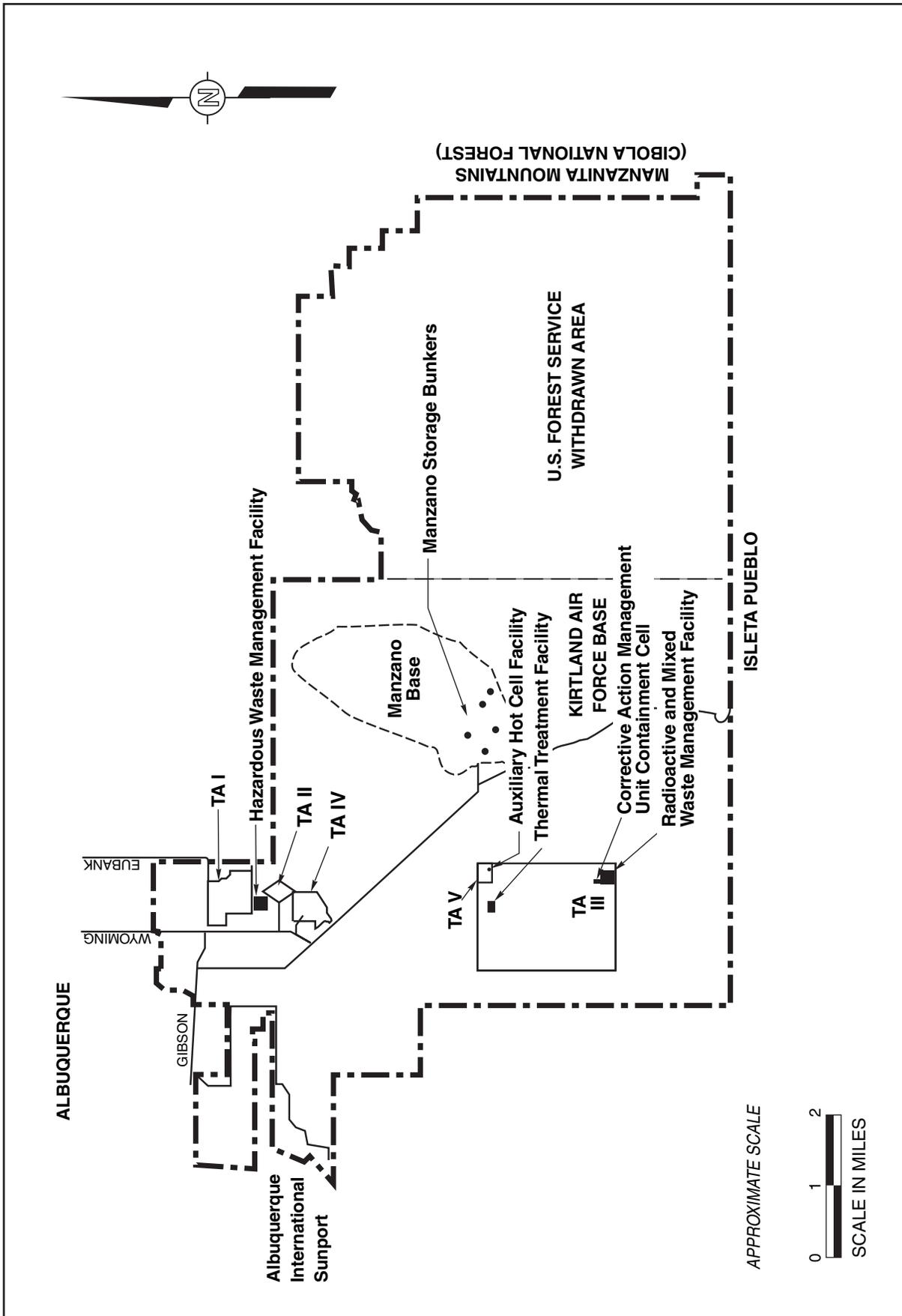
## Footnotes for Process Codes and Capacities

- <sup>a</sup> Wastes are stored in a variety of containers, including large boxes, 55-gallon drums, and smaller containers.
- <sup>b</sup> The quantity of waste undergoing treatment at any one time cannot exceed the 20.8-gallon capacity of the burn pan.
- <sup>c</sup> Wastes are treated by stabilization, chemical deactivation, and amalgamation in a variety of containers, including 55-gallon drums, 5-gallon buckets, laboratory glassware, and other containers as appropriate for the process.
- <sup>d</sup> Wastes are placed in suitable containers and macroencapsulated. The container size is determined by the quantity of waste requiring treatment and the macroencapsulation process. Containers include 7 ft X 4 ft X 4 ft boxes (equivalent volume of 840 gallons), 55-gallon drums, and smaller containers. Liquid wastes are not treated through macroencapsulation; the volume of waste treated is equivalent to the number of gallons listed.
- <sup>e</sup> Wastes are placed in the thermal deactivation equipment and treated. The time required to complete treatment depends on the waste.
- <sup>f</sup> Physical separation volumes depend on the size of the equipment or other item undergoing treatment (e.g., size reduction, separation). Volumes vary widely.
- <sup>g</sup> During operation of the Corrective Action Management Unit (2001-2003), remediation wastes (soils and residues) were stored, treated as needed, and placed in the containment cell. The Unit was closed in 2003. The closed containment cell is undergoing post-closure care.

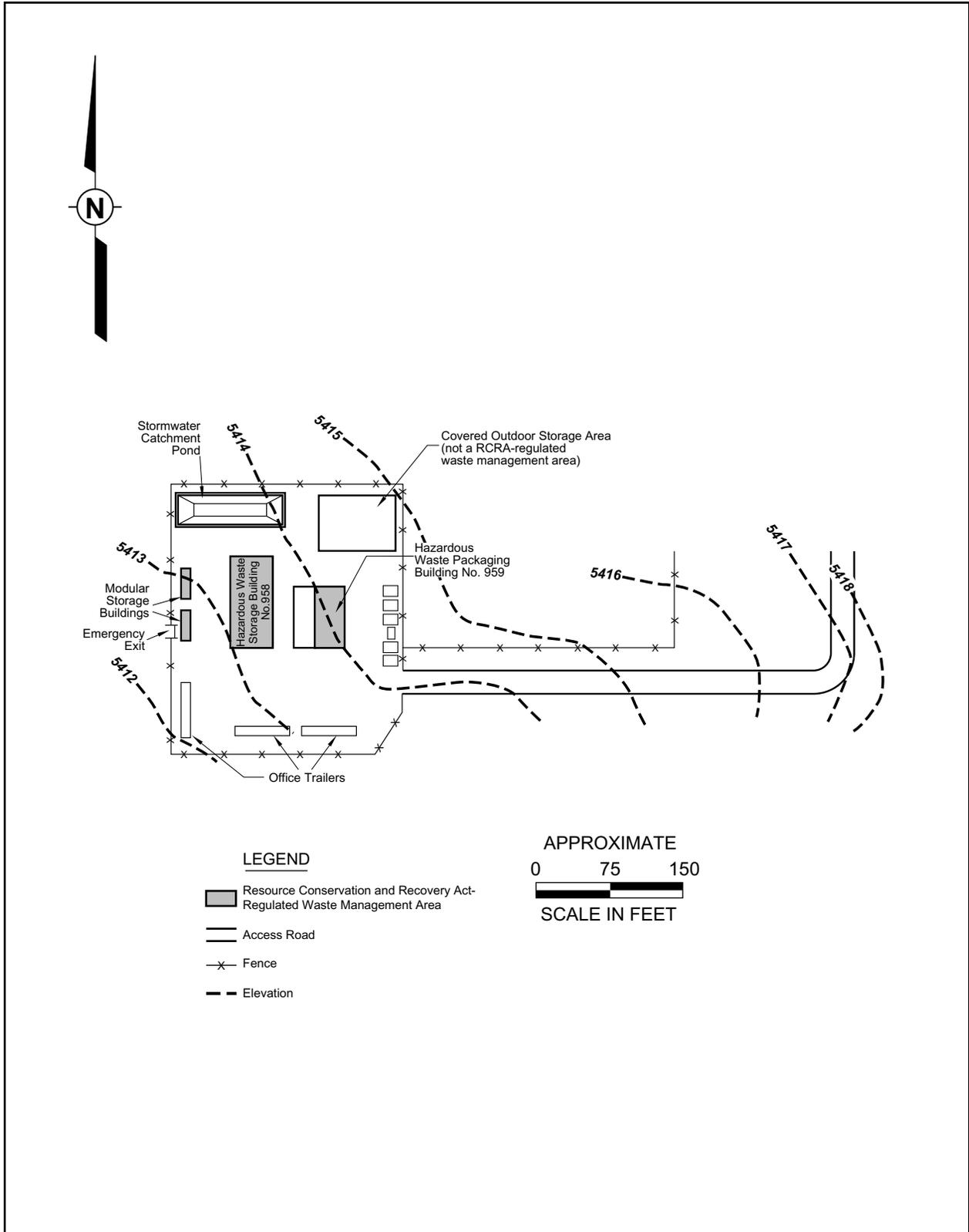
## FIGURES

**This page left intentionally blank.**



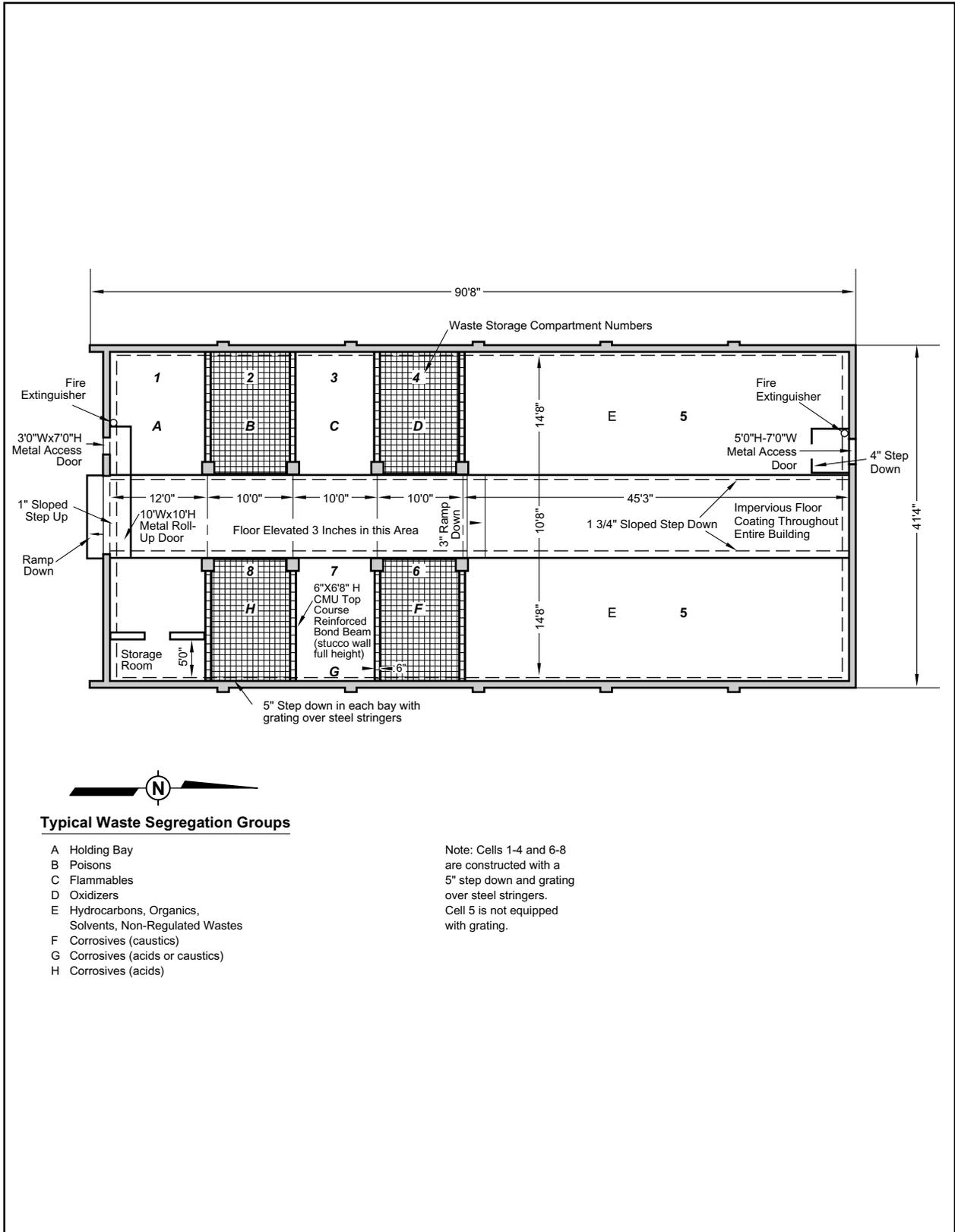


**Figure B-2**  
**Sandia National Laboratories/New Mexico,**  
**Technical Areas (TAs) and Resource Conservation and Recovery Act-Regulated**  
**Waste Management Units**



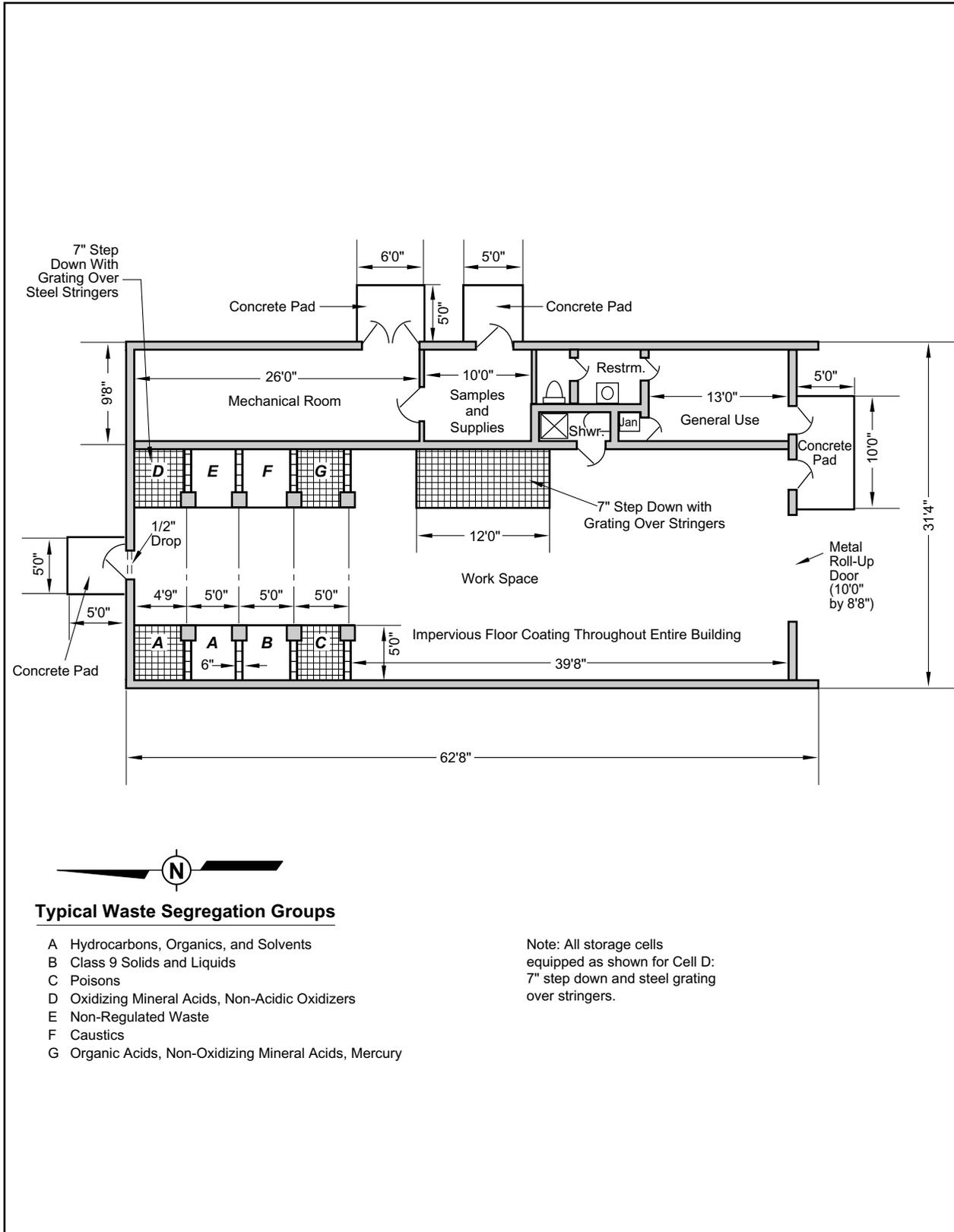
843887.0100000 A118

**Figure B-3**  
**Hazardous Waste Management Facility,**  
**Resource Conservation and Recovery Act-**  
**Regulated Waste Management Areas**



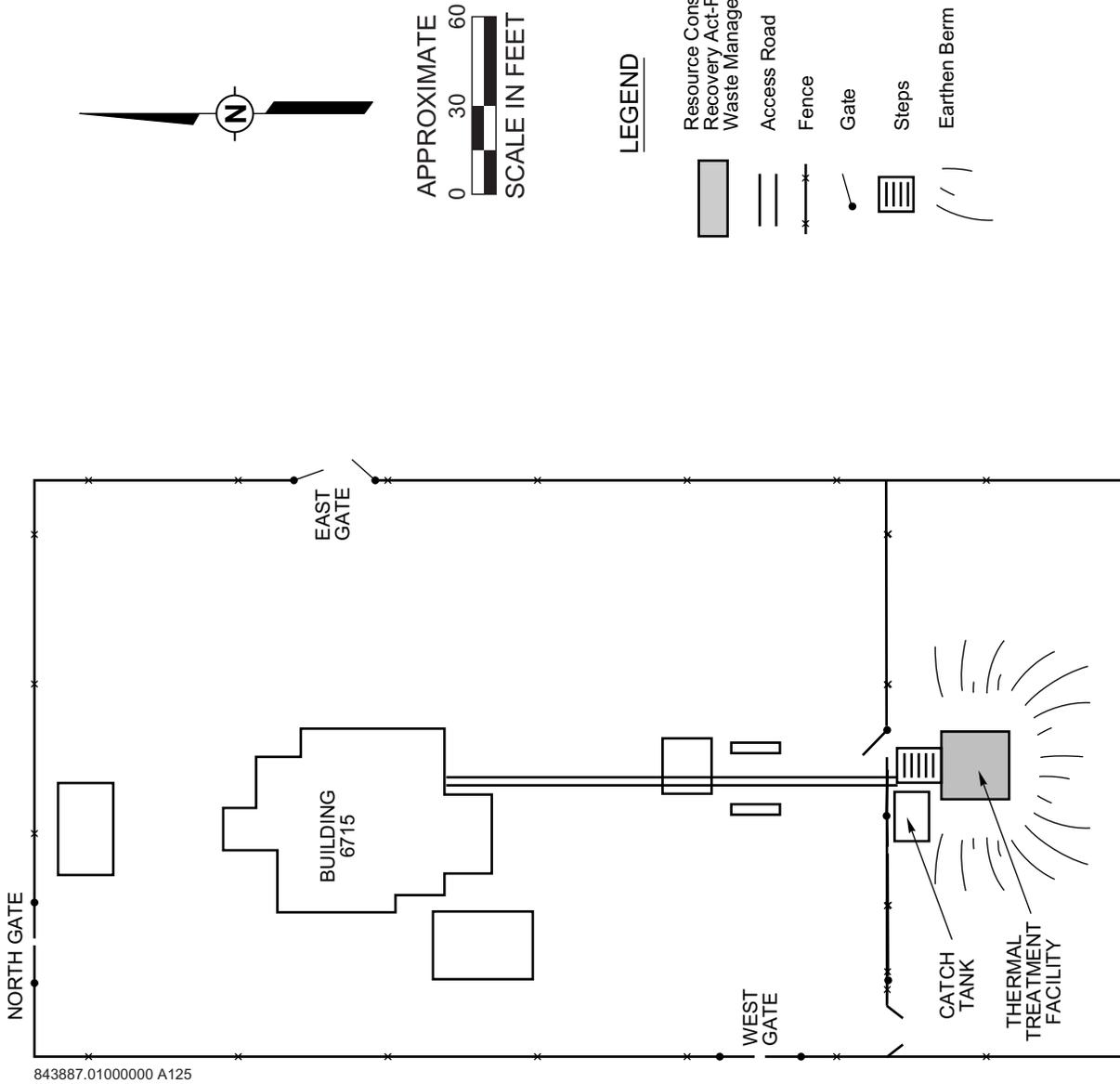
843887.01000000 A119

**Figure B-4**  
**Hazardous Waste Storage Building (Building 958), Floor Plan**



843887.01000000 A120

**Figure B-5**  
**Hazardous Waste Packaging Building (Building 959), Floor Plan**



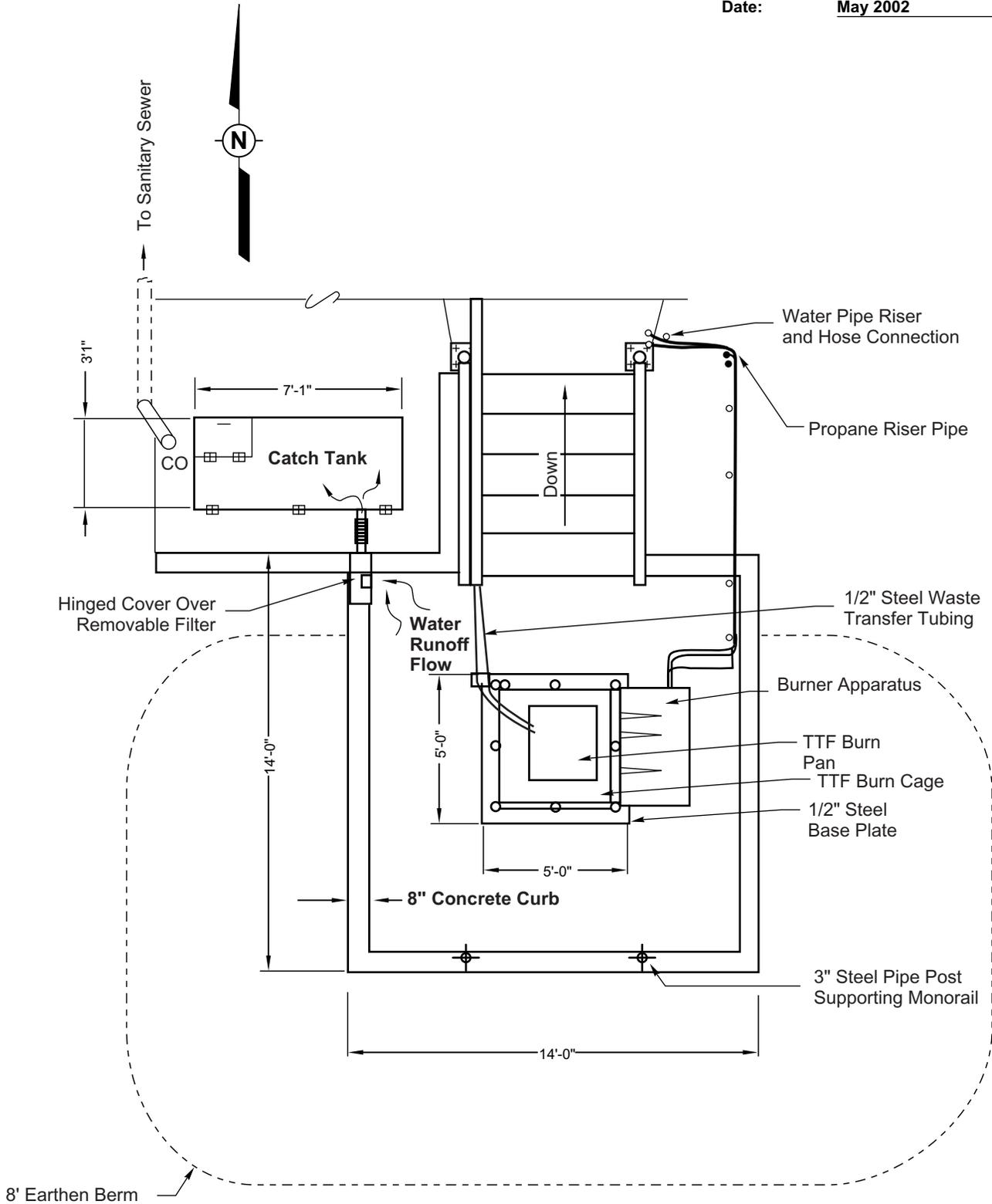
LEGEND

-  Resource Conservation And Recovery Act-Regulated Waste Management Area
-  Access Road
-  Fence
-  Gate
-  Steps
-  Earthen Berm

APPROXIMATE  
0 30 60  
SCALE IN FEET

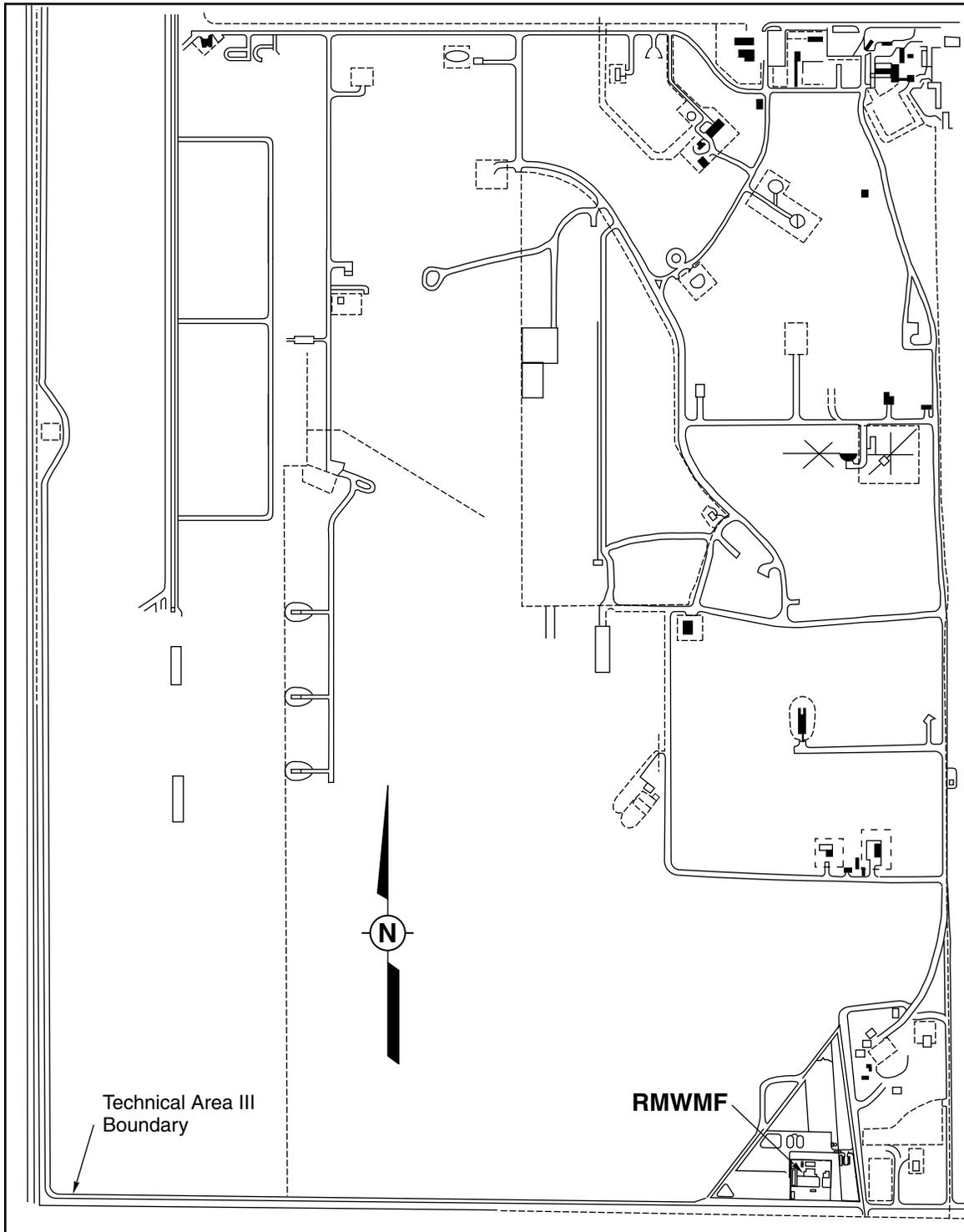


**Figure B-6**  
**Thermal Treatment Facility,**  
**Resource Conservation and Recovery Act-Regulated Waste Management Area**



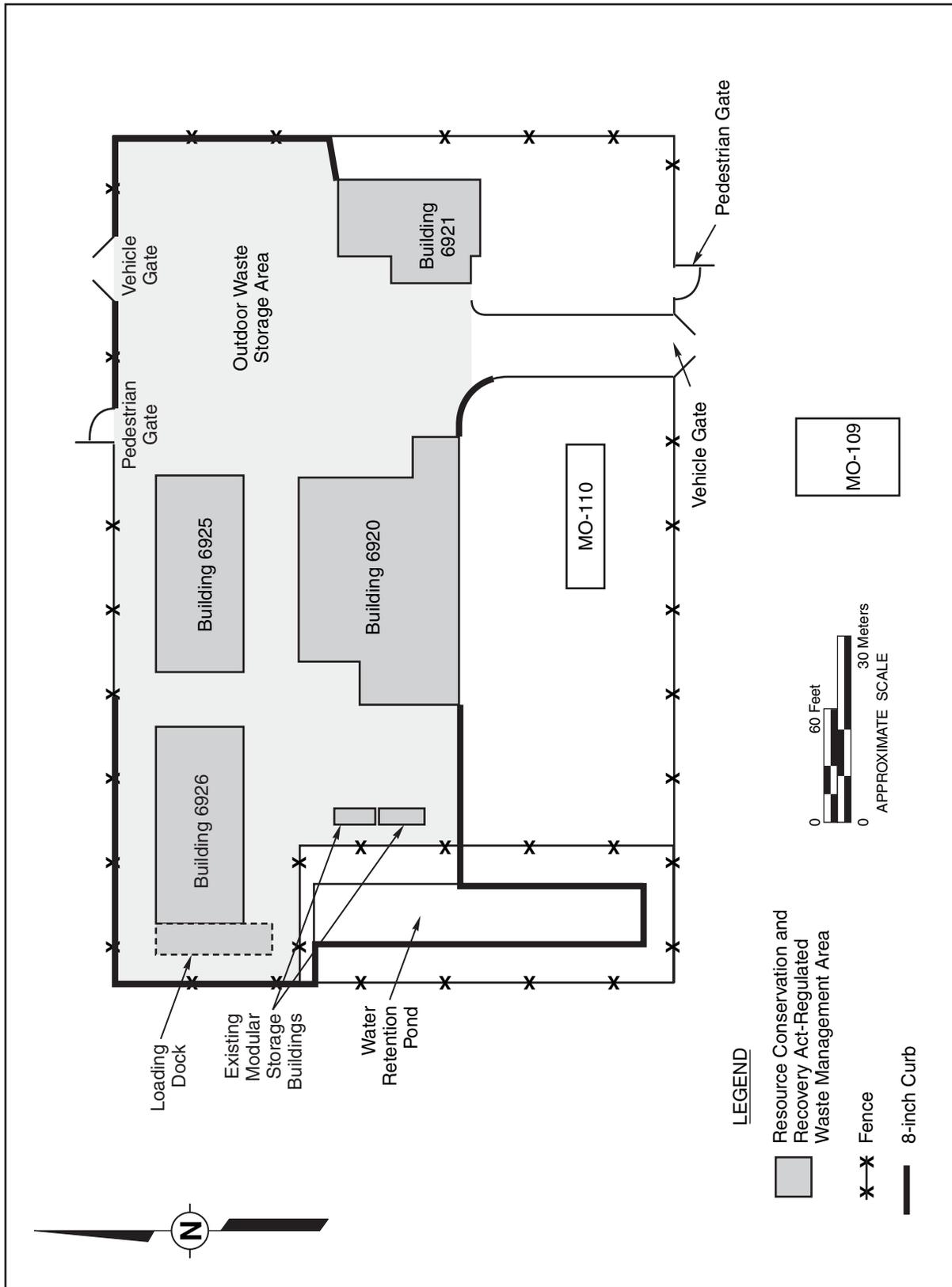
**Figure B-7**  
**Thermal Treatment Facility (TTF)—Plan View**

APPROXIMATE  
0 .125 .25  
SCALE IN MILES

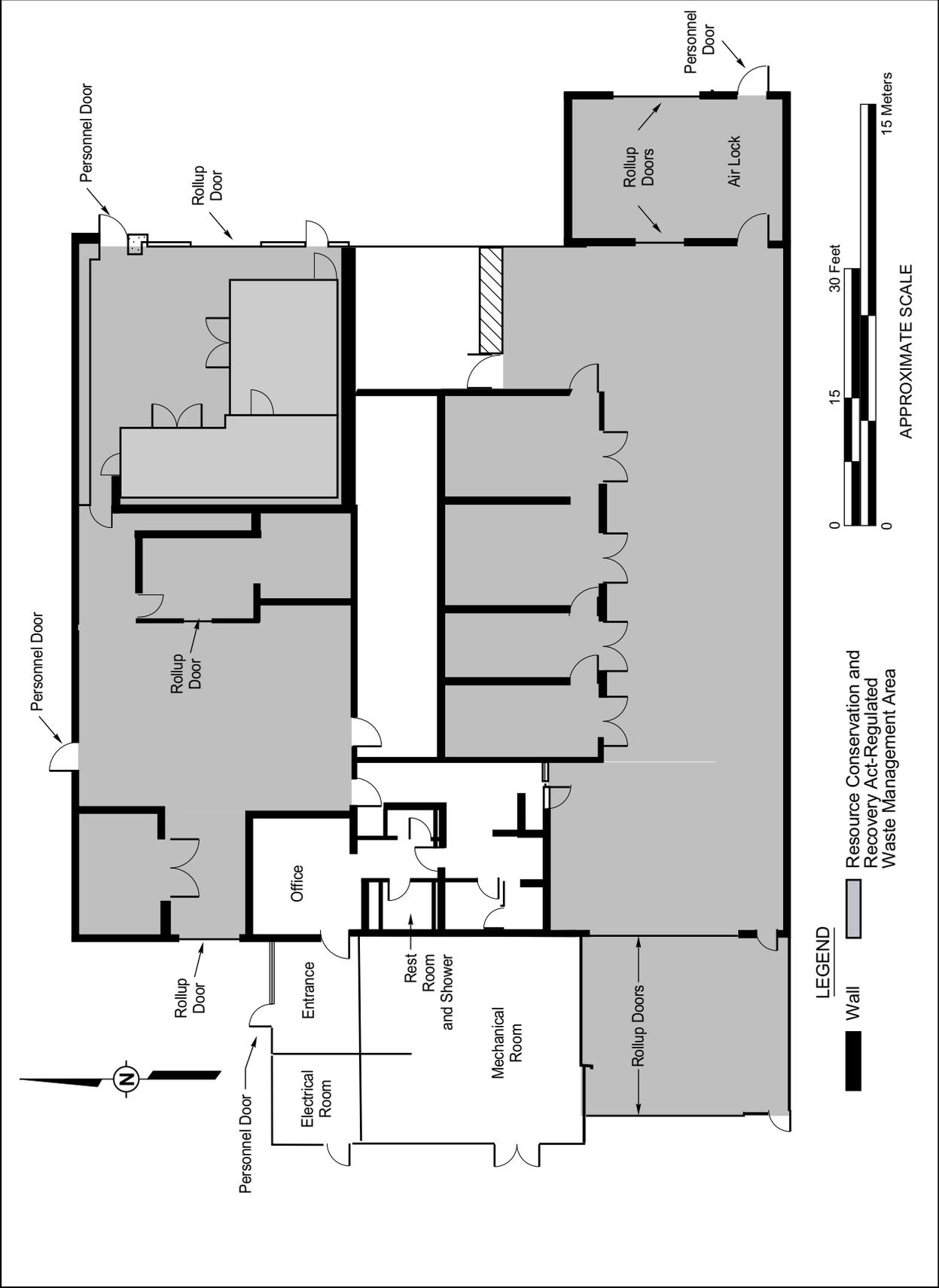


843887.01000000 A184

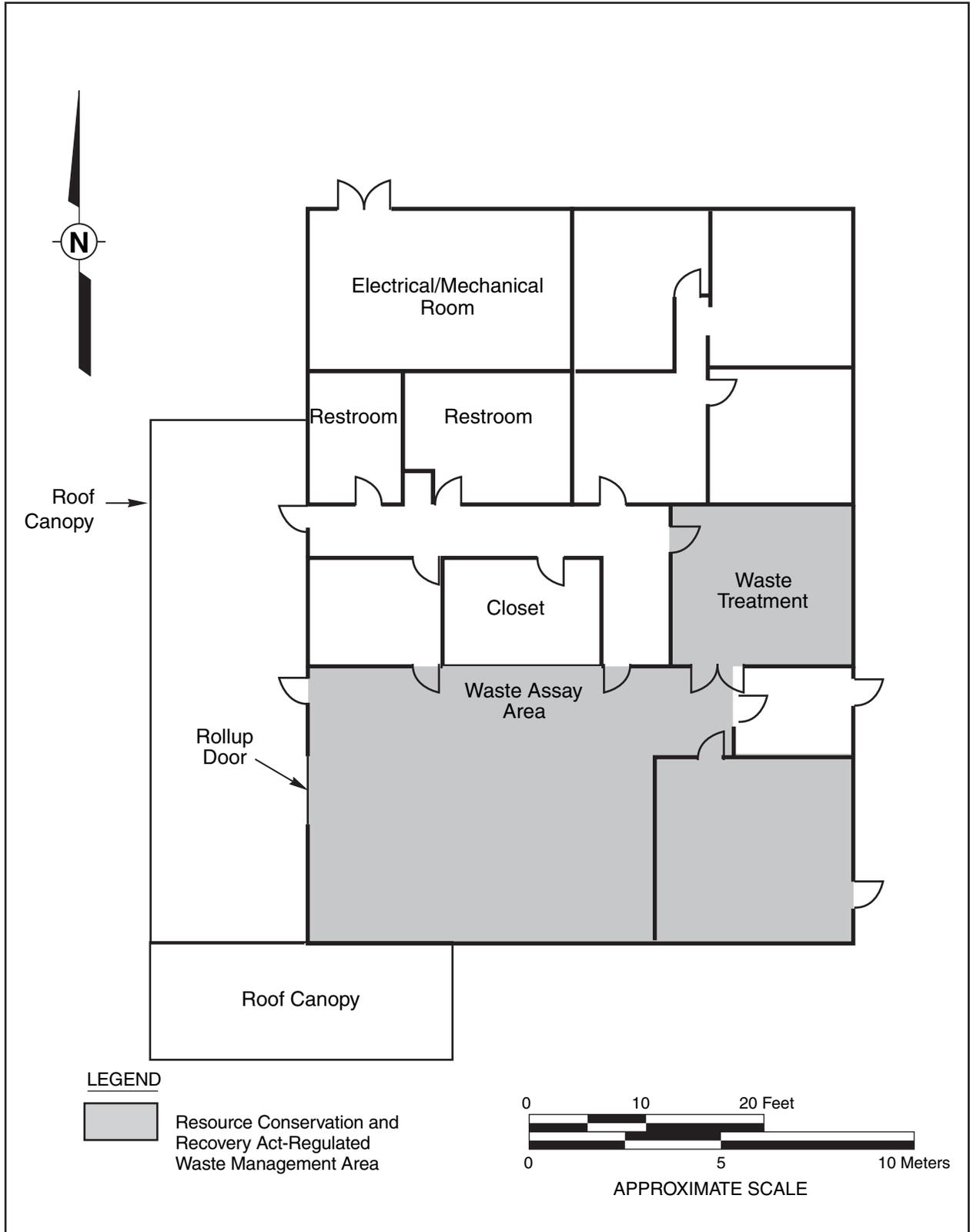
**Figure B-8**  
**Location of the Radioactive and Mixed Waste Management Facility in Technical Area III**



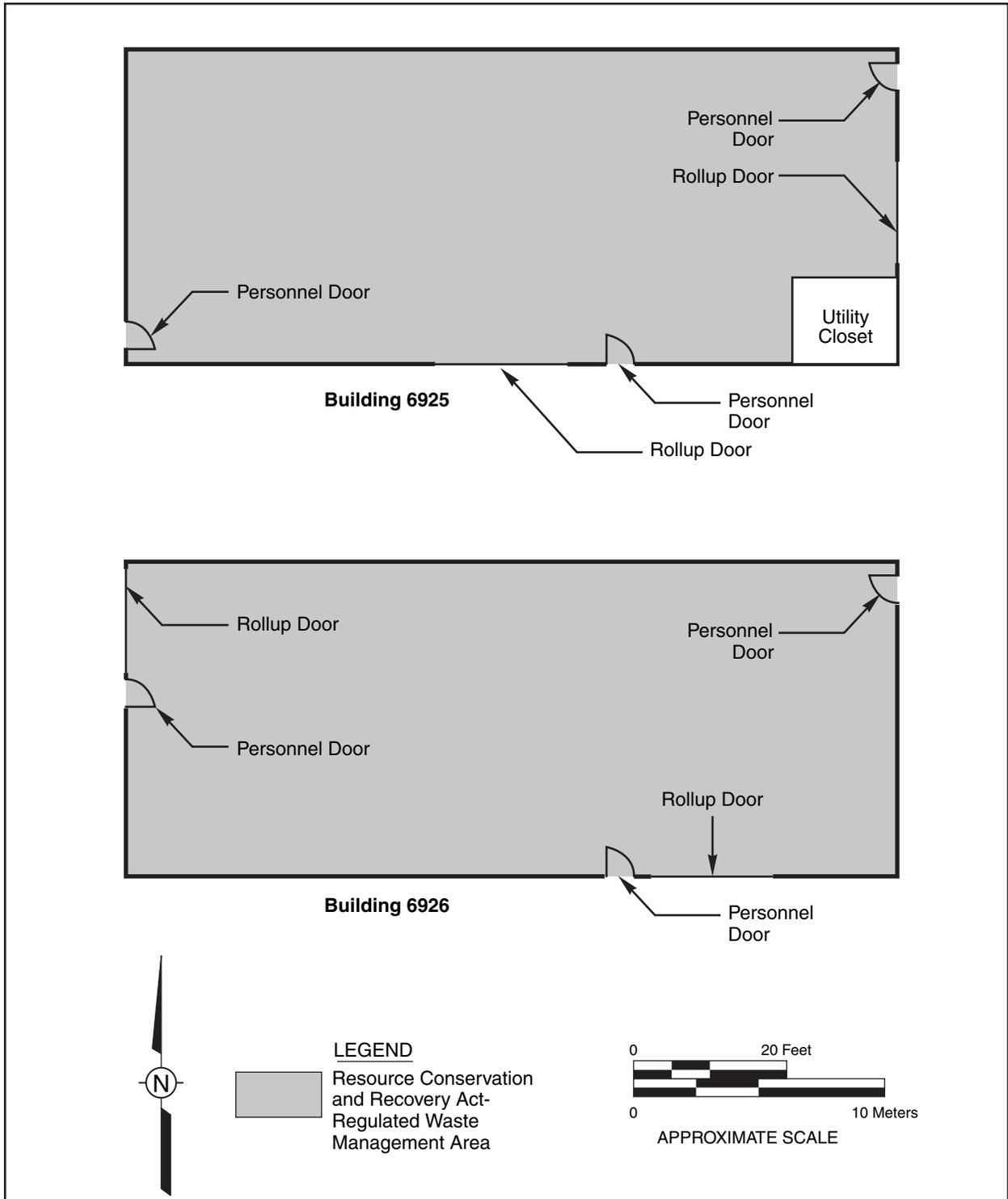
**Figure B-9**  
**Radioactive and Mixed Waste Management Facility,**  
**Resource Conservation and Recovery Act-Regulated Waste Management Areas**



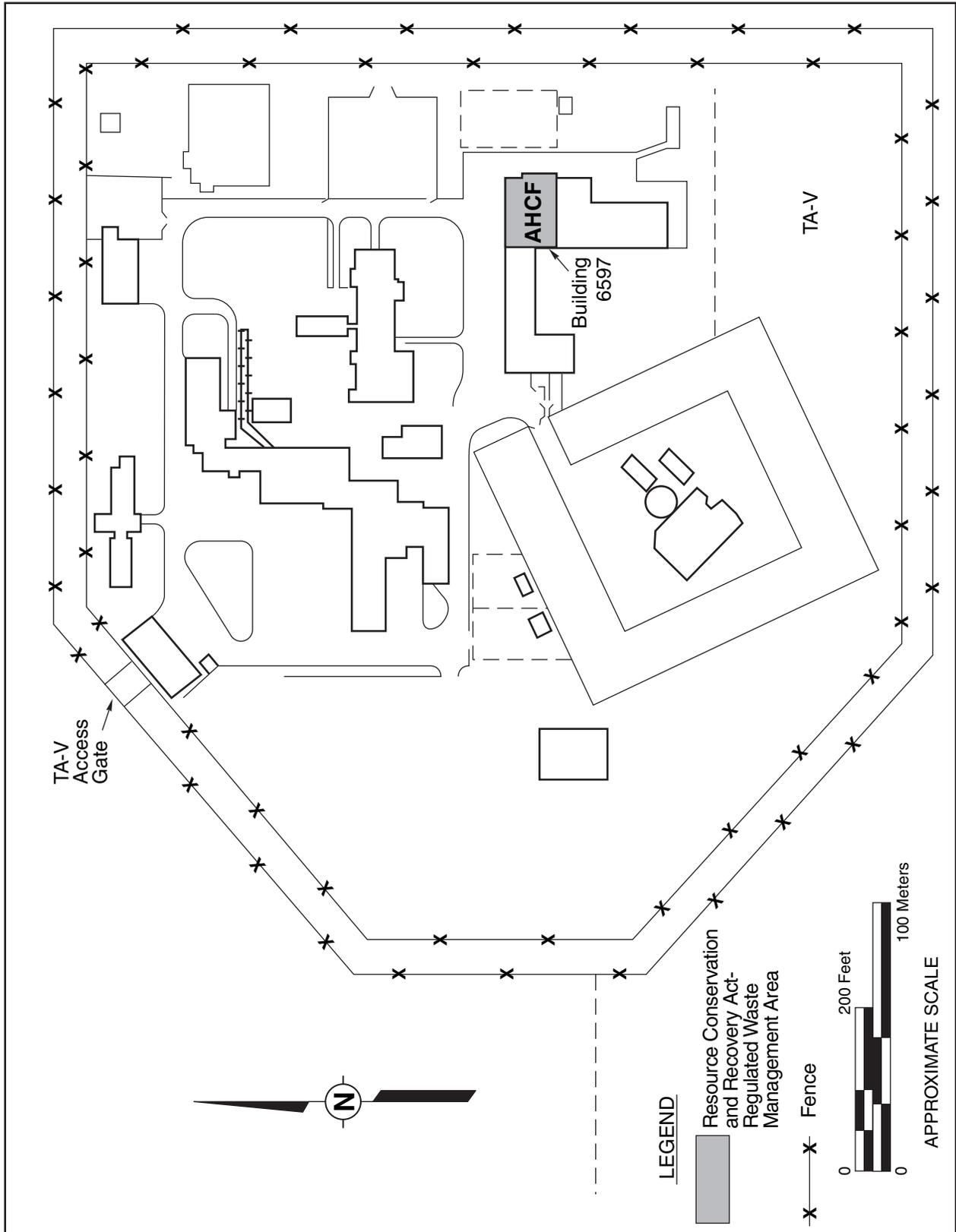
**Figure B-10**  
**Radioactive and Mixed Waste Management Facility, Building 6920,**  
**Resource Conservation and Recovery Act-Regulated Waste Management Areas**



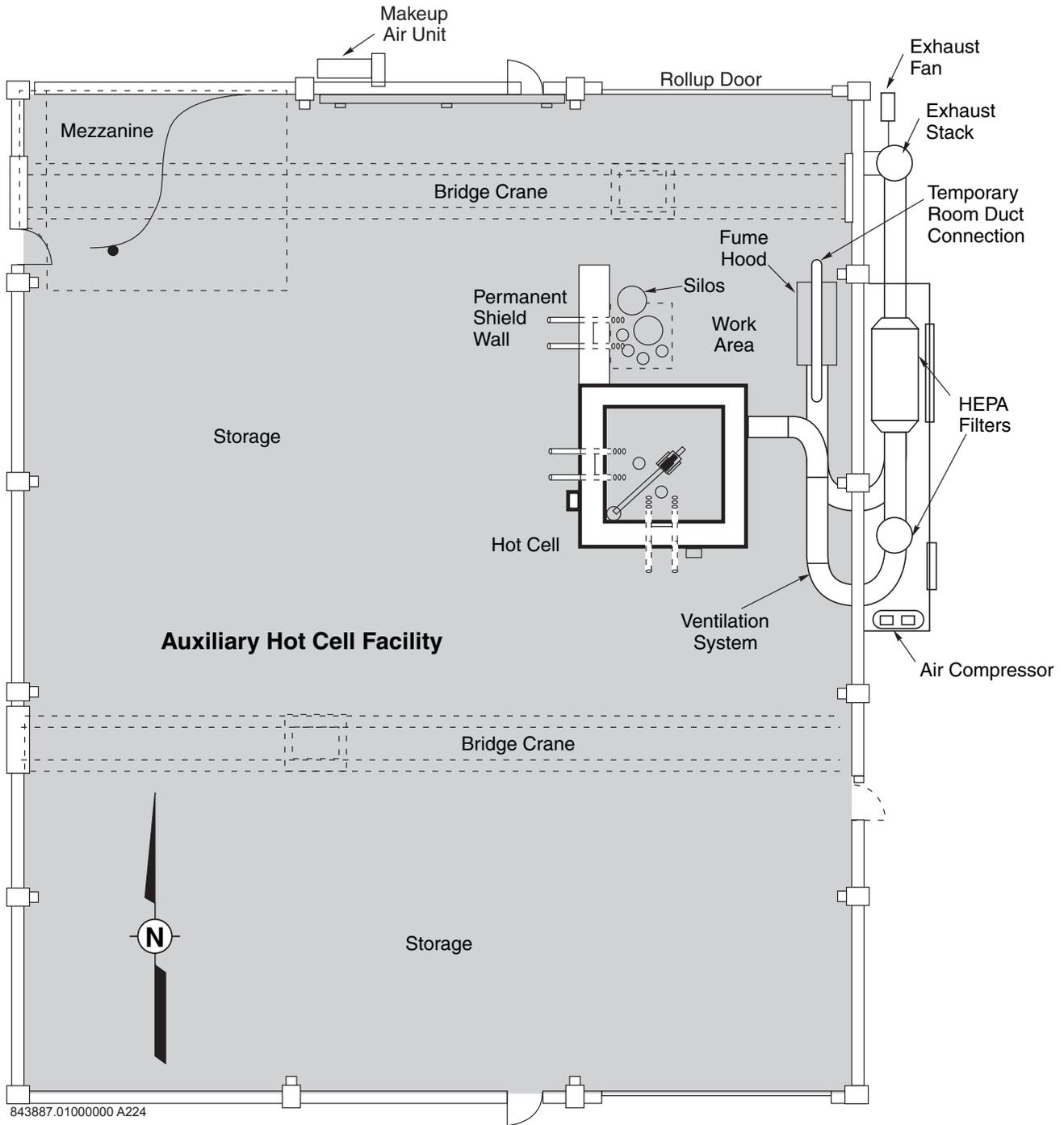
**Figure B-11**  
**Radioactive and Mixed Waste Management Facility, Building 6921,**  
**Resource Conservation and Recovery Act-Regulated Waste Management Areas**



**Figure B-12**  
**Radioactive and Mixed Waste Management Facility, Buildings 6925 and 6926,**  
**Resource Conservation and Recovery Act-Regulated Waste Management Areas**



**Figure B-13**  
**Location of the Auxiliary Hot Cell Facility (AHCF) in Technical Area (TA) V**



843887.01000000 A224

**LEGEND**

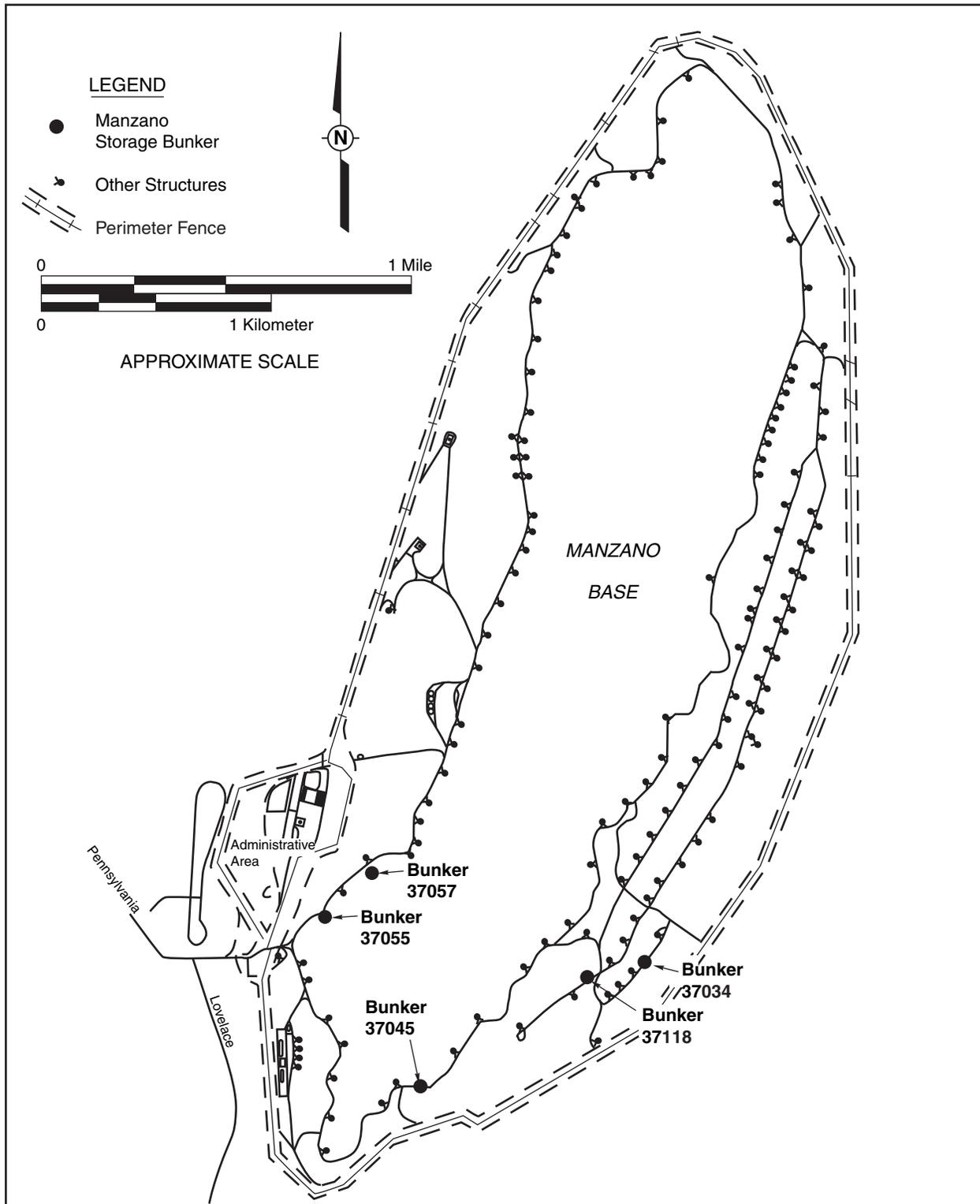


Resource Conservation and Recovery Act-Regulated Waste Management Area

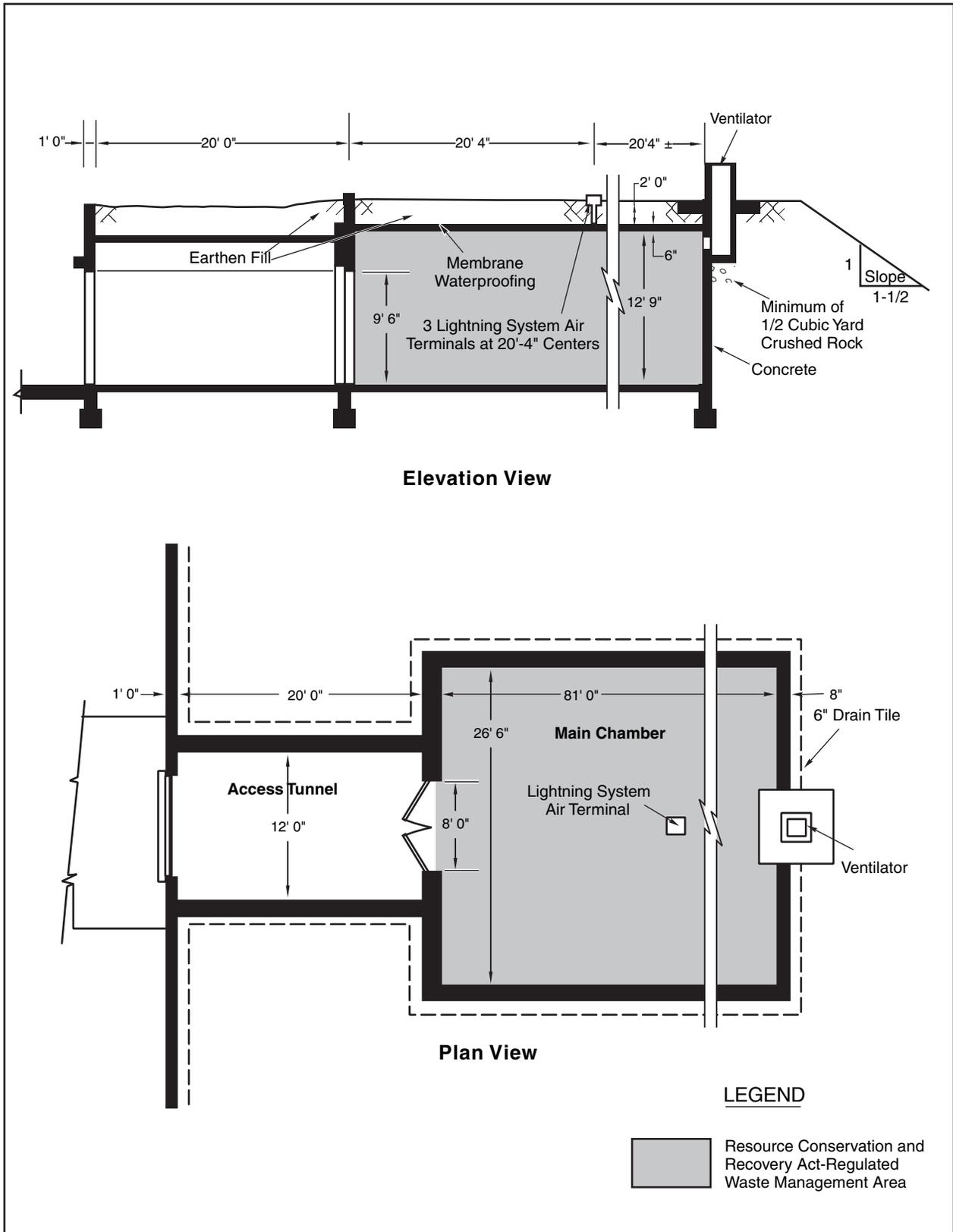
APPROXIMATE SCALE



**Figure B-14**  
**Auxiliary Hot Cell Facility,**  
**Resource Conservation and Recovery Act-**  
**Regulated Waste Management Areas**

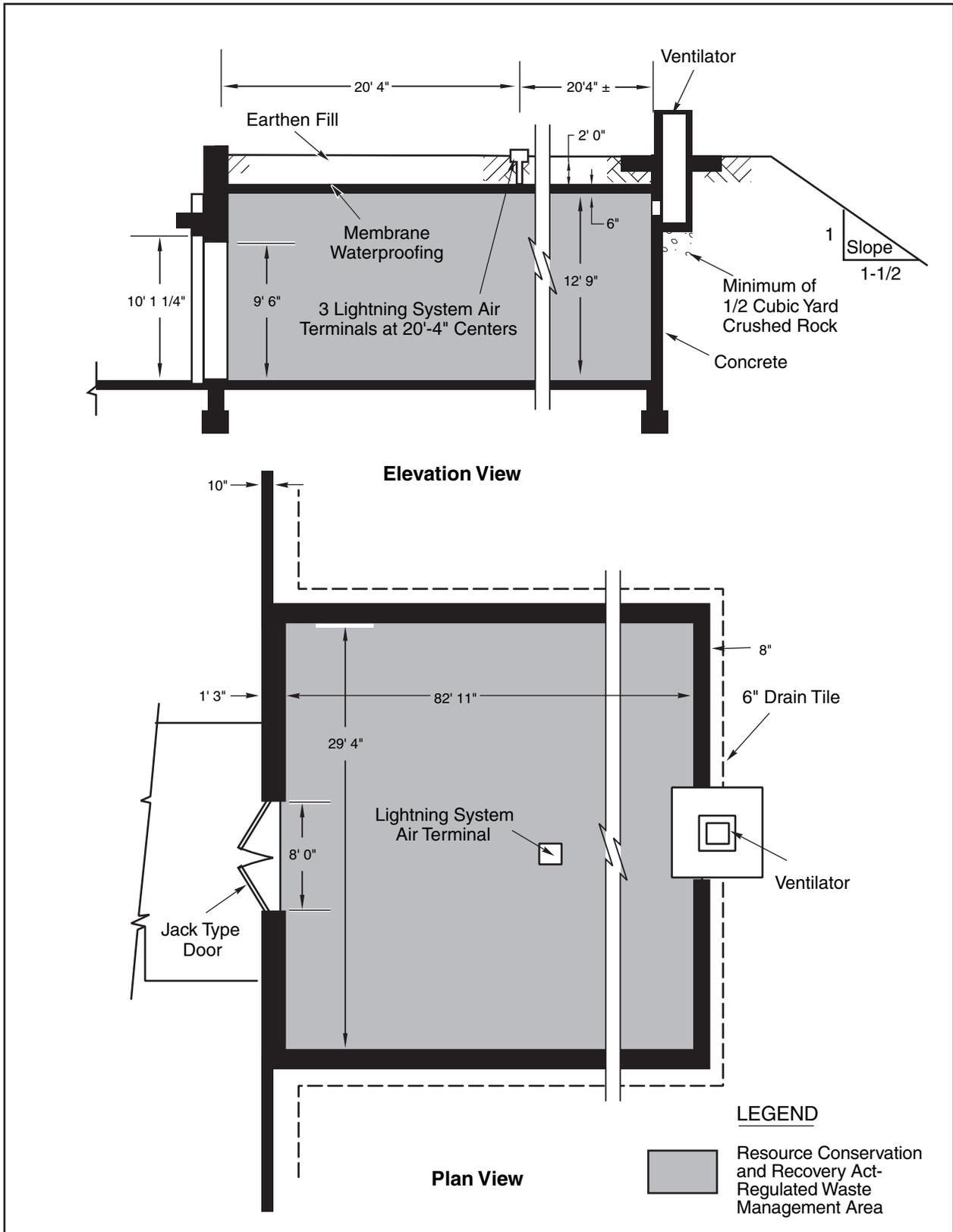


**Figure B-15**  
**Location of the Manzano Storage Bunkers at Manzano Base**

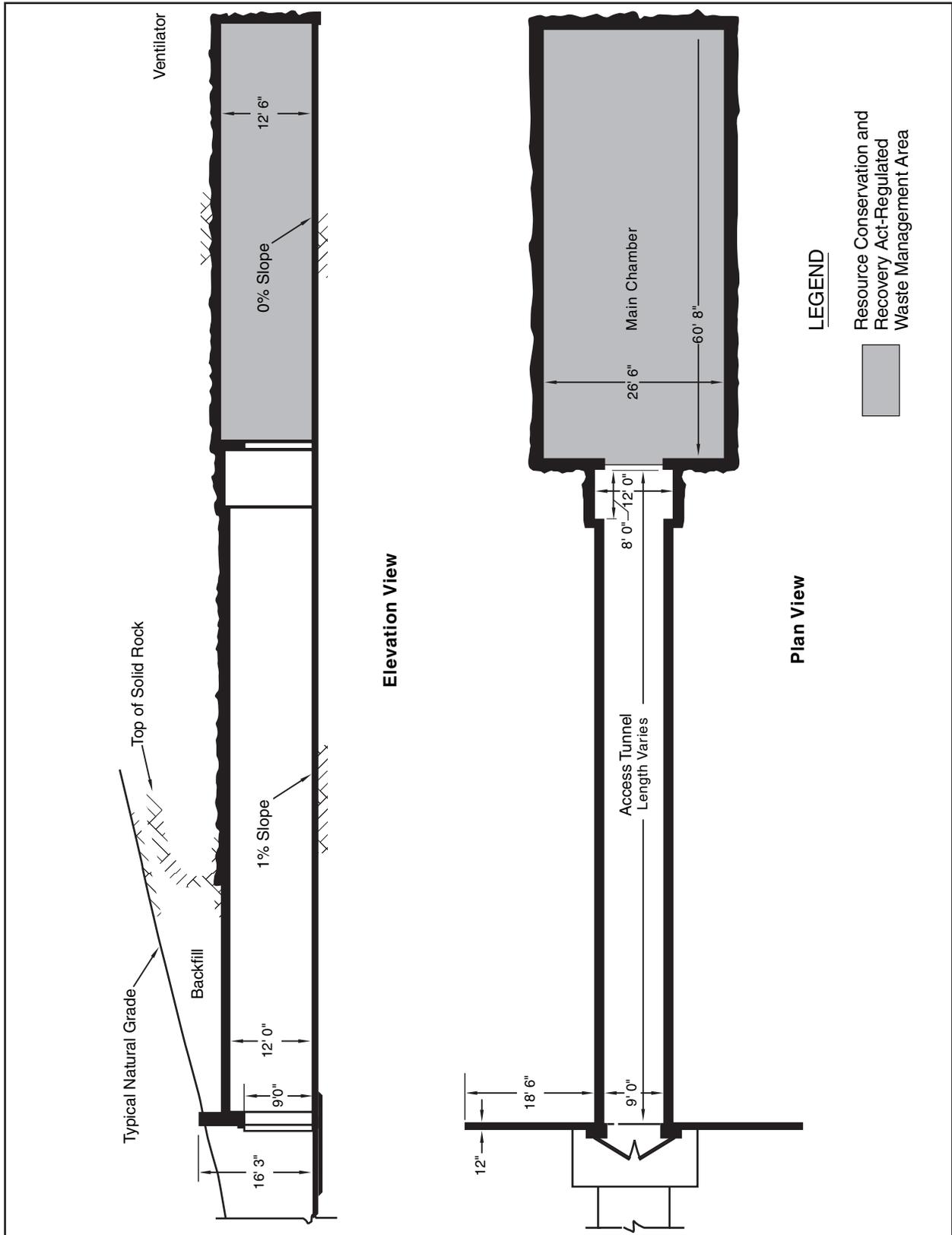


843887.01000000 A226

**Figure B-16**  
**Manzano Storage Bunkers, Type B,**  
**Bunker 37034**

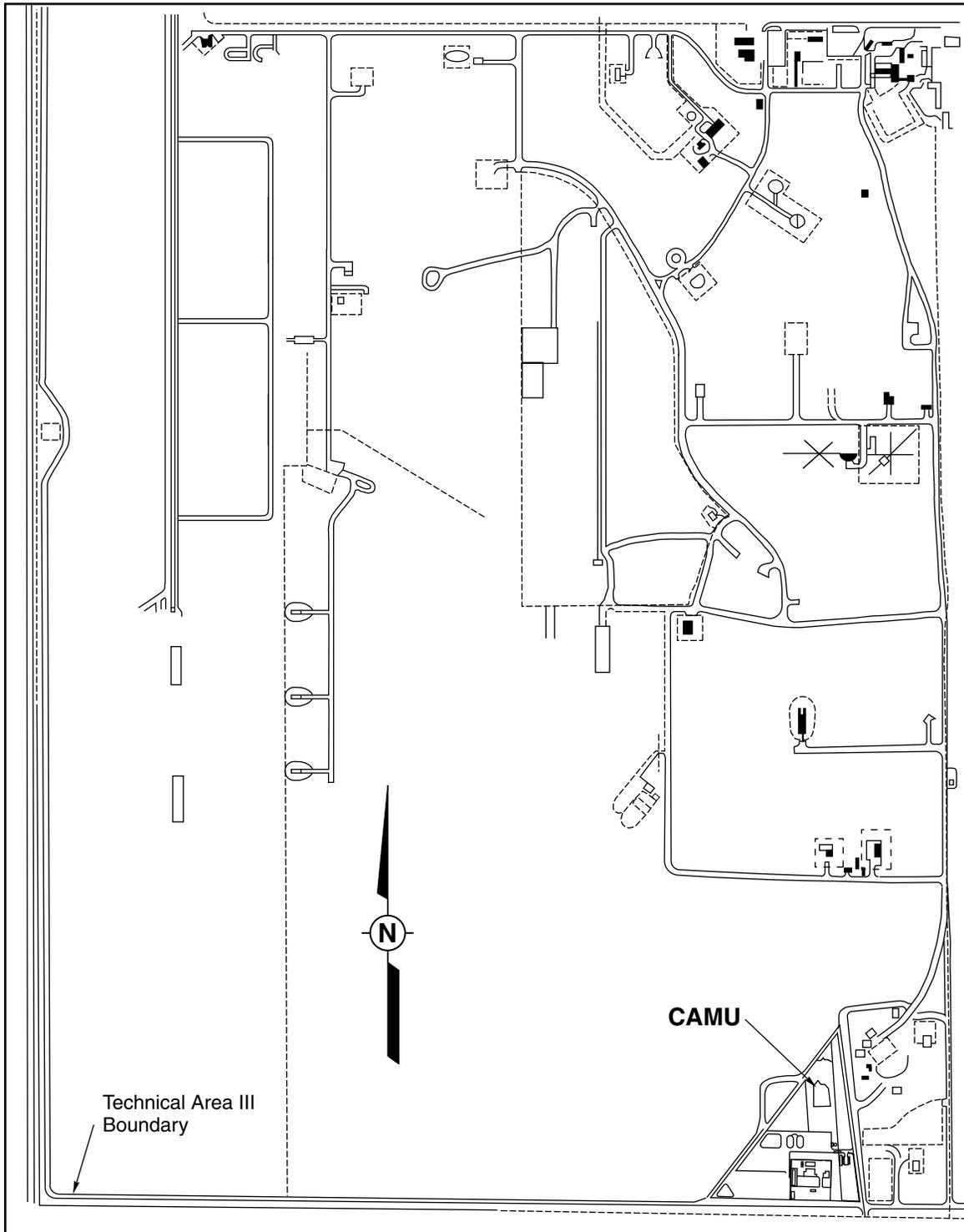


**Figure B-17**  
**Manzano Storage Bunkers, Type C,**  
**Bunker 37118**



**Figure B-18**  
**Manzano Storage Bunkers, Type D**  
**Bunkers 37045, 37055, and 37057**

APPROXIMATE  
0 .125 .25  
SCALE IN MILES

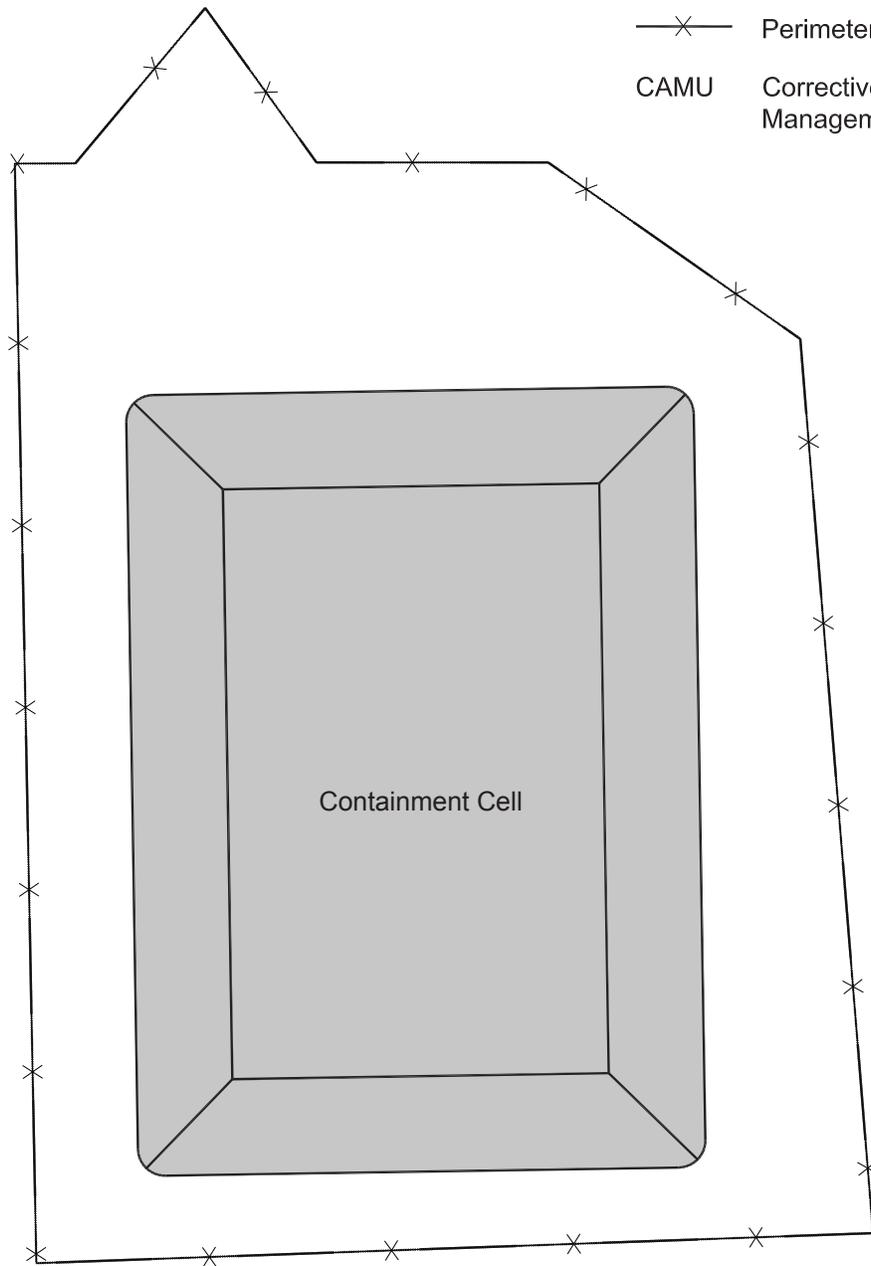


843887.01000000 A229

**Figure B-19**  
**Location of the Corrective Action Management Unit**  
**Containment Cell in Technical Area III**

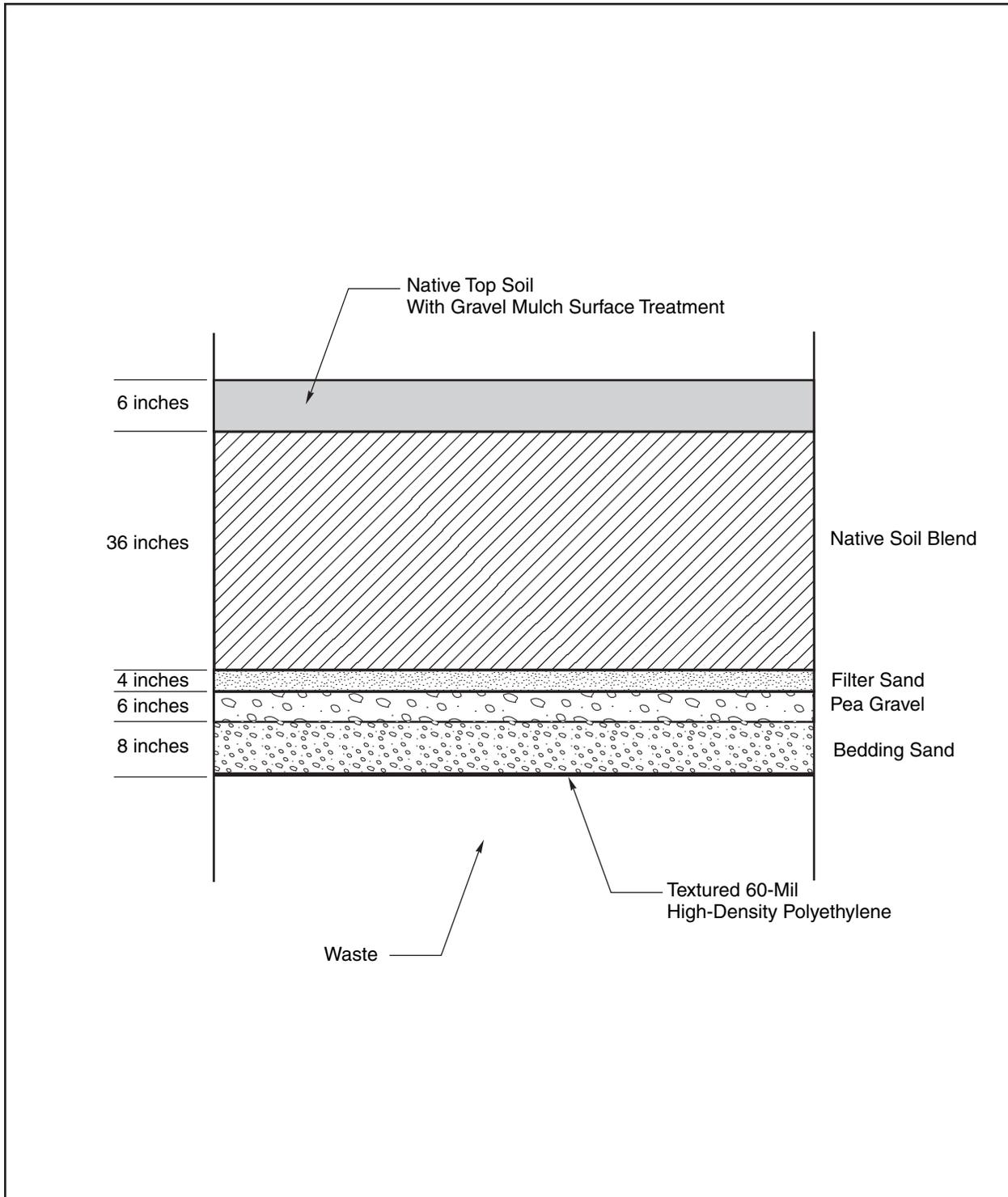
Legend

- X— Perimeter Boundary
- CAMU Corrective Action Management Unit



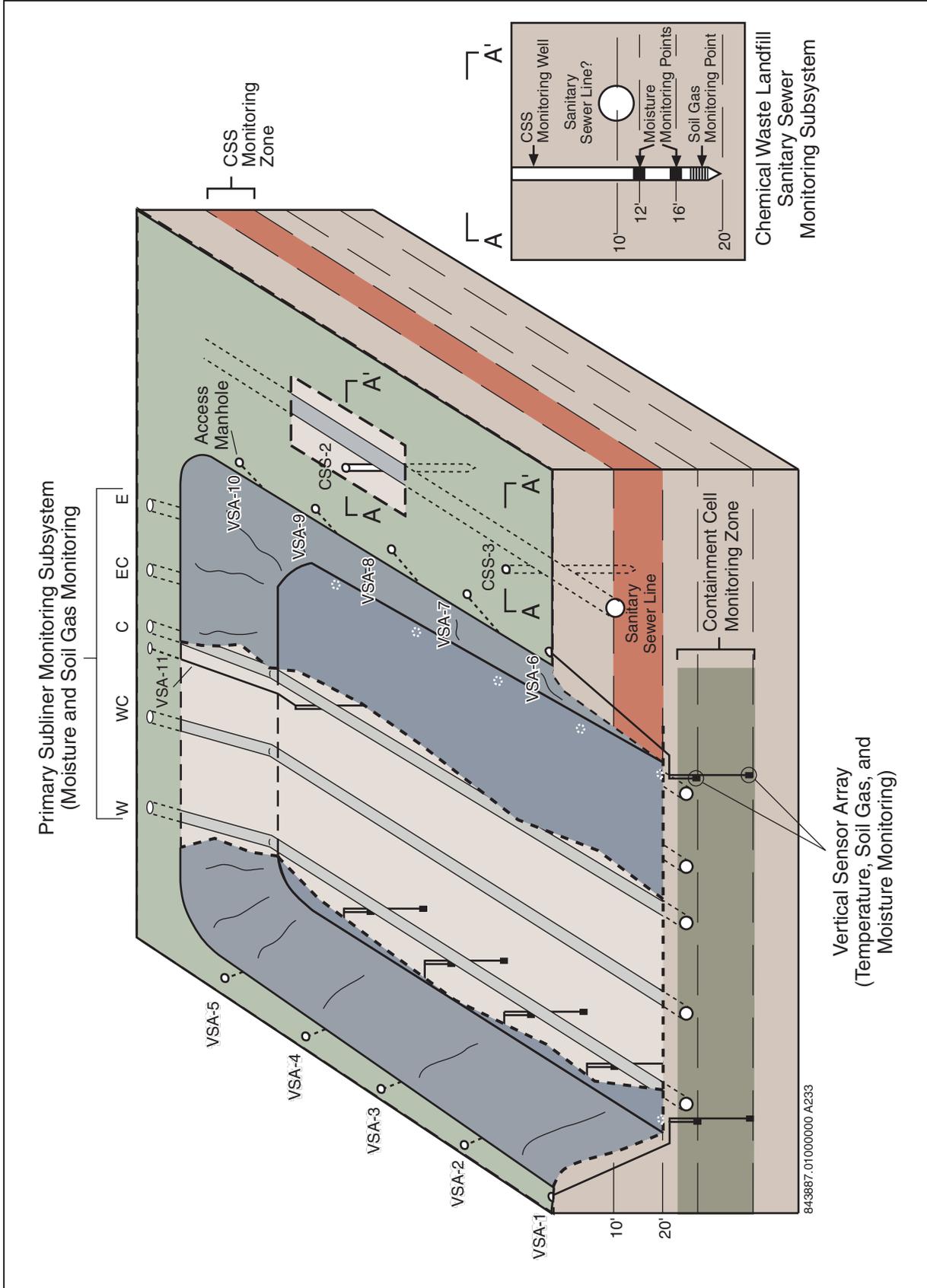
SCALE 1" = 80'

**Figure B-20**  
**Corrective Action Management Unit**  
**Resource Conservation and Recovery Act-Regulated**  
**Waste Management Area**



843887.01000000 A232

**Figure B-21**  
**Corrective Action Management Unit Containment Cell**  
**Schematic Cross-Section of Final Cover System**



**Figure B-22**  
**Block Diagram of Corrective Action Management Unit Containment Cell**  
**and Vadose Zone Monitoring System**

Document: SNL/NM General Part A, Appendix B  
Revision No.: 8.0  
Date: February 2005

## PHOTOGRAPHS

**This page left intentionally blank.**



**Hazardous Waste Management Facility, Buildings 958 and 959**  
Photograph Taken on January 3, 2002  
Process Code: S01

Building 958 is on the left, and Building 959 is on the right.



**Hazardous Waste Management Facility, Flammable Waste Storage Bay in Building 958**  
Photograph Taken on January 3, 2002  
Process Code: S01



**Hazardous Waste Management Facility, Waste Storage Bays in Building 959**  
Photograph Taken on January 3, 2002  
Process Code: S01

The drum at the far end of the building near the door contains absorbent for spill control. The bucket on the wall above it contains clean up materials.

Containers of RCRA-regulated wastes (solids and liquids) are segregated into the bays by compatibility and are stored on shelves over secondary containment in the bays.



**Hazardous Waste Management Facility,  
Modular Storage Buildings (958B and 958C) for Reactive and Ignitable Wastes**  
Photograph Taken on January 3, 2002  
Process Code: S01



**Thermal Treatment Facility**  
**Viewed from Roof of Building 6715**  
Photograph Taken October 23, 2003  
Process Code: X01

The sheet metal housing and propane lines for the propane burners are on the left side of the burn cage. The sheets of steel on the right side and the back of the burn cage are attached at the top and provide protection from wind during waste treatment.

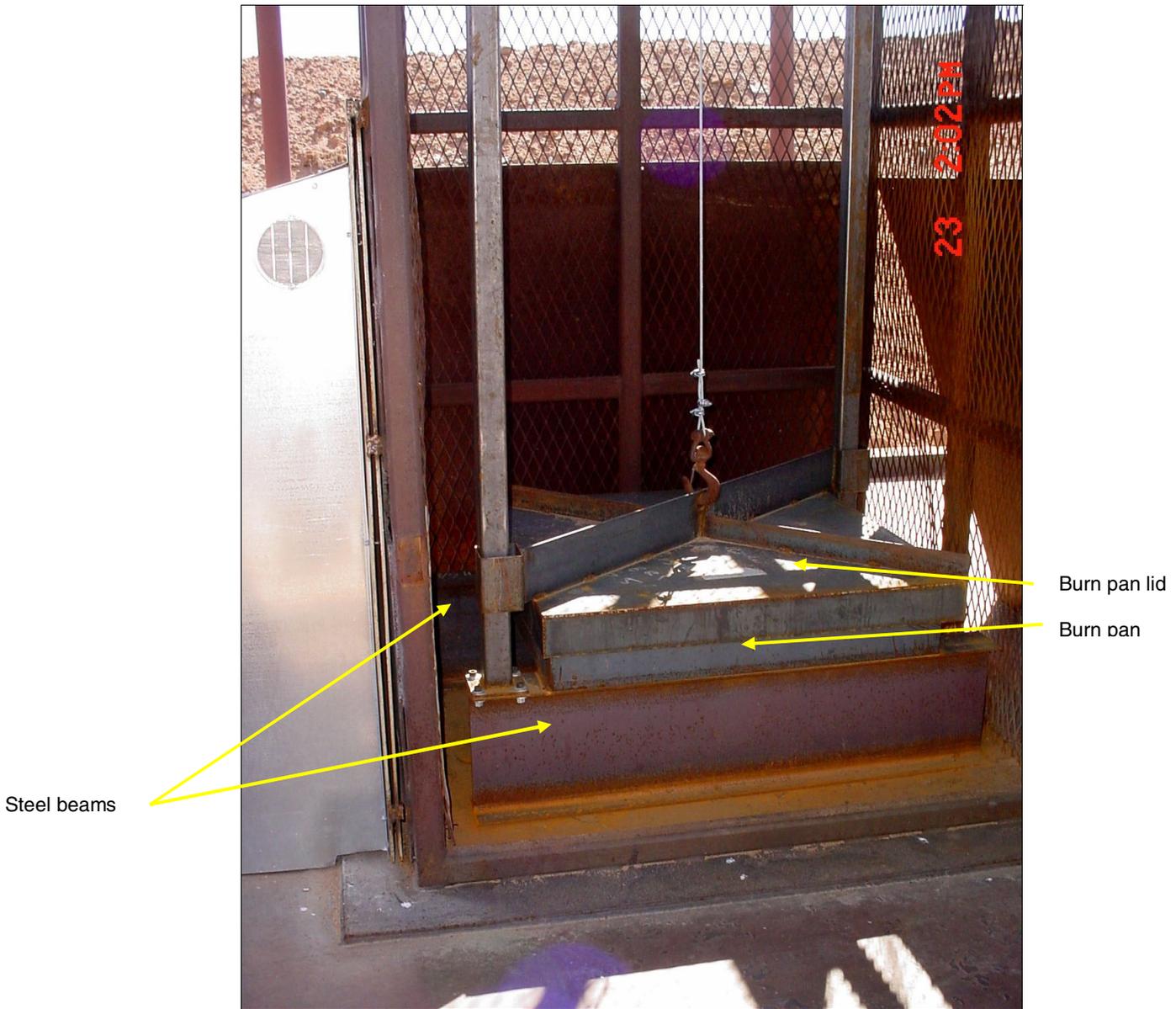
The entire surface of the concrete foundation pad and the inside edge of the concrete pad curb are lined with steel. Runoff water is directed toward the right front corner of the pad, through a filter, and into a covered catchment tank that is visible at the lower right corner of the photograph.

The burn pan lid is in the lowered position. The burn cage is surrounded by an earthen berm. The gate in the fence surrounding the TTF is open.



**Thermal Treatment Facility**  
**Rear View of Burn Cage from Top of Earthen Berm**  
Photograph Taken on October 23, 2003  
Process Code: X01

The door of the burn cage is open on the left (front) side of the cage. The sheet metal housing for the propane burners is visible on the far side of the burn cage.



**Thermal Treatment Facility**  
**Front View of Burn Pan (with Lid Down) Inside Burn Cage**  
Photograph Taken on October 23, 2003  
Process Code: X01

The base of the burn pan sits on the steel beams that run across in the front and back of the burn cage. The pan is 6 inches deep. The lid is lowered and covers the pan. During operation, the lid is raised using the attached cable, and solid RCRA-regulated wastes are placed inside the burn pan or liquid wastes are pumped into the pan. The liquid waste feed system is located on the right side of the cage and is not visible in this photograph. It is temporarily out of service.

The burn cage door is open. The steel sheets on the outside of the burn cage provide protection from wind during treatment. The sheet metal housing for the propane burners is visible to the left of the burn cage.



**Radioactive and Mixed Waste Management Facility, East Side of Building 6920**  
Photograph Taken on December 5, 2001  
Process Codes: S01, T04



**Radioactive and Mixed Waste Management Facility, West Side of Building 6920**  
Photograph Taken on December 5, 2001  
Process Codes: S01, T04



**Radioactive and Mixed Waste Management Facility, Building 6920, South Bay**  
Photograph Taken on December 20, 2001  
Process Codes: S01, T04

The south bay is used for storage of RCRA-regulated wastes in containers and for treatment. The doors to three of the four rooms in the south bay are visible at the left edge of the picture. Treatment operations typically occur in these rooms. The roll-up door at the far (east) end of the room leads to an additional storage/work area. Containers of liquid RCRA-regulated waste are stored over the secondary containment sump shown on the right in the photograph. Containers of solid RCRA-regulated waste may also be stored over the sump.



**Radioactive and Mixed Waste Management Facility, Building 6921**  
Photograph Taken on December 5, 2001  
Process Codes: S01, T04



**Radioactive and Mixed Waste Management Facility, Building 6925**  
Photograph Taken on December 5, 2001  
Process Codes: S01, T04



**Radioactive and Mixed Waste Management Facility, Building 6925, Interior**  
Photograph Taken on December 20, 2001  
Process Codes: S01, T04

The drum in the front of the row on the right contains liquid RCRA-regulated waste and is stored on a portable spill containment pallet.



**Radioactive and Mixed Waste Management Facility, Building 6926**  
Photograph Taken on December 5, 2001  
Process Codes: S01



**Radioactive and Mixed Waste Management Facility, Modular Storage Buildings**  
Photograph Taken on December 5, 2001  
Process Code: S01



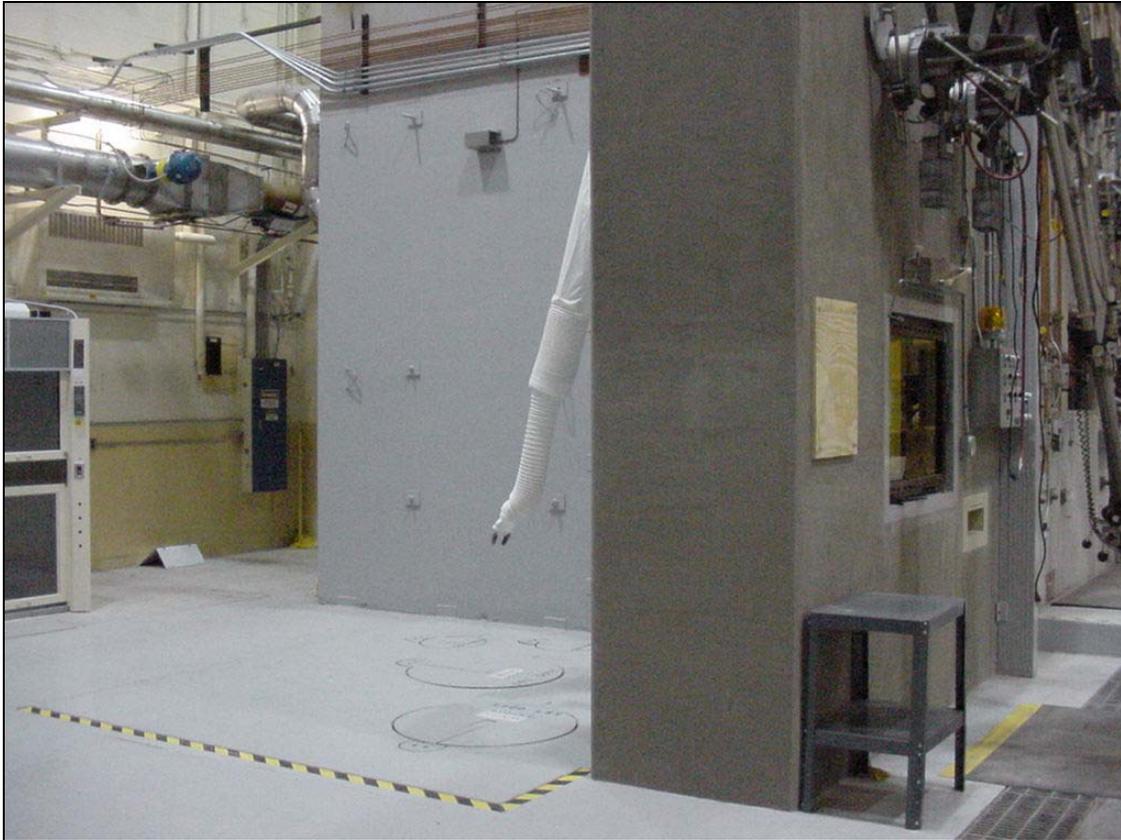
**Auxiliary Hot Cell Facility, North Side of Building 6597**  
Photograph Taken on January 7, 2002  
Process Codes: S01, T04

The work area and permanent shield wall are visible inside the building.



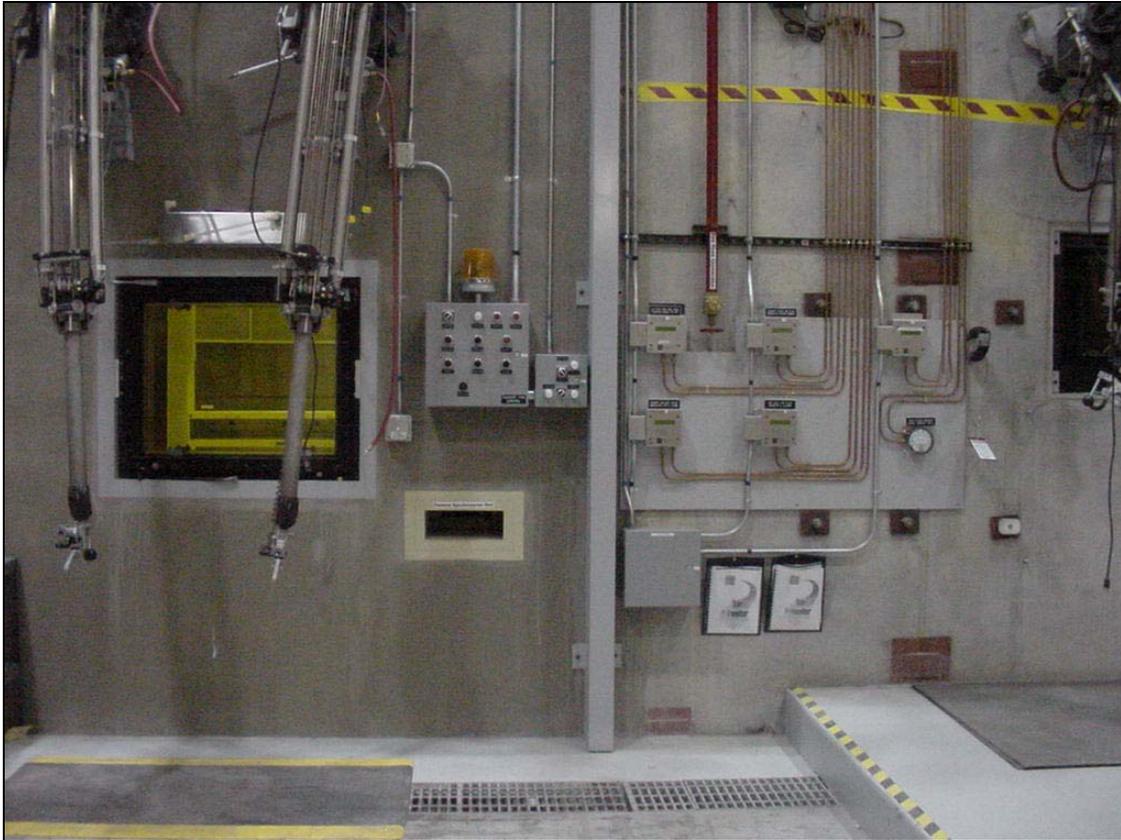
**Auxiliary Hot Cell Facility, Work Area North of Auxiliary Hot Cell**  
Photograph Taken on January 7, 2002  
Process Codes: S01, T04

The permanent shield wall is visible inside the building at the right edge of the opening. The manipulator arms extend from the permanent shield wall into the work area. The north wall of the hot cell is visible behind the manipulator arms at the center of the picture. The fume hood is visible at the left edge of the work area.



**Auxiliary Hot Cell Facility, Fume Hood and Work Area North of Auxiliary Hot Cell**  
Photograph Taken on January 7, 2002  
Process Codes: S01, T04

One of the manipulator arms is visible. It extends from the permanent shield wall into the work area. The operator controls for the manipulator arms are on the right side (outside) of the permanent shield wall at the right edge of the picture. The fume hood is visible at the left edge of the picture. Covers of two storage silos are visible on the floor of the work area under the manipulation arm.



**Auxiliary Hot Cell Facility, Operator Controls for Work Area and Hot Cell**

Photograph Taken on January 7, 2002

Process Codes: S01, T04

The permanent shield wall is on the left, and the hot cell is located on the right. The operator controls for the manipulator arms in the permanent shield wall are visible on the left. The fume hood at the back of the work area is visible through the shield wall window. Similar operator controls and a window are located on the hot cell wall to the right.



**Manzano Storage Bunkers, Type B, Front View of Bunker 37034**  
Photograph Taken on December 13, 2001  
Process Code: S01

The drain shown near the right edge of the picture serves a drain tile on the outside of the bunker, allowing drainage of water (from precipitation) that may accumulate in the soil behind the concrete wall.

The large orange sign indicates that explosive (D003) waste is currently stored in this bunker. The fire extinguisher is located in the white box below and to the left of the orange sign.

The concrete pad in front of the bunker doors is level or slopes slightly away from the bunker, preventing surface water runoff into the bunker.



**Manzano Storage Bunkers, Type D, Front View of Bunker 37045**  
Photograph Taken on December 13, 2001  
Process Code: S01



**Manzano Storage Bunkers, Type D, Front View of Bunker 37055**

Photograph Taken on December 5, 2001

Process Code: S01



**Manzano Storage Bunkers, Type D, Front View of Bunker 37057**  
Photograph Taken on December 5, 2001  
Process Code: S01



**Manzano Storage Bunkers, Type C, Front View of Bunker 37118**  
Photograph Taken on December 13, 2001  
Process Code: S01



**Corrective Action Management Unit**  
**South End and Southeast Corner of Containment Cell**  
Photograph Taken on February 21, 2007  
Process Code: S99

The containment cell is comprised of the following elements (from the top down):

- Multi-component engineered cover system.
- Treated waste.
- Leachate collection and removal system.
- Multi-component engineered liner system on sidewalls and bottom of cell.
- Vadose zone monitoring system.

The vadose zone monitoring system is designed to provide information on containment cell performance and early detection of leaks. It is comprised of three subsystems:

- Primary subliner monitoring system for leak detection – five horizontal clay pipes that run the length (north-south) of the containment cell under the bottom liner. The pipes are equipped with access tubes at either end for a probe to monitor moisture; the southern access tubes for four of the five pipes are visible in the photograph.
- Chemical Waste Landfill and sanitary sewer line monitoring subsystem - 6 vertical boreholes near the sewer line east of the containment cell. The boreholes allow access for monitoring equipment and collecting samples to detect leaks from the sewer line or migration of constituents from the former landfill; the top of one of the boreholes is visible at the right edge of the picture. The yellow posts on either side of the borehole provide protection from vehicles.
- Vertical sensor array subsystem - 11 monitoring locations below the containment cell. These locations house monitoring equipment and allow access for collecting samples. They are not visible in this photograph.



**Corrective Action Management Unit  
East Side of Containment Cell**  
Photograph Taken on February 21, 2007  
Process Code: S99

The top of one of the boreholes in the Chemical Waste Landfill and sanitary sewer line monitoring subsystem is visible at the left side of the picture.

Tops of three access points in the vertical sensor array subsystem (small grey boxes on grey posts) are visible along the edge of the containment cell. The boxes house cables and tubing connected to the monitoring and sampling equipment located under the containment cell.



**Corrective Action Management Unit**  
**North End and Northeast Corner of Containment Cell**  
Photograph Taken on February 21, 2007  
Process Code: S99

The top of one of the boreholes in the Chemical Waste Landfill and sanitary sewer line monitoring subsystem is visible in the foreground beyond the CAMU perimeter fence.

The northern access tubes for four of the five pipes in the primary subliner leak detection subsystem are visible at the right edge of the photograph.

The larger tube extending from the north end of the cap (with a support brace, visible at the right side of the photograph) is the access point for the leachate collection and removal system. The tube is connected to the leachate collection sump at the bottom of the containment cell, and allows access for a portable pump to remove leachate. The pump is stored in a container near the base of the support brace when not in use.

The tops of two utility poles are visible beyond the top of the containment cell (above the signs in the left side of the photograph).



**Corrective Action Management Unit  
Containment Cell and Leachate Management**

Photograph Taken on February 21, 2007

Process Code: S99

The leachate accumulation area is shown in the foreground. Leachate is pumped from the collection sump at the bottom of the containment cell using a portable pump. The access tube for the collection system is visible in the north end of the cell (near the center of the photograph). The container used for storage of the pump is immediately to the right of the access tube; sunlight is reflected off the container lid.

The leachate is collected in the blue containers. The containers are stored on a (yellow) portable spill containment pallet. Other wastes are stored in the white containers on a second pallet. Pallets are stored upside down when not in use to prevent rainwater accumulation.

The portable metal building at the right houses electrical equipment and is used for storage of spill cleanup supplies and safety-related items.

The tops of several utility poles are visible beyond the top of the containment cell.

**Attachment C**

**Sandia National Laboratories  
Comprehensive Part B Permit Request  
NM5890110518**

**Technical and Administrative Updates**

**Revised Pages  
Redline / Strikeout Format**

- **General Part B**
- **General Part B, Appendix E (Site-Wide Contingency Plan)**
- **General Part B, Module VI (Manzano Storage Bunkers)**

# **Sandia National Laboratories/New Mexico General Part B Permit Renewal Request/Application**

**Revision 6.0b**

**~~October 2005~~February 2007**

Prepared by  
Sandia National Laboratories/New Mexico  
Albuquerque, New Mexico 87185

Prepared for  
The U.S. Department of Energy

**Table 1**  
**Resource Conservation and Recovery Act – Regulated Waste Management Units**  
**Included in Part 2 of Comprehensive Part B Permit Request**

Name	Acronym	Location, Size	Types of Operations	Types of Waste	Operating Status	Permit Status
Hazardous Waste Management Facility	HWMF	South of TA-I, north of entrance to TA-II. 1.35 acres	Storage, Repackaging	All wastes listed in General Part A	Existing, operational	Permit expired August 6, 2002. Submitted renewal request February 6, 2002. Requesting that permit be updated and renewed for continued operation.
Thermal Treatment Facility	TTF	Northern part of TA-III. 196 square feet	Treatment	Ignitable, reactive, toxic, and listed wastes	Existing, on standby	Permit expires November 4, 2004. Submitted renewal request February 6, 2002. Requesting that permit be updated and renewed for continued operation.
Radioactive and Mixed Waste Management Facility	RMWMF	Southeast corner of TA-III. 3.11 acres	Storage, Treatment, Repackaging	All wastes listed in General Part A	Existing, operational	Interim status. Requesting that permit be issued using updated information provided in this application.
Auxiliary Hot Cell Facility	AHCF	TA-V. 5578 square feet	Storage, Treatment, Repackaging	All wastes listed in General Part A	Existing, expected to start operations in 2006	Added under interim status. Requesting that permit be issued using information provided in this application.
Manzano Storage Bunkers (set of 5 Units)	MSB	In Manzano Area on KAFB. 0.4 acres occupied by 5 bunkers (approximately 1600 to <del>2100</del> 2400 square feet in each bunker)	Storage	All wastes listed in General Part A	Existing, operational	Interim status. Requesting that permit be issued using updated information provided in this application.

## 12.0 CERTIFICATION

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

\_\_\_\_\_  
Francisco A. Figueroa  
Vice President, Infrastructure Operations and Business  
Management  
and Chief Financial Officer  
Sandia Corporation  
Albuquerque, New Mexico  
Co-Operator

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
Patty Wagner  
Manager  
U.S. Department of Energy  
National Nuclear Security Administration  
Sandia Site Office  
Albuquerque, New Mexico  
Owner and Co-Operator

\_\_\_\_\_  
Date Signed

**APPENDIX E**

**SITE-WIDE CONTINGENCY PLAN FOR  
SANDIA NATIONAL LABORATORIES/NEW MEXICO  
RESOURCE CONSERVATION AND RECOVERY ACT-  
REGULATED WASTE MANAGEMENT UNITS**

**Table E-1  
RCRA – Regulated Waste Management Units Included in Contingency Plan**

<b>Name</b>	<b>Acronym</b>	<b>Location, size</b>	<b>Types of operations</b>	<b>Operating hours</b>	<b>Staff</b>
Hazardous Waste Management Facility	HWMF	South of TA-I, north of entrance to TA-II. Includes Buildings 958, 959. 1.35 acres	Storage, Repackaging	M-F 8:00 am 4:30 pm	Staffed during operating hours
Thermal Treatment Facility	TTF	Northern part of TA-III, south of Building 6715. 196 square feet	Treatment	M-F 7:00 am 5:00 pm	Staffed only during operations at Unit
Radioactive and Mixed Waste Management Facility	RMWMF	Southeast corner of TA-III. Includes Buildings 6920, 6921, 6925, and 6926. 3.11 acres	Storage, Treatment, Repackaging	M-Th 7:00 am – 5:30 pm	Staffed during operating hours
Auxiliary Hot Cell Facility	AHCF	TA-V, Building 6597. 5578 square feet	Storage, Treatment, Repackaging	M-F 8:00 am – 4:30 pm	Staffed during operating hours
Manzano Storage Bunkers	MSB	In Manzano Area on KAFB. 0.4 acres occupied by 5 bunkers (approximately 1600 to <del>212</del> 400 square feet in each bunker)	Storage	M-Th 7:00 am – 5:30 pm	Staffed only during operations at Unit
Corrective Action Management Unit	CAMU	Southeast corner of TA-III. Includes containment cell located due north of RMWMF.	Post-closure monitoring of containment cell.		Staffed only during monitoring operations at Unit.
Chemical Waste Landfill	CWL	Southeast corner of TA-III. Includes landfill located due east of RMWMF.	Landfill undergoing closure.		Staffed only during closure and monitoring operations at Unit.

# **Sandia National Laboratories/New Mexico Manzano Storage Bunkers Part B Permit Application**

## **Module VI**

**Revision 6.0ba**

**~~May 2006~~February 2007**

Prepared by  
Sandia National Laboratories/New Mexico  
Albuquerque, New Mexico 87185

Prepared for  
The U.S. Department of Energy

### 1.1.1 Type B Bunker (37034)

Type B bunkers consist of an access tunnel leading to a main chamber that is used for storage of RCRA-regulated wastes. Figure 3 provides a typical floor plan for a Type B bunker. The Type B access tunnel is approximately 20 feet (ft) long, 12 ft wide, and 12.5 ft high. The main chamber is approximately 81 ft long, 26.5 ft wide, and 12.8 ft high. Each bunker is covered by at least 2 ft of earthen fill over a 6-in. thick roof of waterproofed concrete. The soil surface above and around each bunker is sloped so water drains away from the bunker. Access to the WMA of each 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 on the available floor space (2,100 square feet [ft<sup>2</sup>]) in Bunker 37034, it can hold a maximum of 25,080 gallons of RCRA-regulated wastes.

### 1.1.2 Type C Bunker (37118)

Type C bunkers do not have an access tunnel and consist entirely of a main chamber used for storage of RCRA-regulated wastes. Figure 4 is a typical floor plan of a Type C bunker. The main chamber is approximately ~~8083~~ ft long, ~~2729~~ ft wide, and 12.8 ft high. A 6-in. drain tile is located outside the bunker perimeter. Access to the main chamber is through a set of double doors 8 ft wide and 9.5 ft high. Each bunker is covered by at least 2 ft of earthen fill over a 6-in. thick roof of waterproofed concrete. The soil surface over and around each bunker is sloped so water drains away from the bunker.

Based on the available floor space (approximately ~~2,100~~2,400 ft<sup>2</sup>) in Bunker 37118, it can hold a maximum of ~~25,080~~35,200 gallons of RCRA-regulated wastes.

### 1.1.3 Type D Bunkers (37045, 37055, and 37057)

Type D bunkers consist of an access tunnel leading to a main chamber. Only the main chamber is used for storage of RCRA-regulated wastes. Figure 5 is a typical floor plan of a Type D bunker. Type D access tunnels vary in length from 76 feet to 110 feet and are 9 ft wide and 11 to 12 ft high. The main chamber in each bunker is approximately 61 ft long, 26.5 ft wide, and 12.5 ft high. Access to the WMA of each 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. Each bunker is covered by at least 2 ft of earthen fill over a 6-in. thick roof of waterproofed concrete. The soil surface over and around each bunker is sloped so water drains away from each bunker.

Based on the available floor space (1,600 ft<sup>2</sup>) in each of the Type D bunkers, each bunker can hold a maximum of 18,480 gallons of RCRA-regulated wastes.

**Attachment D**

**Sandia National Laboratories  
Comprehensive Part B Permit Request  
NM5890110518**

**Technical and Administrative Updates**

**Replacement Pages**

- **General Part B**
- **General Part B, Appendix E (Site-Wide Contingency Plan)**
- **General Part B, Module VI (Manzano Storage Bunkers)**

**Instructions for replacing superseded pages in Comprehensive Part B Permit Request:**

- General Part B - Volume I, Part 2. The enclosed pages replace the section cover, pages SW-1/2, and pages SW-37/38.
- General Part B, Appendix E – Volume I, Part 2: The enclosed pages replace the cover and pages SW-E-1/2
- General Part B, Module VI – Volume I, Part 2: The enclosed pages replace the section cover and pages MSB-3/4.

# **Sandia National Laboratories/New Mexico General Part B Permit Renewal Request/Application**

## **Revision 6.0b**

## **February 2007**

Prepared by  
Sandia National Laboratories/New Mexico  
Albuquerque, New Mexico 87185

Prepared for  
The U.S. Department of Energy

**This page intentionally left blank.**

## **SANDIA NATIONAL LABORATORIES/NEW MEXICO GENERAL PART B PERMIT RENEWAL REQUEST/APPLICATION**

This "Sandia National Laboratories/New Mexico (SNL/NM) General Part B Permit Renewal Request/Application," hereinafter referred to as the General Part B, is submitted by Sandia Corporation (Sandia) and the U.S. Department of Energy (DOE), as co-operators of the SNL/NM site, to address requirements applicable to Resource Conservation and Recovery Act (RCRA)-regulated waste storage and treatment operations at SNL/NM RCRA-regulated waste management units (Units) (Figure 1). The U.S. Environmental Protection Agency (EPA) Identification Number for SNL/NM is NM5890110518.

Sandia National Laboratories/New Mexico (SNL/NM) is located on Kirtland Air Force Base (KAFB) southeast of Albuquerque, New Mexico. SNL/NM consists of five technical areas (TAs) and several remote testing areas situated on the 80-square-mile KAFB. Sandia generates and manages wastes that are regulated under the Resource Conservation and Recovery Act (RCRA) and the New Mexico Hazardous Waste Act and implementing regulations, specifically the New Mexico Administrative Code (NMAC) Title 20, Chapter 4. In this comprehensive Part B permit request, these wastes are referred to as RCRA-regulated wastes (i.e., wastes that meet the regulatory definition of hazardous or mixed wastes). RCRA-regulated wastes are generated during SNL/NM operations and ongoing corrective actions for solid waste management units (SWMUs). The corrective actions are conducted under the SNL/NM Environmental Restoration (ER) Project.

There are 11 RCRA-regulated waste management units (Units) included in this comprehensive Part B permit request. Nine of the Units (listed in Table 1) are used for management of wastes from ongoing operations and from the ER project. These units are addressed in this part (Part 2) of the comprehensive Part B permit request. One of the remaining units is a corrective action management unit (containment cell) used exclusively for management of remediation wastes generated through the ER project. It was closed in 2003. The other unit is a landfill that was operated under interim status and is undergoing closure. Sandia/DOE will conduct post-closure care and maintenance at the containment cell and the landfill; both Units are addressed in Part 5 of the comprehensive Part B permit request. Three additional units will be undergoing closure under interim status and will not require post-closure care. They are included in Part 1.

The information in Part 2 is separated into site-wide and Unit-specific information to minimize redundancy. Part 2 information for the Units listed in Table 1 includes:

- General information (the General Part B) that serves as an "umbrella" document addressing the general requirements of the New Mexico Hazardous Waste Act and implementing regulations, specifically the New Mexico Administrative Code, Title 20, Chapter 4, Part 1, Subparts V and IX (20 NMAC 4.1.500 and .900), revised October 1, 2003 [10-1-03]. 20 NMAC 4.1.500 and .900 adopt, with limited exceptions, all of the Code of Federal Regulations, Title 40, Parts 264 and 270 (40 CFR 264 and 270). Information that is applicable to most or all of the Units is included in the General Part B.

Appendices containing site-wide information addressing a specific topic (e.g., waste analysis, training, or closure).

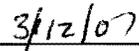
**Table 1**  
**Resource Conservation and Recovery Act – Regulated Waste Management Units**  
**Included in Part 2 of Comprehensive Part B Permit Request**

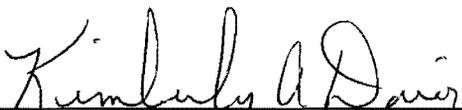
<b>Name</b>	<b>Acronym</b>	<b>Location, Size</b>	<b>Types of Operations</b>	<b>Types of Waste</b>	<b>Operating Status</b>	<b>Permit Status</b>
Hazardous Waste Management Facility	HWMF	South of TA-I, north of entrance to TA-II. 1.35 acres	Storage, Repackaging	All wastes listed in General Part A	Existing, operational	Permit expired August 6, 2002. Submitted renewal request February 6, 2002. Requesting that permit be updated and renewed for continued operation.
Thermal Treatment Facility	TTF	Northern part of TA-III. 196 square feet	Treatment	Ignitable, reactive, toxic, and listed wastes	Existing, on standby	Permit expires November 4, 2004. Submitted renewal request February 6, 2002. Requesting that permit be updated and renewed for continued operation.
Radioactive and Mixed Waste Management Facility	RMWMF	Southeast corner of TA-III. 3.11 acres	Storage, Treatment, Repackaging	All wastes listed in General Part A	Existing, operational	Interim status. Requesting that permit be issued using updated information provided in this application.
Auxiliary Hot Cell Facility	AHCF	TA-V. 5578 square feet	Storage, Treatment, Repackaging	All wastes listed in General Part A	Existing, expected to start operations in 2006	Added under interim status. Requesting that permit be issued using information provided in this application.
Manzano Storage Bunkers (set of 5 Units)	MSB	In Manzano Area on KAFB. 0.4 acres occupied by 5 bunkers (approximately 1600 to 2400 square feet in each bunker)	Storage	All wastes listed in General Part A	Existing, operational	Interim status. Requesting that permit be issued using updated information provided in this application.

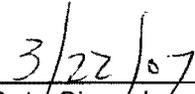
## 12.0 CERTIFICATION

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

  
\_\_\_\_\_  
Francisco A. Figueroa  
Vice President, Infrastructure Operations and Business  
Management  
and Chief Financial Officer  
Sandia Corporation  
Albuquerque, New Mexico  
Co-Operator

  
\_\_\_\_\_  
Date Signed

  
\_\_\_\_\_  
Patty Wagner  
Manager  
U.S. Department of Energy  
National Nuclear Security Administration  
Sandia Site Office  
Albuquerque, New Mexico  
Owner and Co-Operator

  
\_\_\_\_\_  
Date Signed

## 13.0 REFERENCES

*Bretherick's Handbook of Handbook of Reactive Chemical Hazards*, 5<sup>th</sup> Edition, 1995. P.G. Urben, Editor. Butterworth-Heinemann

Hoagland, S.R., 1991, "A Cultural Resources Survey Conducted in the Vicinity of the Sandia National Laboratories Burn Site, KAFB, New Mexico," CGI Project No. 8067 AF.CR, Chambers Group, Inc., Albuquerque, New Mexico.

National Fire Protection Association (NFPA), 2002, "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," NFPA 25, National Fire Protection Association, Quincy, Massachusetts.

New Mexico Environment Department (NMED), US Department of Energy, Sandia Corporation, 1995, Federal Facilities Compliance Order

NFPA, see National Fire Protection Association

NMED, see New Mexico Environment Department

Sandia National Laboratories/New Mexico (SNL/NM), 2004, "Sandia National Laboratories/New Mexico General Part A Permit Renewal Request/Application, Revision 7.0," Sandia National Laboratories/New Mexico, Albuquerque, New Mexico.

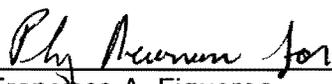
SNL/NM, see Sandia National Laboratories/New Mexico.

U.S. Department of Energy, 1999, "Final Site-Wide Environmental Impact Statement for Sandia National Laboratories/New Mexico" (DOE/EIS-0281), Albuquerque Operations Office, Albuquerque New Mexico

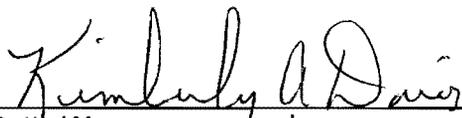
U.S. Department of Health and Human Services (DHHS), 1994. "NIOSH Pocket Guide to Chemical Hazards", National Institute for Occupational Safety and Health.

## 12.0 CERTIFICATION

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

  
\_\_\_\_\_  
Francisco A. Figueroa  
Vice President, Infrastructure Operations and Business  
Management  
and Chief Financial Officer  
Sandia Corporation  
Albuquerque, New Mexico  
Co-Operator

3/12/07  
\_\_\_\_\_  
Date Signed

  
\_\_\_\_\_  
Patty Wagner  
Manager  
U.S. Department of Energy  
National Nuclear Security Administration  
Sandia Site Office  
Albuquerque, New Mexico  
Owner and Co-Operator

3/22/07  
\_\_\_\_\_  
Date Signed

## 13.0 REFERENCES

*Bretherick's Handbook of Handbook of Reactive Chemical Hazards*, 5<sup>th</sup> Edition, 1995. P.G. Urben, Editor. Butterworth-Heinemann

Hoagland, S.R., 1991, "A Cultural Resources Survey Conducted in the Vicinity of the Sandia National Laboratories Burn Site, KAFB, New Mexico," CGI Project No. 8067 AF.CR, Chambers Group, Inc., Albuquerque, New Mexico.

National Fire Protection Association (NFPA), 2002, "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," NFPA 25, National Fire Protection Association, Quincy, Massachusetts.

New Mexico Environment Department (NMED), US Department of Energy, Sandia Corporation, 1995, Federal Facilities Compliance Order

NFPA, see National Fire Protection Association

NMED, see New Mexico Environment Department

Sandia National Laboratories/New Mexico (SNL/NM), 2004, "Sandia National Laboratories/ New Mexico General Part A Permit Renewal Request/Application, Revision 7.0," Sandia National Laboratories/New Mexico, Albuquerque, New Mexico.

SNL/NM, see Sandia National Laboratories/New Mexico.

U.S. Department of Energy, 1999, "Final Site-Wide Environmental Impact Statement for Sandia National Laboratories/New Mexico" (DOE/EIS-0281), Albuquerque Operations Office, Albuquerque New Mexico

U.S. Department of Health and Human Services (DHHS), 1994. "NIOSH Pocket Guide to Chemical Hazards", National Institute for Occupational Safety and Health.

**APPENDIX E**

**SITE-WIDE CONTINGENCY PLAN FOR  
SANDIA NATIONAL LABORATORIES/NEW MEXICO  
RESOURCE CONSERVATION AND RECOVERY ACT-  
REGULATED WASTE MANAGEMENT UNITS**

**This page intentionally left blank.**

## **SITE-WIDE CONTINGENCY PLAN FOR SANDIA NATIONAL LABORATORIES/NEW MEXICO**

This appendix presents site-wide contingency measures applicable to all Resource Conservation and Recovery Act (RCRA)–regulated waste management units (Unit) at Sandia National Laboratories/New Mexico (SNL/NM), co-operated by Sandia Corporation (Sandia) and the U.S. Department of Energy (DOE). Unit-specific Contingency Plan information is provided in Section 6.0 of each Unit-specific module. Together, information in the General Part B, in this appendix, and in each Unit-specific module meets the applicable regulatory requirements.

This Contingency Plan is intended to meet the requirements specified in the New Mexico Administrative Code, Title 20, Chapter 4, Part 1, Subpart V (20 NMAC 4.1.500), adopting by reference the Code of Federal Regulations, Title 40, Part 264 (40 CFR 264), Subpart D, revised October 1, 2003 [10-1-03], “Contingency Plan and Emergency Procedures,” and 20 NMAC 4.1.900/40 CFR 270.14(b)(7) [10-1-03], for hazardous waste treatment, storage, or disposal facilities.

The provisions of this Contingency Plan will be carried out immediately to minimize hazards whenever there is an emergency, as required by 20 NMAC 4.1.500/40 CFR 264.51(b) [10-1-03].

### **E.1 SNL/NM SITE DESCRIPTION**

SNL/NM is a multidisciplinary laboratory engaged in research and development of weapons and alternative energy sources. SNL/NM is managed by Sandia, a wholly owned subsidiary of Lockheed Martin, for the DOE, with work also performed for others. SNL/NM falls under North American Industry Classification System Numbers 92811 (National Security) and 54171 (Research and Development in the Physical, Engineering, and Life Sciences).

SNL/NM is located on Kirtland Air Force Base (KAFB) immediately southeast of the Albuquerque city limits in Bernalillo County, New Mexico. SNL/NM occupies an area of approximately 2,842 acres (1,150 hectares) within the 80-square-mile KAFB. SNL/NM consists of five Technical Areas, I through V, and remote test areas situated in the eastern half of KAFB (Figure E-1).

#### **E.1.1 Unit Descriptions**

The Units subject to 20 NMAC 4.1.500/40 CFR 264, Subpart D [10-1-03] and this Contingency Plan are listed in Table E-1. Additional detail about each Unit is provided in Section 6.0 of each Unit-specific module.

#### **E.1.2 Waste Description**

RCRA-regulated wastes at SNL/NM are generated primarily from laboratory research activities, process operations, and environmental restoration activities. Typical laboratory research waste includes bottles of excess or residual chemical mixtures and solutions, and solid laboratory items

**Table E-1  
RCRA – Regulated Waste Management Units Included in Contingency Plan**

<b>Name</b>	<b>Acronym</b>	<b>Location, size</b>	<b>Types of operations</b>	<b>Operating hours</b>	<b>Staff</b>
Hazardous Waste Management Facility	HWMF	South of TA-I, north of entrance to TA-II. Includes Buildings 958, 959. 1.35 acres	Storage, Repackaging	M-F 8:00 am 4:30 pm	Staffed during operating hours
Thermal Treatment Facility	TTF	Northern part of TA-III, south of Building 6715. 196 square feet	Treatment	M-F 7:00 am 5:00 pm	Staffed only during operations at Unit
Radioactive and Mixed Waste Management Facility	RMWMF	Southeast corner of TA-III. Includes Buildings 6920, 6921, 6925, and 6926. 3.11 acres	Storage, Treatment, Repackaging	M-Th 7:00 am – 5:30 pm	Staffed during operating hours
Auxiliary Hot Cell Facility	AHCF	TA-V, Building 6597. 5578 square feet	Storage, Treatment, Repackaging	M-F 8:00 am – 4:30 pm	Staffed during operating hours
Manzano Storage Bunkers	MSB	In Manzano Area on KAFB. 0.4 acres occupied by 5 bunkers (approximately 1600 to 2400 square feet in each bunker)	Storage	M-Th 7:00 am – 5:30 pm	Staffed only during operations at Unit
Corrective Action Management Unit	CAMU	Southeast corner of TA-III. Includes containment cell located due north of RMWMF.	Post-closure monitoring of containment cell.		Staffed only during monitoring operations at Unit.
Chemical Waste Landfill	CWL	Southeast corner of TA-III. Includes landfill located due east of RMWMF.	Landfill undergoing closure.		Staffed only during closure and monitoring operations at Unit.

**Sandia National Laboratories/New Mexico  
Manzano Storage Bunkers  
Part B Permit Application**

**Module VI**

**Revision 6.0b**

**February 2007**

Prepared by  
Sandia National Laboratories/New Mexico  
Albuquerque, New Mexico 87185

Prepared for  
The U.S. Department of Energy

**This page intentionally left blank.**

### 1.1.1 Type B Bunker (37034)

Type B bunkers consist of an access tunnel leading to a main chamber that is used for storage of RCRA-regulated wastes. Figure 3 provides a typical floor plan for a Type B bunker. The Type B access tunnel is approximately 20 feet (ft) long, 12 ft wide, and 12.5 ft high. The main chamber is approximately 81 ft long, 26.5 ft wide, and 12.8 ft high. Each bunker is covered by at least 2 ft of earthen fill over a 6-in. thick roof of waterproofed concrete. The soil surface above and around each bunker is sloped so water drains away from the bunker. Access to the WMA of each 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 on the available floor space (2,100 square feet [ft<sup>2</sup>]) in Bunker 37034, it can hold a maximum of 25,080 gallons of RCRA-regulated wastes.

### 1.1.2 Type C Bunker (37118)

Type C bunkers do not have an access tunnel and consist entirely of a main chamber used for storage of RCRA-regulated wastes. Figure 4 is a typical floor plan of a Type C bunker. The main chamber is approximately 83 ft long, 29 ft wide, and 12.8 ft high. A 6-in. drain tile is located outside the bunker perimeter. Access to the main chamber is through a set of double doors 8 ft wide and 9.5 ft high. Each bunker is covered by at least 2 ft of earthen fill over a 6-in. thick roof of waterproofed concrete. The soil surface over and around each bunker is sloped so water drains away from the bunker.

Based on the available floor space (approximately 2,400 ft<sup>2</sup>) in Bunker 37118, it can hold a maximum of 35,200 gallons of RCRA-regulated wastes.

### 1.1.3 Type D Bunkers (37045, 37055, and 37057)

Type D bunkers consist of an access tunnel leading to a main chamber. Only the main chamber is used for storage of RCRA-regulated wastes. Figure 5 is a typical floor plan of a Type D bunker. Type D access tunnels vary in length from 76 feet to 110 feet and are 9 ft wide and 11 to 12 ft high. The main chamber in each bunker is approximately 61 ft long, 26.5 ft wide, and 12.5 ft high. Access to the WMA of each 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. Each bunker is covered by at least 2 ft of earthen fill over a 6-in. thick roof of waterproofed concrete. The soil surface over and around each bunker is sloped so water drains away from each bunker.

Based on the available floor space (1,600 ft<sup>2</sup>) in each of the Type D bunkers, each bunker can hold a maximum of 18,480 gallons of RCRA-regulated wastes.

## 1.2 Unit Operations

The MSB WMAs are used to store any of the RCRA-regulated wastes bearing U.S. Environmental Protection Agency (EPA) Hazardous Waste Numbers listed in the General Part A.

The MSB are not continuously occupied. All personnel sign in on a log upon entering each bunker and sign out when they leave. Waste handling personnel work in pairs and maintain contact with each other. All personnel are trained to check that everyone has signed out and exited the bunker before turning off the lights and closing and locking the doors.

Information regarding operations requiring a permit at all RCRA-regulated Units at SNL/NM is included addressed in Section 1.1 of the General Part B. Additional Unit-specific information is provided in the following sections.

### 1.2.1 Operation of Containment Systems (20 NMAC 4.1.500/40 CFR 264.175[b][5]; 20 NMAC 4.1.900/40 CFR 270.14[b][8][ii] and 270.15[a] and [b])

Unit personnel begin taking action to evaluate and remove accumulated liquids in the spill pallets upon discovery. Accumulated liquids are cleaned up as described in Section 1.1.1 of the General Part B.

### 1.2.2 Requirements for Ignitable, Reactive, and Incompatible Wastes (20 NMAC 4.1.500/40 CFR 264.17, 264.176, and 264.177; 20 NMAC 4.1.900/40 CFR 270.14[b][9] and 270.15[c] and [d])

Any of the ignitable or reactive wastes listed in the General Part A may be managed at the MSB. Sources of ignition that may be present at the MSB are those noted in Section 1.1.2.1 of the General Part B: welding activities, open flames, hot surfaces, frictional heat, radiant heat, sparks, and engines. Unit personnel employ the general precautions and practices described in Section 1.1.2 of the General Part B. Additional Unit-specific features, potential ignition and reaction sources, precautions, and practices include:

- Ignitable and reactive wastes are segregated from other wastes within each bunker. The containers are labeled as described in Section 1.2.1 of the General Part B. Unit personnel typically place a portable sign near the wastes, use prominent labels, or use another method to assist in identifying them as ignitable and/or reactive. Water-reactive wastes are not routinely stored in the bunkers. If present, they are segregated from other wastes and their location identified clearly through the use of signs, labels, or some other method.
- Containers of wastes are labeled and segregated according to compatibility criteria in 20 NMAC 4.1.500/40 CFR 264 Appendix V. The liquids in containers that are stored together on a spill pallet must be compatible with each other. The spill pallet provides an independent containment system. Likewise, only compatible solids are stored together on a pallet. The pallets of wastes are segregated into different rows and areas,